

AIRSTAGE®

FUJITSU

Variable Refrigerant Flow Systems

Heat Pump

J-III L 208-230V / 3-Phase

J-IIS 208-230V / 1-Phase

J-II 208-230V / 1-Phase

V-II 208-230V, 460V / 3-Phase

Heat Recovery

VR-II 208-230V, 460 / 3-Phase



Creation of Comfort



Fujitsu General creates high-quality and environmentally-friendly products that provide a comfortable environment by using its continually improving air conditioning technology, innovation and creativity, which we started over 35 years ago.

High Quality Development and Production Environment

The Headquarters-JAPAN R&D Center is equipped with a wide range of testing equipment envisioning a variety of operating conditions. We provide high quality & reliable products that meet the customers' needs from all over the world through this advanced R&D center and 6 factories based in China and Thailand.



JAPAN R&D center and 198 ft. (60m) height testing tower (Kawasaki, Japan)
Central R&D center for global air conditioner development. Advanced products are developed and next generation technologies are researched.



FUJITSU GENERAL CENTRAL AIR-CONDITIONER (WUXI) CO., LTD. (China)
VRF Main factory. ISO9001 and ISO14001 certified. This factory has high quality and high reliability systems for manufacturing VRF systems.

FUJITSU GENERAL's VRF AIRSTAGE Series has been developed based on our long-term air conditioning technology know-how that was first introduced 18 years ago. Since then, the Airstage series has been serving the market's HVAC needs in applications ranging from large residential to commercial in addition to a large variety of other installations.



AIRSTAGE™ History

Global

2001

2003

2006

2007

2009

2012

History of Environmental Measures

Certification Acquisition of

ISO14001

1998 : Fujitsu General (Shanghai) Co.,Ltd.

1999 : Fujitsu General (Thailand) co.,Ltd.

2002 : FGA(Thailand) Co.,Ltd.

2006 : Fujitsu General Central Air-conditioner (Wuxi) co.,Ltd.

Green Initiatives

Fujitsu introduces inverter technology and the use of environmentally friendly R410A refrigerant.



RoHS Compliant

Restriction of Hazardous Substances is an EU directive intended to protect the environment by forcing manufacturers to use environmentally friendly materials in all consumer electronics.



AIRSTAGE J-III L

208/230V 3-Phase

J-Series

High efficiency, medium capacity model
6, 8, 10 tons / Heat pump



AIRSTAGE VR-II

460V 3-Phase

6 to 24 tons / Heat Recovery
100% Inverter driven



AIRSTAGE J-II S

208/230V 1-Phase

J-Series

High efficiency, small capacity model
3, 4 tons / Heat pump



AIRSTAGE J-II

208/230V 1-Phase

J-Series

High efficiency, small capacity model
3, 4 and 5 tons / Heat pump



AIRSTAGE V-II

460V 3-Phase

6 to 24 tons / Heat Pump
100% Inverter driven



AIRSTAGE VR-II

208/230V 3-Phase

6 to 24 tons / Heat Recovery
100% Inverter driven



AIRSTAGE V-II

208/230V 3-Phase

6 to 24 tons / Heat Pump
100% Inverter driven

North America

2013

2014

2015

2017

2019

Green Advancement
Use of 100% inverter driven
DC compressors.

INVERTER

A World Leader in Heating and Cooling Solutions

Support Team

Fujitsu features an expert team of Regional Sales Managers and Sales Engineers located around North America to provide customer support. Additionally, blended Rep Agencies support Plan and Spec Consulting Engineers, as well as wholesale distribution, to provide product knowledge and support. We pride ourselves in having one of the most educated and qualified teams in the HVAC industry.



Technical Support

The Fujitsu support experience is top notch and our highly trained technicians are equipped with the tools and resources to answer any question that may come your way. Fujitsu offers remote technical support, and when needed, can dispatch local support to solve field issues. **Our Tech support wait time is the lowest in the industry with the highest level of expertise and limited return calls.**

Wireless phone headsets provide mobility to techs so they can physically access any tools they may need to solve the problem.

Installed equipment allows techs to simulate situations contractors have in the field, making calls go faster and smoother.

Quality Control is pertinent to customer satisfaction. Every piece of equipment that is sent back to Fujitsu is tested and evaluated, bringing our failure rate to a record low .01%.

Research & Development

The Headquarters-R&D Center (Japan) is equipped with a wide range of testing equipment envisioning a variety of operating conditions. This includes a testing tower with a 197ft.(60m) height difference for buildings. We provide high quality & reliable products that meet the customers' needs from all over the world through this advanced R&D Center and 6 factories based in China and Thailand.



Fujitsu General Central Air-conditioner (Wuxi) Co., Ltd.



Fujitsu General (Shanghai) Co., Ltd.



Fujitsu General (Thailand) Co., Ltd.
Fujitsu General Engineering (Thailand) Co., Ltd.



Certifications Acquisition of ISO 9001 and ISO14001 in each factory

Fujitsu General Limited

R&D Center in JAPAN





Variable Refrigerant Flow System For Small and Large Buildings

- Extensive lineup from 3 to 24 tons
- Connectable capacity ratio up to 150%
- 62 different indoor units available in 12 styles
- Up to 63 indoor units per one VRF system
- Three outdoor V-Series units may be combined with twinning kits to create up to 24 tons
- 10-Year Parts and Compressor Warranty
See Warranty Statement for details
- Connect up to 36 tons of indoor units to a single VRF refrigerant circuit.
- Extensive training for Engineers, Architects, Contractors and Distributors

High Efficiency & Reliability



3, 4 and 5 tons

3, and 4 tons

6, 8 and 10 tons



6, 8 tons

10 Ton

TABLE OF CONTENTS

FEATURES

High Energy Efficiency.....	6
Design Versatility	7
Easy Installation.....	8
High Reliability	9
Comfort & Convenience	10
Easy Service & Maintenance.....	11

MODEL LINEUP

Indoor and Outdoor Model Table.....	12
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OUTDOOR UNITS

J-II & J-IIS Heat Pump Models, 208-230V / 1-Phase....	14
J-IIIIL Heat Pump, 208-230V / 3-Phase	18
V-II Heat Pump Models, 208-230V, 460V.....	20
VR-II Heat Recovery Models, 208-230V, 460V.....	24

INDOOR UNITS

Compact Cassette	28
Large 4-way Cassette.....	30
Large Circular Flow Cassette	32
Slim Compact Duct	34
Medium Static Pressure Duct.....	36
High Static Pressure Duct (ARUH36, 48, 60)	38
High Static Pressure Duct (ARUH72, 96)	40
Vertical Air Handler	42
Floor Mount.....	44
Floor/Ceiling	46
Ceiling.....	48
Compact Wall Mounts.....	50
Wall Mounts	52
Compact Wall Mount (Limited Quantities)	54

FRESH AIR

Outdoor Air Unit	58
Ventacity Systems.....	60

CONTROL SYSTEMS & TOOLS

Control System Overview	62
Remotes & Controllers Features Table.....	64
SBC100 Smarter Building Controller	65
Remote Controls.....	67
Central Controllers.....	72
Accessories	80
BMS Communication Options	83
Service & Design Tools.....	85
Cypetherm.....	90

PIPING ACCESSORIES & OPTIONAL PARTS

Separation Tubes.....	92
RB Units	93
Optional Parts Overview	94
Auto Louver Grille Kit.....	96

RESOURCES / APPLICATIONS

Resources	98
Facility Applications	99
Commercial Financing.....	102
Warranty and General Info	103

HIGH ENERGY EFFICIENCY

J-SERIES

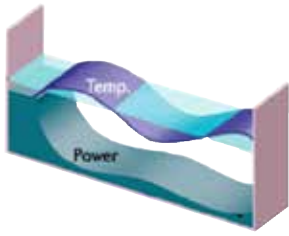
V-SERIES

All inverter compressor

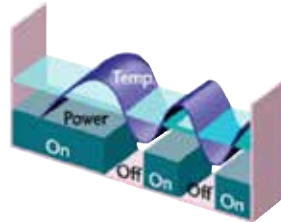
Airstage outdoor units are equipped with DC Inverter Control of compressors. Inverter control is like having cruise control for your heating and cooling system. DC twin rotary compressors only run as fast as they need to handle the cooling or heating demand. This provides smoother and more stable operation while improving comfort and reducing energy consumption.

Inverter Benefits

- Soft start resulting in low inrush current
- High efficiency operation
- Lower RPM = quieter operation
- Built in protections improve compressor life



Inverter System



Conventional System

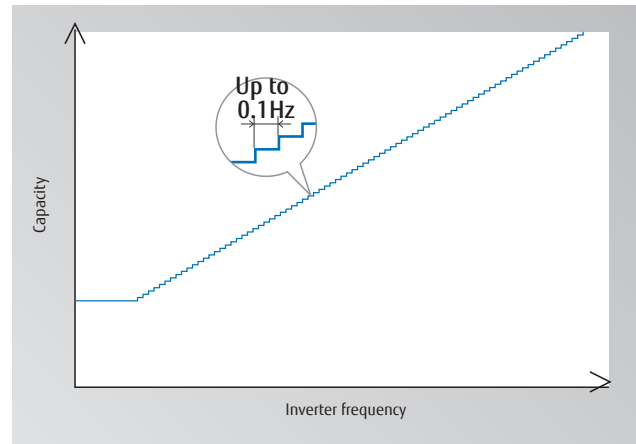
Large capacity DC inverter compressor

Large capacity high efficiency DC twin rotary compressor with excellent part load performance.



High efficiency compressor speed control

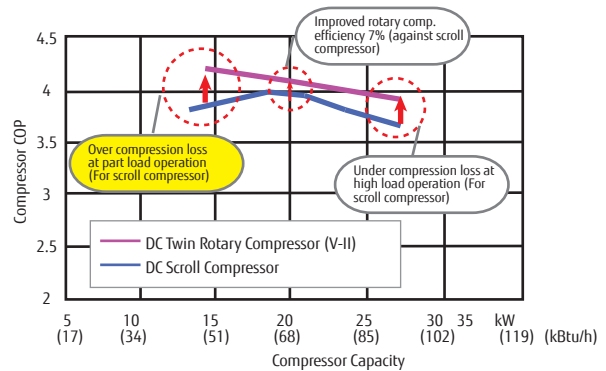
Provides comfort by making small temperature changes. This reduces energy usage by controlling the compressor speed in 1000 increments.



Single Twin Rotary Compressor

Some manufactures use scroll compressors, or multiple compressors consisting of one variable and one fixed. Using this older technology makes the outdoor unit heavier and more expensive.

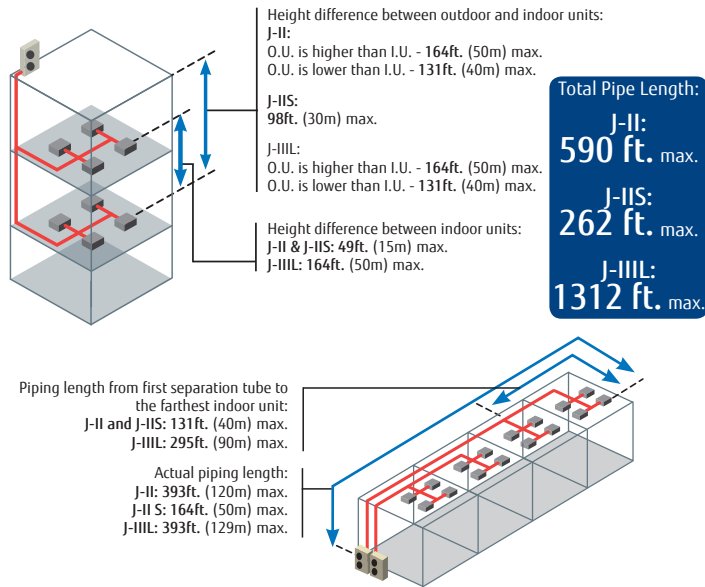
Fujitsu uses twin rotary technology which is more efficient with up to 7% improved COP over older scroll compressors.



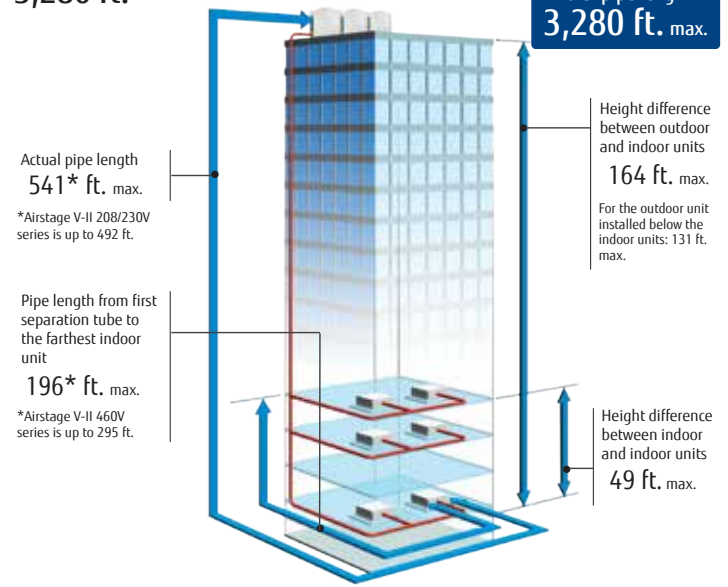
DESIGN VERSATILITY

Long piping length

Broad range of installation by long piping capability.

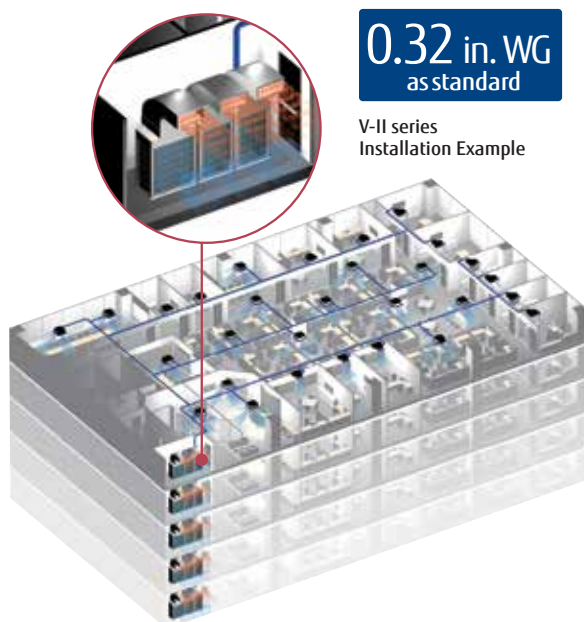


Overall piping length 3,280 ft.



High static pressure

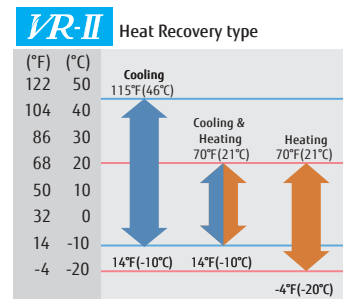
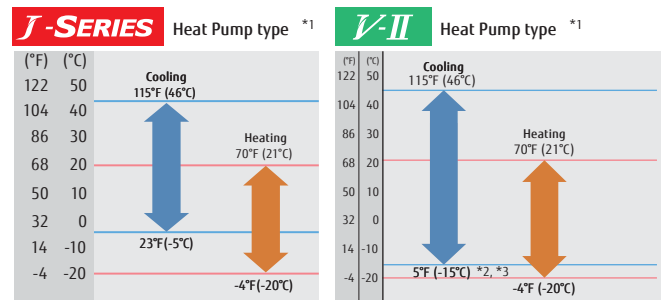
Outdoor unit static pressure is adjustable up to 0.32 in WG. This facilitates mechanical room and hood installations.



High static pressure is achieved using large diameter fan and a DC motor.

Wide operating range

Installation in wide temperature conditions is possible due to an increase in operational range.



*1 VRF Heat Pump system operates in non-simultaneous heating or cooling.

*2 Operation range based on a single condensing unit; when multiple condensing units are used on a single refrigerant circuit (12 ton thru 24 ton) the cooling lower operating range is limited to 23°F (-5°C).

*3 When cooling operation will be required at outdoor air temperature below 23°F (-5°C), the outdoor unit must be installed higher than or equal to the elevation of the indoor units.

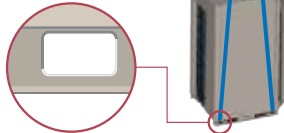
EASY INSTALLATION

Easily transported

J-SERIES

V-SERIES

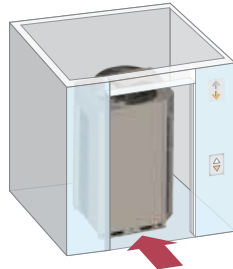
Easily craned into position using lifting belt hooks



Design of outdoor unit allows for lifting straps to be used

Slots in base of the unit allow for easy transportation by forklift.

Can be transported in a small elevator



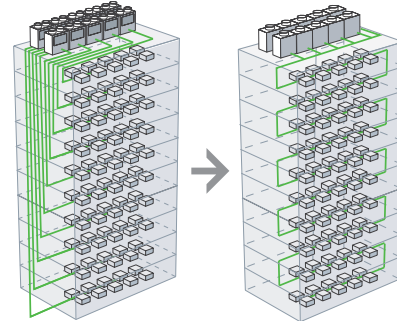
Simple signal line connection

J-SERIES

V-SERIES

Communication wiring can be connected continuously to any component, making installation easier.

Up to maximum length 11,811 ft / 3,600 m



Other wiring method

Simple wiring method

J-SERIES

High capacity connection

V-SERIES

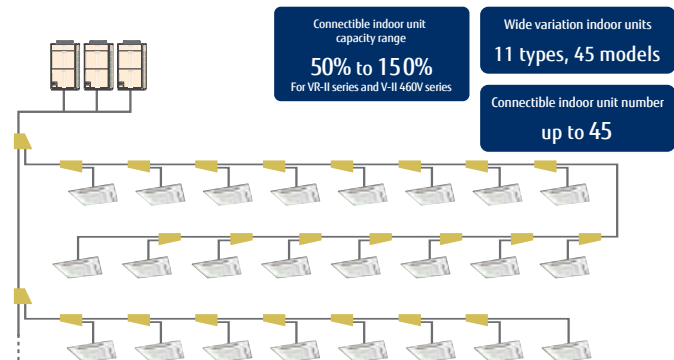
Number of connectible indoor units
3Ton: 1 to 6 units
4Ton: 1 to 8 units
J-II: 5Ton: 1 to 9 units
J-III: 6-Ton - 18 units
J-III: 8-Ton - 24 units
J-III: 10-Ton - 20 units

Connectible indoor unit capacity range
50 % to 130 %

Compatible indoor unit
12 Types of Airstage indoor units ranging in size from 7 kBTU to 60 kBTU



Various combinations from 6 Tons to 24 Tons with 62 indoor unit models, 12 types, can be selected. A minimum of 50% to a maximum of 150% indoor unit connectible capacity.



Connectible indoor unit capacity range
50% to 150%
For VR-II series and V-II 460V series

Wide variation indoor units
11 types, 45 models

Connectible indoor unit number
up to 45

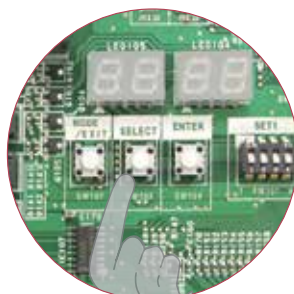
Note: When total indoor unit capacity is greater than 100%, individual indoor units will operate at a slightly lower capacity when maximum capacity is required.

Automatic address setting

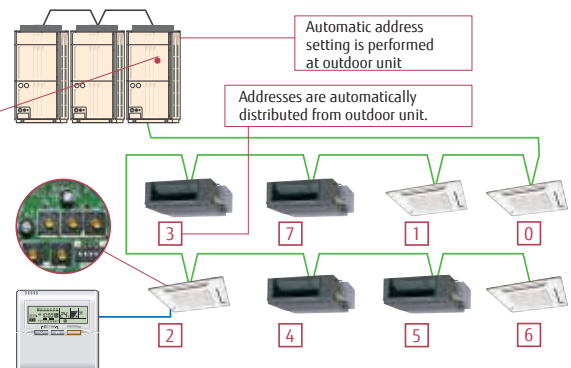
J-SERIES

V-SERIES

The address of each indoor unit can be automatically set by the touch of a button on the outdoor unit.



Press the pushbutton switch of outdoor unit.



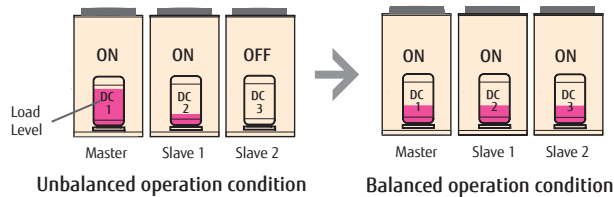
Manual address setting from indoor unit and remote controller is also possible.

HIGH RELIABILITY

Refrigerant circulation control

V-SERIES

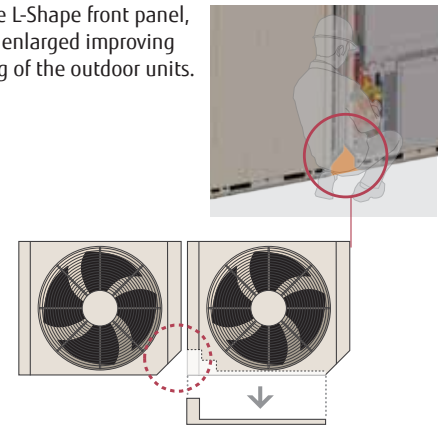
Innovative compressor control logic balances refrigerant flow rate of each outdoor unit by controlling inverter speed.



Easy access

V-SERIES

By adopting a removable L-Shape front panel, working space is greatly enlarged improving installation and servicing of the outdoor units.

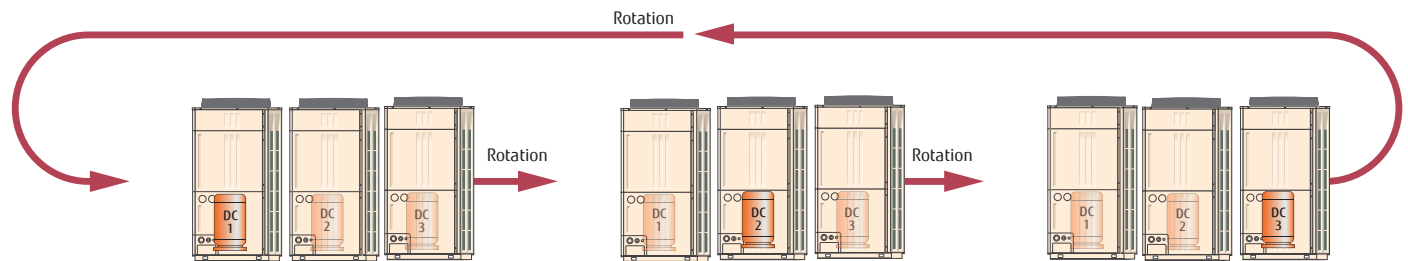


Life-extending operation

V-SERIES

Lead outdoor unit rotation

The rotation of the lead outdoor unit provides equal runtime for all units, extending equipment life.



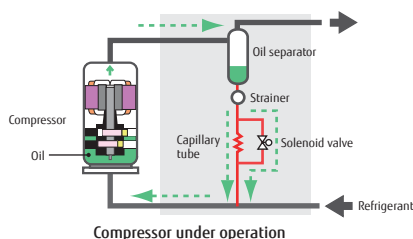
Note: The inverter compressors start in priority. Rotate operation is alternated by the start / stop timing of the compressors.

J-SERIES

V-SERIES

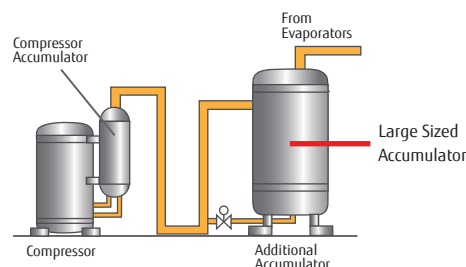
Oil return design

Individual oil separator and intelligent oil feedback operation logic are adopted. Oil return pipe of oil separator is connected directly to the compressor suction line through capillary and through solenoid valve.



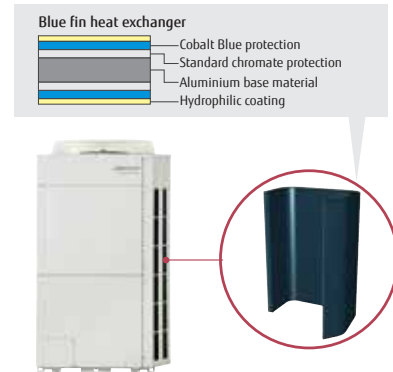
Liquid back-flow protection

By adopting a large sized accumulator, the refrigerant, which is not completely vaporized, is left inside the accumulator and only a stable supply of gas is fed from the accumulator.



Blue fin heat exchanger

Blue fin treatment to the outdoor unit's heat exchanger improves corrosion resistance.



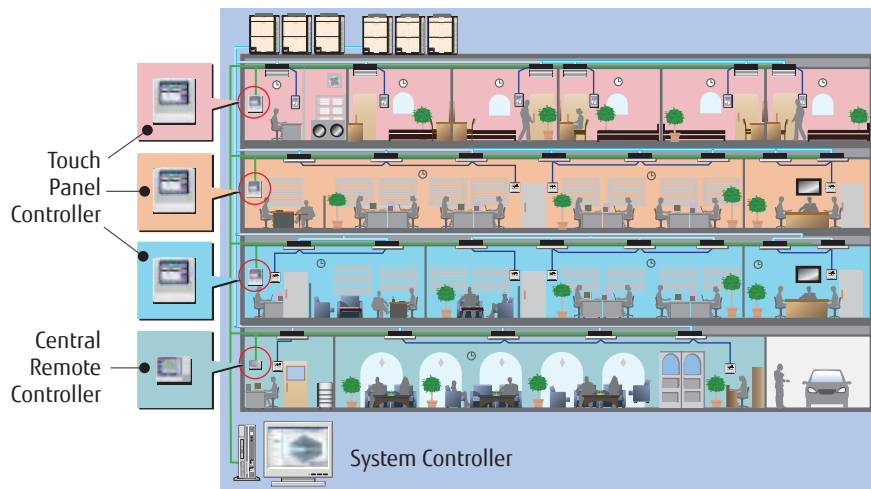
COMFORT AND CONVENIENCE

J-SERIES

V-SERIES

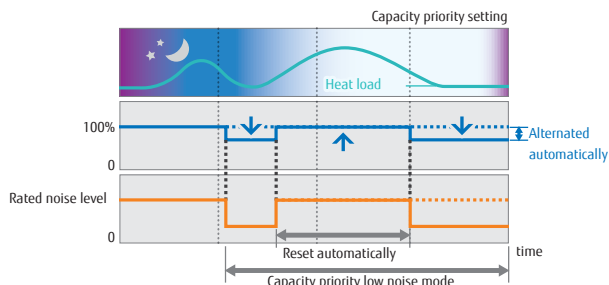
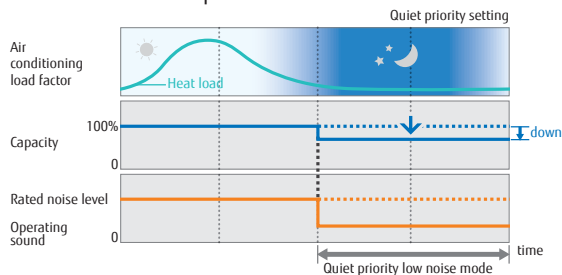
Centralized Control

Fujitsu Airstage offers a variety of individual remotes and centralized controllers. Each provides users with a set of features to meet different needs.

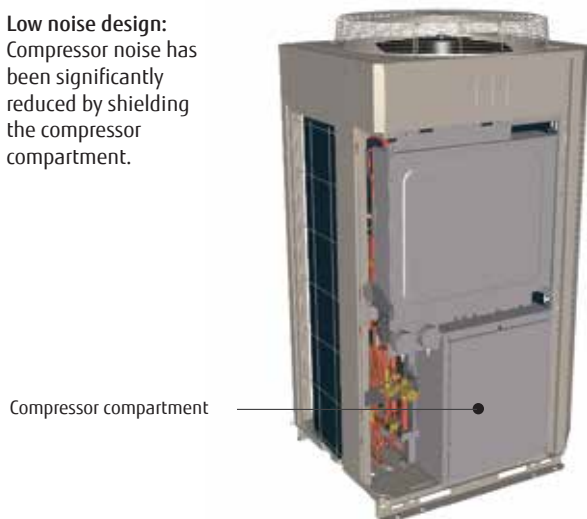


Quiet operation

Low noise mode: Two low noise modes can be selected automatically using quiet priority setting or capacity priority setting, depending on the usage environment and outside temperature load.



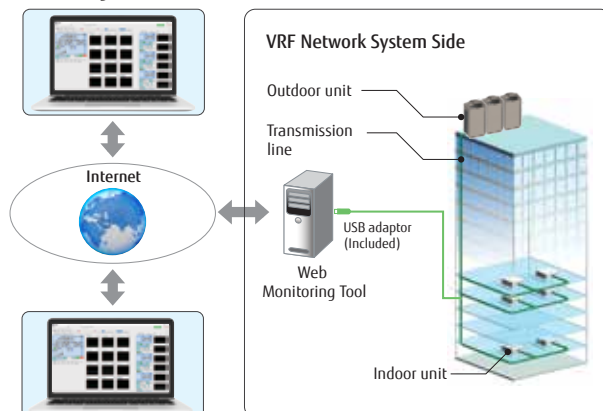
Low noise design: Compressor noise has been significantly reduced by shielding the compressor compartment.



Remote monitoring

Web Monitoring option brings remote Internet access to view system operation ensuring trouble free operation.

Monitoring Side



The operating VRF network system in the building can be monitored in real time over the Internet.

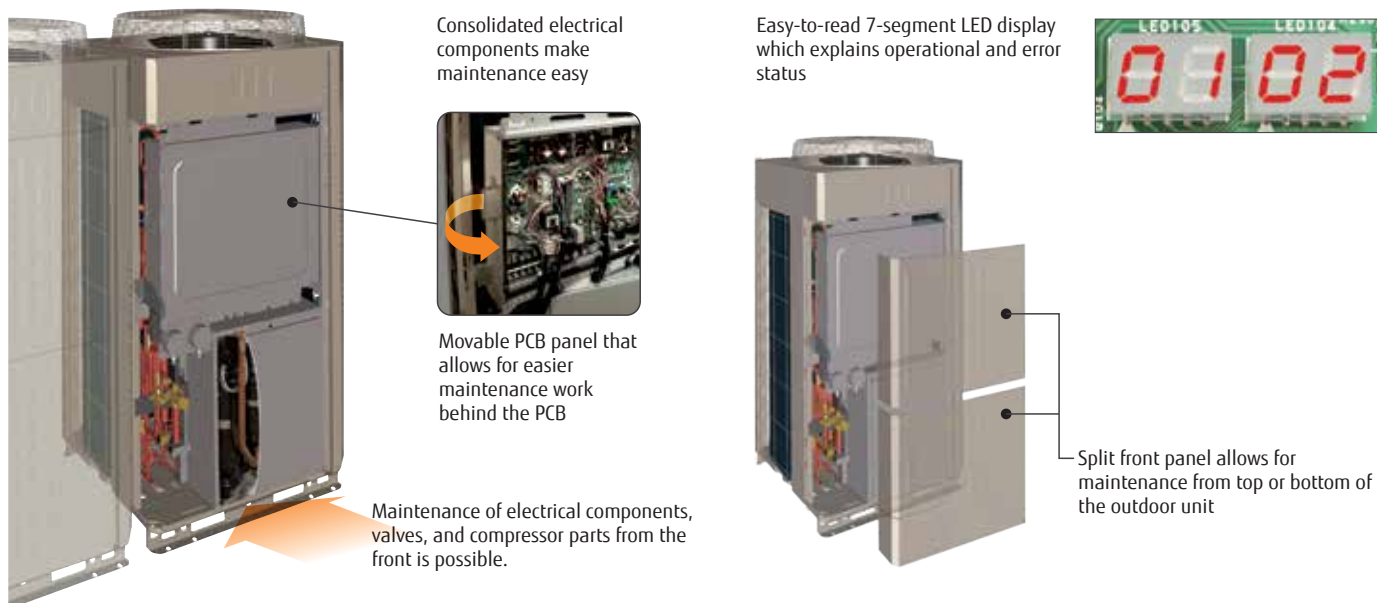
EASY SERVICE & MAINTENANCE

J-SERIES

V-SERIES

Designed for easy service and maintenance

Inspection and replacement of main parts is simple due to innovative construction and an LED operational display.



Error status can be checked easily via the indoor unit wired remote control

An error code is displayed on an LCD screen.

Touch Remote Control



Error status / Error history

No.	Date	Time	Address	Code
1	2012/8/1	11:00AM	002-01	141
2	2012/7/30	2:53AM	002-02	143
3	2012/7/25	8:53AM	002-02	143
4	2012/7/25	11:00AM	002-01	141
5	2012/7/22	11:00AM	002-01	141
6	2012/7/21	11:00AM	002-01	141

Simple Remote Control

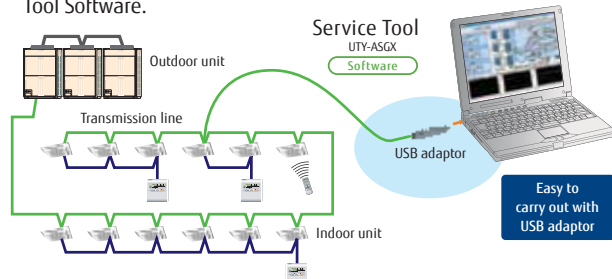


Remote control address
Error code



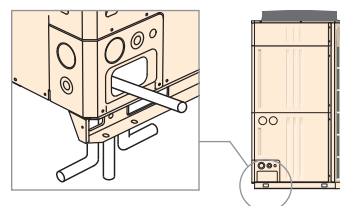
Troubleshooting using the Service Tool

Simplified troubleshooting and commissioning using Service Tool Software.



Flexible piping connection

Piping and wiring are available through the front, left, right and bottom.






Fujitsu Mobile Technician App




This free app is a handy, troubleshooting tool for heat pump and heat recovery systems. The app helps contractors troubleshoot error codes, thermistors and pressure sensors. It also includes a built-in flashlight. Fujitsu Mobile Technician is available as a troubleshooting system performance aid 24/7/365 and requires no phone call or waiting on hold.



The Mobile Technician App requires iOS 6.0 or later and is compatible with iPhone, iPod touch and iPad, it's optimized for the iPhone 5. An Android version for 4.0 or later is also available through Google Play.

OUTDOOR UNITS LINEUP

J-II Heat Pump Single Phase	230V Heat Pump	J-IIS Heat Pump Single Phase	230V Heat Pump	J-IIIIL Heat Pump Three Phase	230V Heat Pump
	36,000 BTU/h (3 Tons) AOU36RLAVM		36,000 BTU/h (3 Tons) AOU36RLAVS		72,000 BTU/h (6 Tons) AOU72RLAVL
	48,000 BTU/h (4 Tons) AOU48RLAVM		48,000 BTU/h (4 Tons) AOU48RLAVS		96,000 BTU/h (8 Tons) AOU96RLAVL
	60,000 BTU/h (5 Tons) AOU60RLAVM				120,000 BTU/h (10 Tons) AOU120RLAVL

V-II Heat Pump VR-II Heat Recovery 3-Phase	230V Heat Pump	460V Heat Pump	230V Heat Recovery	460V Heat Recovery
	72,000 BTU/h (6 Tons) AOUA72RLBV1	72,000 BTU/h (6 Tons) AOUA72RLCV	72,000 BTU/h (6 Tons) AOUA72TLBV	72,000 BTU/h (6 Tons) AOUA72TLCV
	96,000 BTU/h (8 Tons) AOUA96RLBV1	96,000 BTU/h (8 Tons) AOUA96RLCV	96,000 BTU/h (8 Tons) AOUA96TLBV	96,000 BTU/h (8 Tons) AOUA96TLCV
	120,000 BTU/h (10 Tons) AOUA120RLBV1	120,000 BTU/h (10 Tons) AOUA120RLCV	120,000 BTU/h (10 Tons) AOUA120TLBV	120,000 BTU/h (10 Tons) AOUA120TLCV
	144,000 BTU/h (12 Tons) AOUA144RLBVG1 AOUA72RLBV1 AOUA72RLBV1	144,000 BTU/h (12 Tons) AOUA144RLCVG AOUA72RLCV AOUA72RLCV	144,000 BTU/h (12 Tons) AOUA144TLBVG AOUA72TLBV AOUA72TLBV	144,000 BTU/h (12 Tons) AOUA144TLCVG AOUA72TLCV AOUA72TLCV
	168,000 BTU/h (14 Tons) AOUA168RLBVG1 AOUA72RLBV1 AOUA96RLBV1	168,000 BTU/h (14 Tons) AOUA168RLCVG AOUA72RLCV AOUA96RLCV	168,000 BTU/h (14 Tons) AOUA168TLBVG AOUA72TLBV AOUA96TLBV	168,000 BTU/h (14 Tons) AOUA168TLCVG AOUA72TLCV AOUA96TLCV
	192,000 BTU/h (16 Tons) AOUA192RLBVG1 AOUA72RLBV1 AOUA120RLBV1	192,000 BTU/h (16 Tons) AOUA192RLCVG AOUA72RLCV AOUA120RLCV	192,000 BTU/h (16 Tons) AOUA192TLBVG AOUA72TLBV AOUA120TLBV	192,000 BTU/h (16 Tons) AOUA192TLCVG AOUA72TLCV AOUA120TLCV
	216,000 BTU/h (18 Tons) AOUA216RLBVG1 AOUA96RLBV1 AOUA120RLBV1	216,000 BTU/h (18 Tons) AOUA216RLCVG AOUA96RLCV AOUA120RLCV	216,000 BTU/h (18 Tons) AOUA216TLBVG AOUA96TLBV AOUA120TLBV	216,000 BTU/h (18 Tons) AOUA216TLCVG AOUA96TLCV AOUA120TLCV
	240,000 BTU/h (20 Tons) AOUA240RLBVG1 AOUA120RLBV1 AOUA120RLBV1	240,000 BTU/h (20 Tons) AOUA240RLCVG AOUA120RLCV AOUA120RLCV	240,000 BTU/h (20 Tons) AOUA240TLBVG AOUA120TLBV AOUA120TLBV	240,000 BTU/h (20 Tons) AOUA240TLCVG AOUA120TLCV AOUA120TLCV
	264,000 BTU/h (22 Tons) AOUA264RLBVG1 AOUA72RLBV1 AOUA96RLBV1 AOUA96RLBV1	264,000 BTU/h (22 Tons) AOUA264RLCVG AOUA72RLCV AOUA96RLCV AOUA96RLCV	264,000 BTU/h (22 Tons) AOUA264TLBVG AOUA72TLBV AOUA96TLBV AOUA96TLBV	264,000 BTU/h (22 Tons) AOUA264TLCVG AOUA72TLCV AOUA96TLCV AOUA96TLCV
	288,000 BTU/h (24 Tons) AOUA288RLBVG1 AOUA96RLBV1 AOUA96RLBV1 AOUA96RLBV1	288,000 BTU/h (24 Tons) AOUA288RLCVG AOUA96RLCV AOUA96RLCV AOUA96RLCV	288,000 BTU/h (24 Tons) AOUA288TLBVG AOUA96TLBV AOUA96TLBV AOUA96TLBV	288,000 BTU/h (24 Tons) AOUA288TLCVG AOUA96TLCV AOUA96TLCV AOUA96TLCV


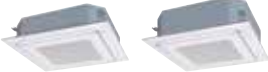









OUTDOOR UNIT NOMENCLATURE

MODEL	INDOOR BODY STYLE	CAPACITY	TYPE	COMPRESSOR	VOLTAGE	CLASS	CODE
AOU Outdoor Unit	Smaller Chassis	BTU/h in	R = Heat Pump	L = Inverter Driven	A = 208/230-1	V = VRF	G = Group**
	A Larger Chassis	Thousands	T = Heat Recovery		B = 208/230-3		M = Medium
					C = 460-3		S = Small
							L = Large

**G is used in AHRI directory to refer to a Group of outdoor units, ex. AOUA168RLBVG is a grouping of one AOUA72RLBV and one AOUA96RLBV.

INDOOR UNITS LINEUP

TLAV/TLAV1: Heat Recovery/ Heat Pump
RLAV: Heat Pump

Compact Cassette ¹ 	4,000 BTUh AUUA4TLAV1	7,000 BTUh AUUA7TLAV AUUA7RLAV*	9,000 BTUh AUUA9TLAV AUUA9RLAV*	12,000 BTUh AUUA12TLAV AUUA12RLAV*	14,000 BTUh AUUA14TLAV AUUA14RLAV*	18,000 BTUh AUUA18TLAV	24,000 BTUh AUUA24TLAV AUUA24RLAV*
4-Way Cassette ² 	18,000 BTUh AUUB18TLAV AUUB18RLAV*	24,000 BTUh AUUB24TLAV	30,000 BTUh AUUB30TLAV	36,000 BTUh AUUB36TLAV			
Circular Flow Cassette 	18,000 BTUh AUUB18TLAV1	24,000 BTUh AUUB24TLAV1	30,000 BTUh AUUB30TLAV1	36,000 BTUh AUUB36TLAV1	48,000 BTUh AUUB48TLAV1		
Slim Compact Duct 	4,000 BTUh ARUL4TLAV1	7,000 BTUh ARUL7TLAV	9,000 BTUh ARUL9TLAV	12,000 BTUh ARUL12TLAV ARUL12RLAV*	14,000 BTUh ARUL14TLAV ARUL14RLAV*	18,000 BTUh ARUL18TLAV	
Medium Static Pressure Duct 	24,000 BTUh ARUM24TLAV	30,000 BTUh ARUM30TLAV ARUM30RLAV*	36,000 BTUh ARUM36TLAV ARUM36RLAV*				
High Static Pressure Duct 	36,000 BTUh ARUH36TLAV	48,000 BTUh ³ ARUH48TLAV ARUH48RLAV*	60,000 BTUh ³ ARUH60TLAV	72,000 BTUh ⁴ ARUH72TLAV	96,000 BTUh ⁴ ARUH96TLAV		
Vertical Air Handler 	12,000 BTUh ARUV12TLAV	18,000 BTUh ARUV18TLAV	24,000 BTUh ARUV24TLAV	30,000 BTUh ARUV30TLAV	36,000 BTUh ARUV36TLAV	48,000 BTUh ³ ARUV48TLAV	60,000 BTUh ³ ARUV60TLAV
Floor Mount 	4,000 BTUh AGUA4TLAV1	7,000 BTUh AGUA7TLAV1	9,000 BTUh AGUA9TLAV1	12,000 BTUh AGUA12TLAV1	14,000 BTUh AGUA14TLAV1		
Floor/Ceiling 	12,000 BTUh ABUA12TLAV	14,000 BTUh ABUA14TLAV ABUA14RLAV*	18,000 BTUh ABUA18TLAV	24,000 BTUh ABUA24TLAV			
Ceiling 	30,000 BTUh ABUA30TLAV	36,000 BTUh ABUA36TLAV ABUA36RLAV*					
Compact Wall Mounted 	7,000 BTUh ASUA7TLAV*	9,000 BTUh ASUA9TLAV* ASUA9RLAV*	12,000 BTUh ASUA12TLAV*	14,000 BTUh ASUA14TLAV* ASUA14RLAV*			
	4,000 BTUh ASUA4TLAV1	7,000 BTUh ASUA7TLAV1	9,000 BTUh ASUA9TLAV1	12,000 BTUh ASUA12TLAV1	14,000 BTUh ASUA14TLAV1		
Wall Mounted 	18,000 BTUh ASUB18TLAV*	24,000 BTUh ASUB24TLAV*					
	18,000 BTUh ASUB18TLAV1	24,000 BTUh ASUB24TLAV1	30,000 BTUh ASUB30TLAV1	36,000 BTUh ASUB36TLAV1			
Outdoor Air Unit 	48,000 BTUh ³ AAUA48TLAV	72,000 BTUh ⁴ AAUA72TLAV	96,000 BTUh ⁴ AAUA96TLAV				

*While supplies last. 1. Compact Cassette Grille UTG-CCGV sold separately. Must order one with each Compact Cassette. 2. Cassette Grille UTG-LCGV sold separately. Must order one with each Cassette. 3. J-Series compatibility is dependent on outdoor unit capacity. 4. Not compatible with J-Series.

INDOOR UNIT NOMENCLATURE

Model	Indoor Body Style	Capacity	Type	Compressor	Voltage	Class
ASU Wall Mount	A Smaller Chassis	BTUhs in	R = Heat Pump	L = Inverter Driven	A = 208/230-1	V = VRF
ABU Universal/Ceiling	B Larger Chassis	Thousands	T = Heat Pump or Heat Recovery			
ARU Ducted	L Low Static	(e.g.)				
AUU Cassette	M Medium Static	4, 7, 9, 12,				
AAU DOA	H High Static	14, 18, 24,				
AGU Floor Mount	V Vertical Air Handler	etc.)				

* 1, 2 or 3 at the end of a model number denotes a model revision. Please note models may not be combined with each other.

HEAT PUMP

AIRSTAGE®

J-IIS / J-II

For 208 /230V

Single Phase

The J-Series provides air conditioning systems for a wide range of applications from small office buildings and stores to large houses.

Connectable indoor unit capacity up to 130%.

A large number of J-Systems can be connected to a single VRF communication network offering a variety of central and remote communication and BMS options.

Applications



Small Commercial

Space-saving design and long piping design allow for flexible installation on the roofs or balconies of small and medium-size buildings.



Large Residential

Multiple indoor units of various capacities and types can be connected.

J-IIS OFFERS SPACE SAVING DESIGN

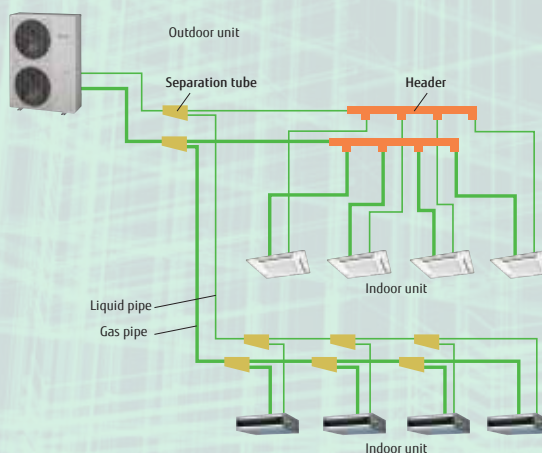
The compact size with a height of less than 3.3ft (1m) allows it to be installed under windows and in tight spaces

Small and light-weight outdoor unit



J-II SYSTEM CONFIGURATION EXAMPLE

- The J-II system offers a long pipe length of 590 ft. total.
- Connection of multiple indoor units using separation tubes and headers.



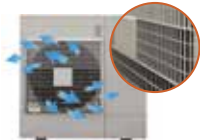
ADVANCED HIGH EFFICIENCY TECHNOLOGY

J-IIS



SMOOTH AIRFLOW GRILLE

This grille was aerodynamically designed for good efficiency with little blow loss.



LARGE HEAT EXCHANGER

Heat exchange performance is substantially improved by adding a 3rd row to the heat exchanger.

DC INVERTER CONTROL

Efficiency is improved by mounting of new active filter module.

HIGH EFFICIENCY DC FAN MOTOR

Using low noise dual DC fan motors offers better control and efficiency.

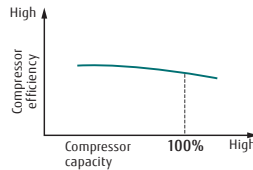
LARGE PROPELLER FAN

High performance and low noise realized by large propeller and optimization of angle.

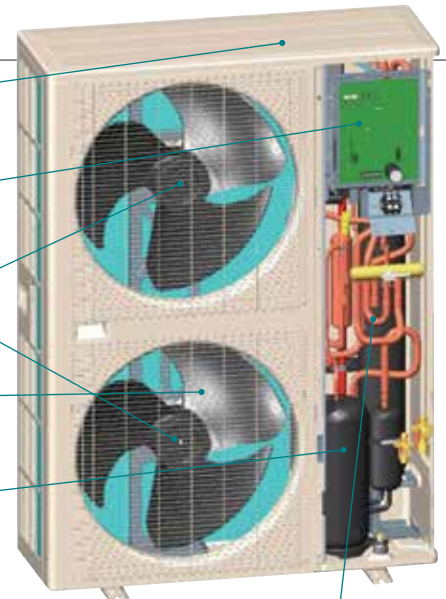
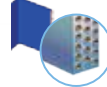
HIGH EFFICIENCY DC TWIN ROTARY COMPRESSOR

DC twin rotary compressor provides great performance under all load conditions. Its performance is optimized for part-load operation.

High efficiency compressor motor
Optimized refrigerant flow design
Highly accurate parts

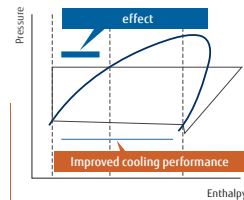


J-II



SUBCOOL HEAT EXCHANGER

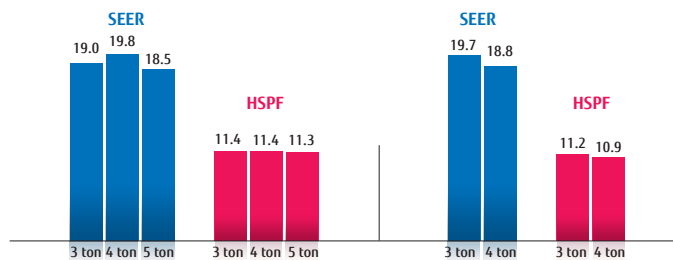
Cooling performance is improved by mounting of dual tube heat exchanger.



ENERGY EFFICIENCY

J-Series Systems provide the highest efficiency for any single-phase VRF. Figures shown based on non-ducted models.

J-II



J-IIS



OPTIMUM COMFORT

Central Controller

Central Remote Controller

or

Touch Panel Controller

or

System Controller
or
System Controller Lite

Individual control of each room's climate provides better control and reduces energy consumption.

Simple Remote Control

Touch Remote Control

Wireless Remote Control



Wall Mount



Cassette



Slim Duct

Ceiling Mount

BMS system

Network converter for LonWorks®

BACnet® Gateway

MODBUS® Converter

SPECIFICATIONS

			J-IIS		J-II		
Nominal system capacity		Ton	3	4	3	4	5
Model name			AOU36RLAVS	AOU48RLAVS	AOU36RLAVM	AOU48RLAVM	AOU60RLAVM
Indoor unit connectable capacity ratio			50% to 130%	50% to 130%		50% to 130%	
Maximum connectable indoor unit			1-6	1-8	1-6	1-8	1-9
Power source		V/Ø/Hz	1-Phase, 208 / 230V, 60Hz		1-Phase, 208 / 230V, 60Hz		
Cooling Capacity (Non-Ducted/Ducted)	Capacity	Btu/h	36,000	48,000	36,000	48,000	60,000
	EER	Btu/h/W	11.8 / 11.2	9.6 / 9.1	13.3 / 12.5	12.5 / 11.8	10.8 / 10.4
	SEER	Btu/h/W	19.7 / 17.4	18.8 / 16.9	19.0 / 17.0	19.8 / 18.1	18.5 / 16.5
Heating Capacity (Non-Ducted/Ducted)	Capacity	Btu/h	42,000	54,000	42,000	54,000	66,000
	COP	W/W	3.74 / 3.56	3.54 / 3.36	3.82 / 3.86	3.88 / 3.64	3.65 / 3.60
	HSPF	W/W	11.2 / 10.3	10.9 / 10.1	11.4 / 10.4	11.4 / 10.9	11.3 / 11.0
Airflow rate		CFM (m3/h)	2,378 (4,040)	2,472 (4,200)	3,649 (6,200)	3,767 (6,400)	4,827 (8,200)
Sound pressure level	Cooling/Heating	dB(A)	52 / 54	53 / 55	50 / 52	51 / 53	57 / 57
Dimensions	Height	in.(mm)	39-5/16 (998)		52-1/2 (1,334)		
	Width		38-3/16 (970)		38-3-16 (970)		
	Depth		14-9/16 (370)		14-9/16 (370)		
Weight		lbs.(kg)	194 (88)		262(119)	262 (119)	269 (122)
Connection pipe diameter	Liquid	in.(mm)	3/8 (9.52)		3/8 (9.52)		
	Gas		5/8 (15.88)		5/8 (15.88)	5/8 (15.88)	3/4 (19.05)
Max. total pipe length		ft.(m)	262 (80)		590 (180)		
Max. actual pipe length (OU to furthest IU)		ft.(m)	164 (50)		393 (120)		
Max.height difference (Outdoor Unit: Upper/Lower)		ft.(m)	98/98 (30/30)		164 / 131 (50/40)		
Operation range	Cooling	°F(°C)	23 to 115 (-5 to 46)		23 to 115 (-5 to 46)		
	Heating		-4 to 70 (-20 to 21)		-4 to 70 (-20 to 21)		
Refrigerant type			R410A		R410A		

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 80°F (26.7°C)DB / 67°F (19.4°C)WB, and outdoor temperature of 95°F (35°C)DB / 75°F (23.9°C)WB.

Heating : Indoor temperature of 70°F (21.1°C)DB / 60°F (15.6°C)WB, and outdoor temperature of 47°F (8.3°C)DB / 43°F (6.1°C)WB.

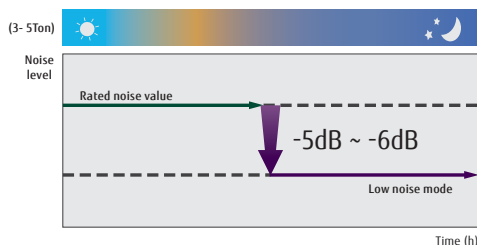
Pipe length : 25ft. (7.5m), Height difference : 0ft. (0m). (Outdoor unit - indoor unit)

VRF Communication Cable is required. It is shown on pg. 79

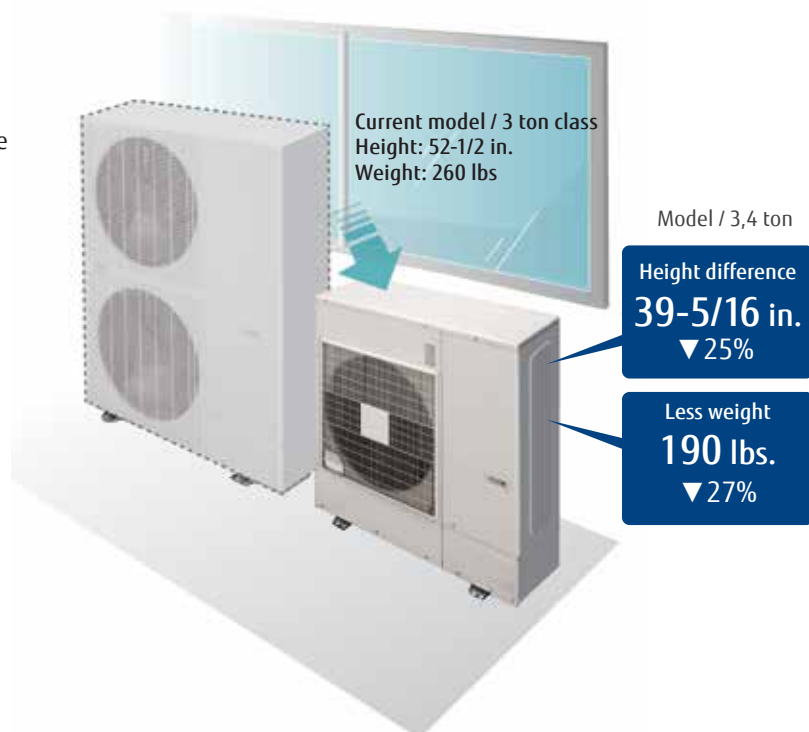
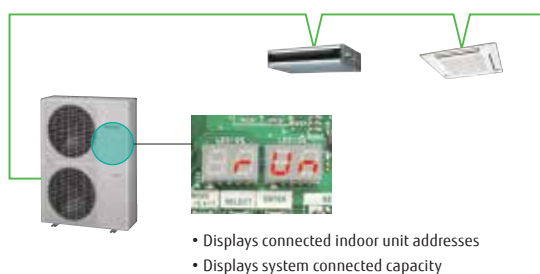
LOW NOISE DESIGN

Low noise mode

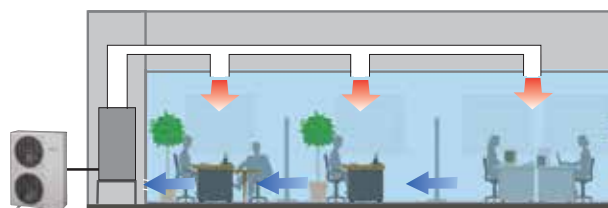
Outdoor unit can be switched to silent mode, depending on the installation environment.



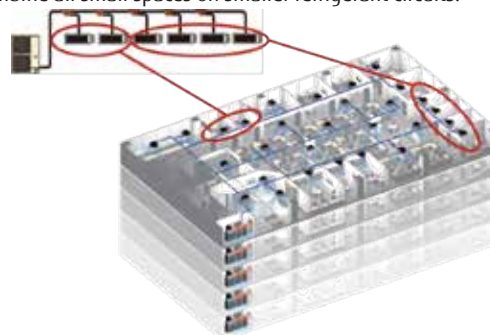
CONNECTION CHECK FUNCTION



Use with DOAS to improve larger VRF system operation and increase overall building efficiency.



Combine all small spaces on smaller refrigerant circuits.

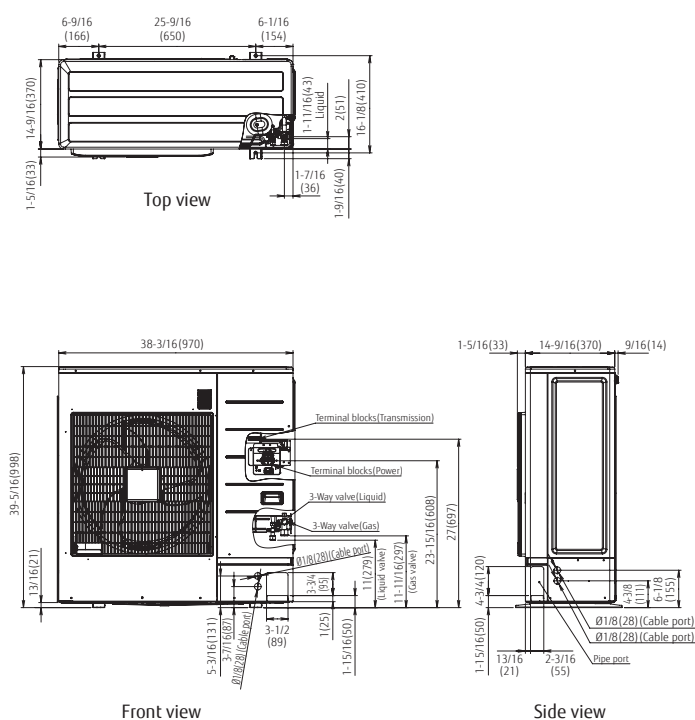


J-II series (Heating operation)



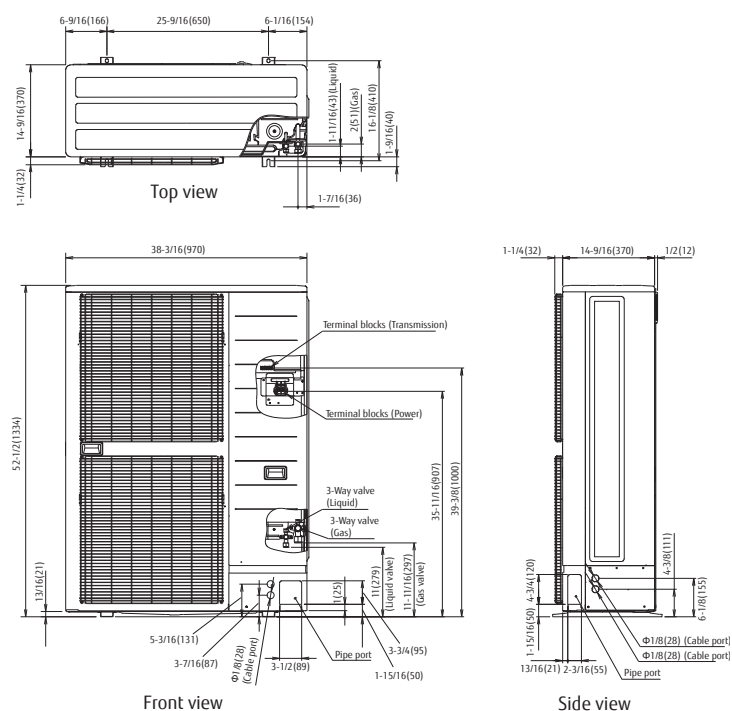
Non-stop oil recovery operation

3, 4 tons: AOU36RLAVS / AOU48RLAVS



3, 4, 5 tons: AOU36RLAVM / AOU48RLAVM / AOU60RLAVM

(Unit : in. (mm))



HEAT PUMP

AIRSTAGE®

J-III L

For 208 /230V

Three Phase

Fujitsu General America provides perfect total air conditioning systems that take into account energy saving, low noise, comfortable airflow, small room application and centralized control for small-sized office buildings with many small rooms.

Flexible Installation



Interior Installation

Quiet operation does not disturb residents. This model features the fan on the front, which is about 39.4 in. (1000mm) wide, allowing flexible installation in narrow spaces.



Installation in Alleys

The compact and narrow chassis allows the unit to be installed directly on the ground or mounted on a wall.



Curbside Installation

The front side fan combined with the slim, compact design enable multiple systems to be installed without blocking windows.

PERFECT FOR SMALL SPACES

Up to 30 units can be connected

Small but powerful indoor units combined with the new J-III L outdoor unit to reach an industry leading maximum of up to 30 indoor units.



Max. connectable
Indoor Unit

10Ton : 30units

8Ton : 24units

6Ton : 18units

HIGH STATIC PRESSURE

External static pressure is available up to 0.24in. W.G (60Pa).



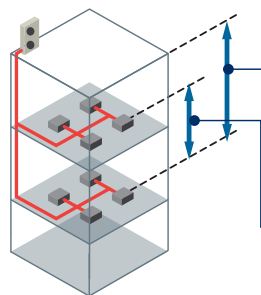
INSTALLATION FLEXIBILITY

Long Piping Length

Advanced refrigerant technology allows systems to reach a total refrigerant piping length of 1,312 ft (400m). This opens up new possibilities in system design.

Total Piping Length

Max. **1,312 ft.**
(400m)



Height difference between outdoor and indoor units

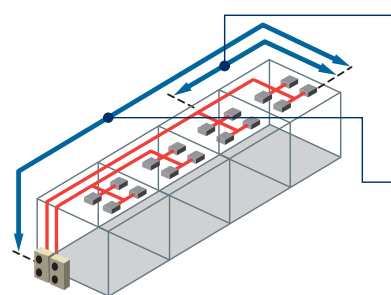
Max. **164ft. (50m)**

For the outdoor unit installed below the indoor units: 131ft. (40m) max.

Height difference between indoor and indoor units

Max. **164ft. (50m)**

*: Only when new indoor units and J-III-L series are combined



Piping length from first separation tube to the farthest indoor unit

Max. **295ft. (90m)**

Actual piping length

Max. **393ft. (120m)**

SPECIFICATIONS

Nominal system capacity		Ton	6	8	10
Model name			AOU72RLAVL	AOU96RLAVL	AOU120RLAVL
Indoor unit connectable capacity ratio			50% to 150%		
Maximum connectable indoor unit			1-18	1-24	1-30
Power source		Ø/V/Hz	208/230V, 3-Phase, 60Hz		
Capacity (Non-Ducted/Ducted)	Capacity	Btu/h	72,000	96,000	120,000
	EER	Btu/h/W	12.1/11.9	11.6/11.6	11.6/11.6
	IEER	-	23.9/21.5	23.1/21.1	24.2/20.9
Capacity (Non-Ducted/Ducted)	Capacity	Btu/h	81,000	108,000	135,000
	COP at 47°F	W/W	4.19/4.01	3.87/3.66	3.77/3.64
Airflow rate		CFM(m³/h)	5,298(9,000)	6,475(11,000)	7,653(13,000)
Sound pressure level	Cooling/Heating	dB(A)	54/55	59/60	62/63
	Height		64-1/2(1,638)		
Dimensions	Width	in.(mm)	42-1/2(1,080)		
	Depth		18-7/8(480)		
Weight		lbs.(kg)	470(213)		
Connection pipe diameter	Liquid	in.(mm)	3/8(9.52)	3/8(9.52)	1/2(12.70)
	Gas		3/4(19.05)	7/8(22.20)	1-1/8(28.58)
Max.Total pipe length		ft.(m)	1312(400)		
Max.height difference (Outdoor Unit: Upper/Lower)			164/131(50/40)		
Operation range	Cooling	°F(°C)	5* ¹ to 115 (-15* ¹ to 46)	5* ¹ to 115 (-15* ¹ to 46)	23* ^{1,2} to 115 (-5* ^{1,2} to 46)
	Heating		-4 to 70(-20 to 21)	-4 to 70(-20 to 21)	-4 to 70(-20 to 21)
Refrigerant type			R410A		

Note: Specifications are based on the following conditions:

Cooling: Indoor temperature of 80°F (26.7°C)DB / 67°F (19.4°C)WB, and outdoor temperature of 95°F (35°C)DB / 75°F (23.9°C)WB.

Heating: Indoor temperature of 70°F (21.1°C)DB / 60°F (15.6°C)WB, and outdoor temperature of 47°F (8.3°C)DB / 43°F (6.1°C)WB.

Pipe length: 25ft. (7.5m),

Height difference: 0ft. (0m). (Outdoor unit - indoor unit)

*¹ When the outdoor unit is lower than the indoor unit, the temperature range is 23°F(-5°C).

*² The cooling operation range of 5 to 115°F(-15 to 46°C) is allowed only when all of the indoor units connected to the system are higher than capacity of 18000Btu/h(5.6kW).

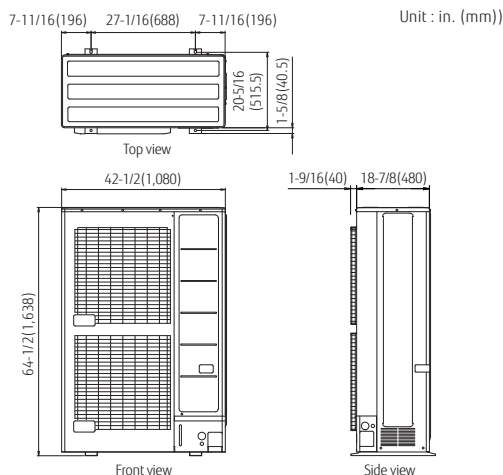
DIMENSIONS

Models:

AOU72RLAVL

AOU96RLAVL

AOU120RLAVL



INDOOR UNIT AND CONTROLLER CONNECTIVITY



Wall Mounted

Mini Duct

Compact Cassette

Compact Floor

JIII-L outdoor units can connect to:

- 13 types of indoor units - 58 different models (Capacity ranges from 4,000 to 96,000 BTU/h)
- Wi-fi enabled controllers



HEAT PUMP

AIRSTAGE[®] V-II series

For 208 /230V

For 460V

3 Phase

Smart and cutting edge design.

Extensive lineup from 6 to 24-Tons in 2-Ton increments

Connectable indoor unit capacity up to 150%

A large number of Airstage systems can be connected to a single VRF communication network offering a variety of central and remote communication and BMS options.

System Outline



Excellent energy savings

Heat pump inverter control improves system operation efficiency in part-load conditions when one or many indoor units are in operation.



Lower life-cycle cost

System operates with minimum energy usage. Only service the zones that need it, which allows for less required operating energy and maintenance.



Easy installation and maintenance

The flexible communication method and piping connections makes installation and maintenance easy even for large systems.

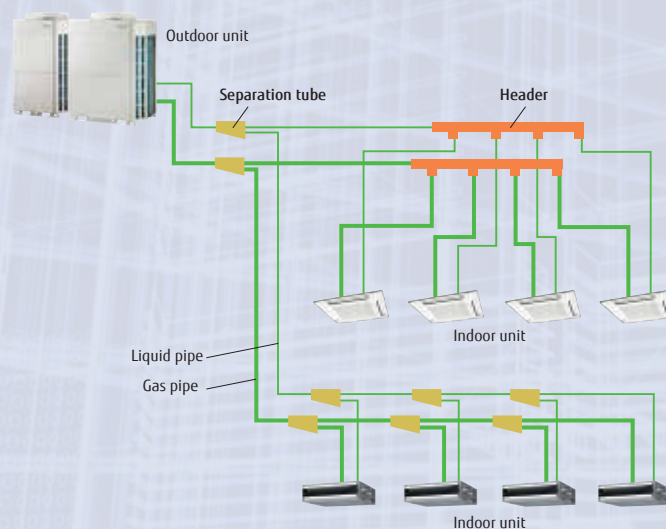
Large Office

SPECIFICATIONS



System configuration example

- This system is used for medium-sized and large buildings. Connecting each outdoor unit makes it possible to create a high-capacity system.
- Connection of multiple indoor units using separation tubes and headers.



ENERGY SAVING TECHNOLOGY THAT BOOSTS OPERATION EFFICIENCY



Powerful large propeller fan

By using CFD*1 technology, a newly designed fan achieves high performance and low noise operation.

*1. CFD = Computational Fluid Dynamics



3 phase DC fan motor

Efficiency is substantially improved by high efficient motor with sophisticated driver control. In addition, low noise is realized by DC fan motor.



Subcool heat exchanger

High Heat Exchange efficiency is achieved by using an internal projection shape double pipe construction.



Sine-wave DC inverter control

High efficiency is realized by adoption of reduced switching loss IPM.



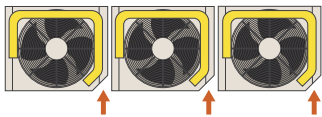
High efficient compressor Large capacity DC inverter compressor

Large capacity high efficient DC twin rotary compressor with excellent intermediate capability.



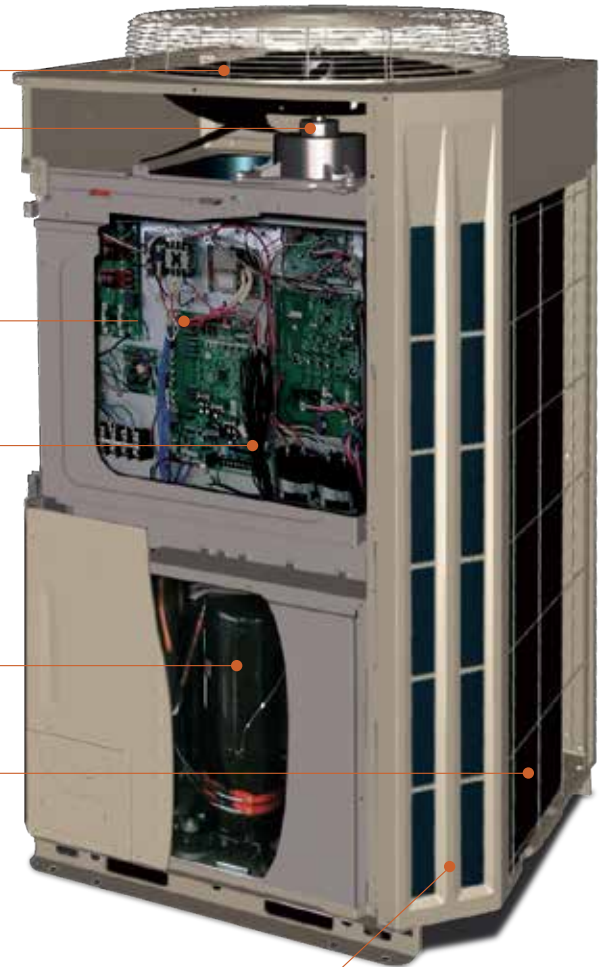
4-face heat exchanger

Heat exchange efficiency is significantly improved by the introduction of a new 4-face heat exchanger that increases effective surface area.



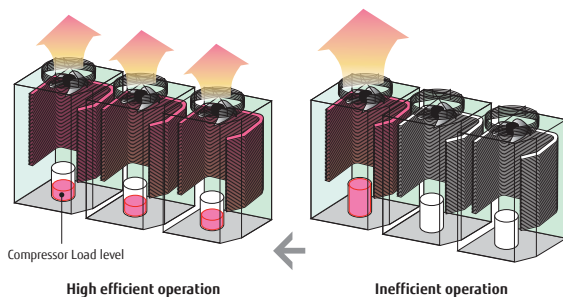
Front intake port (corner cut air inhaling structure)

In multiple outdoor unit installations, the unique front intake design improves airflow into the Heat Exchanger.



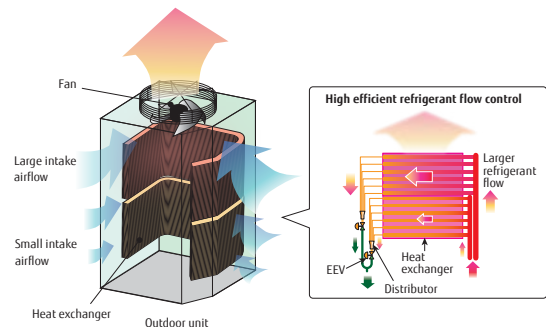
MULTIPLE OUTDOOR OPERATION CONTROL

When multiple outdoor units are connected a sophisticated operation is performed by each compressor. Rather than running one compressor at full load and distributing refrigerant to one heat exchanger, this control method operates all compressors at part load and distributes refrigerant to all of the heat exchangers which allows for the overall system efficiency to be improved.



HEAT EXCHANGER REFRIGERANT CONTROL

The heat exchanger in the outdoor unit is split into two parts (Top and Bottom). The efficiency of the heat exchanger has been improved by adopting an optimum refrigerant path control where the refrigerant is distributed more into the top heat exchanger as this is where there is a greater air flow intake.

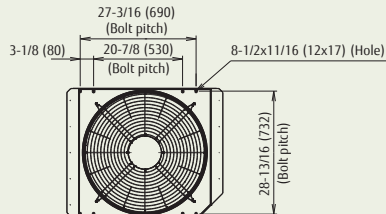
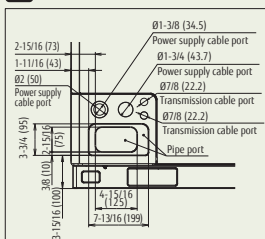


V-II Specifications for 208 / 230 / 460V

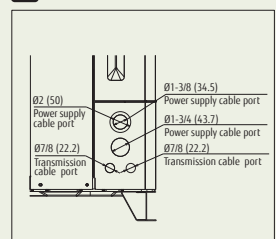
Nominal Tonnage	Ton(s)	6	8	10	12	14
Model Name	Units	AQUA72RLBV1 / AQUA72RLCV	AQUA96RLBV1 / AQUA96RLCV	AQUA120RLBV1 / AQUA120RLCV	AQUA144RLBVG1 / AQUA144RLCVG	AQUA168RLBVG1 / AQUA168RLCVG
Unit Group Configuration		1×(AQUA72RLBV1) / 1×(AQUA72RLCV)	1×(AQUA96RLBV1) / 1×(AQUA96RLCV)	1×(AQUA120RLBV1) / 1×(AQUA120RLCV)	2×(AQUA72RLBV1) / 2×(AQUA72RLCV)	1×(AQUA96RLBV1) + 1×(AQUA72RLBV1) / 1×(AQUA96RLCV) + 1×(AQUA72RLCV)
Indoor Unit Total Capacity		50% to 150%				
Maximum Connectable Indoor Units		16	21	26	32	37
CAPACITY						
Nominal Cooling Capacity	BTU/h [kW]	72,000 [21.1]	96,000 [28.1]	120,000 [35.2]	144,000 [42.2]	168,000 [49.2]
Cooling Power Input (Nominal)	kW	5.37 / 5.37	7.67 / 7.67	9.86 / 9.86	11.80 / 11.80	14.20 / 14.20
Nominal Heating Capacity	BTU/h [kW]	81,000 [23.7]	108,000 [31.7]	135,000 [39.6]	162,000 [47.5]	188,000 [55.1]
Heating Power Input (Nominal)	kW	5.39 / 5.39	7.90 / 7.90	10.19 / 10.19	12.81 / 12.81	14.69
ELECTRIC						
Electrical Power Requirements 208 / 230 VAC, 3-Phase, 60Hz / 460 VAC, 3-Phase, 60Hz						
Maximum Circuit Breaker	A	50 / 25	50 / 25	60 / 30	2×(50/25)	2×(50/25)
Minimum Circuit Ampacity (MCA)	A	41 / 21	41 / 21	50 / 25	2X (41) / 2X (21)	2X (41) / 2X (21)
EFFICIENCY						
Cooling (Non-Ducted/Ducted)	EER	12.5 / 12.3	11.7 / 11.3	11.3 / 11.3	11.4 / 11.4	11.0 / 11.0
Cooling (Non-Ducted/Ducted)	IEER	24.1 / 20.0	23.6 / 20.2	23.8 / 20.1	22.2 / 20.4	22.2 / 20.0
Heating 47° (Non-Ducted/Ducted)	COP	4.06 / 3.64	3.72 / 3.60	3.61 / 3.49	3.44 / 3.44	3.48 / 3.48
TEMPERATURE						
Operating Temp. Cooling (DB)	°F [°C]	5 to 115 [-15 to 46]	5 to 115 [-15 to 46]	5 to 115 [-15 to 46]	23 to 115 [-5 to 46]	23 to 115 [-5 to 46]
Operating Temp. Heating (DB)	°F [°C]	-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]
PIPE						
Pipe Connection: Liquid	in [mm]	1/2 [12.70]	1/2 [12.70]	1/2 [12.70]	1/2 [12.70]	5/8 [15.88]
Pipe Connection: Discharge Gas	in [mm]	7/8 [22.22]	7/8 [22.22]	1-1/8 [28.58]	1-1/8 [28.58]	1-1/8 [28.58]
REFRIGERANT						
Refrigerant Type		R410A	R410A	R410A	R410A	R410A
Refrigerant Charge	lbs [kg]	25.79 [11.70]	25.79 [11.70]	26.01 [11.80]	2×(25.79[11.70])	2×(25.79[11.70])
FAN						
Fan Airflow Rate	CFM [m³/h]	6533 [11,100]	6533 [11,100]	7652 [13,000]	2×(6533 [11,100])	2×(6533 [11,100])
External Static Pressure (Max)	in.WG [Pa]	0.32 [80]	0.32 [80]	0.32 [80]	0.32 [80]	0.32 [80]
Sound Pressure Levels (Cooling/Heating)	dB (A)	57/58	59/59	61 / 62	60/61	61/62
COMPRESSOR						
Compressor Type x Quantity		Rotary Inverter	Rotary Inverter	Rotary Inverter	2×Rotary Inverter	2×Rotary Inverter
Compressor Motor Output	kW	7.5	7.5	11.0	2×7.5	2×7.5
Compressor Crankcase Heater	W	2×35	2×35	2×35	2×(2×35)	2×(2×35)
DIMENSIONS / WEIGHT						
Dim.Net (HxWxD)	in [mm]	66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765]	66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765]	66-9/16 × 48-13/16 × 30-1/8 [1,690 × 1240 × 765]	2 × (66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765])	2 × (66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765])
Net Weight	lbs [kg]	564 [256] / 584 [265]	564 [256] / 584 [265]	611 [277] / 635 [288]	2×(564[256]) / 2×(584[265])	2×(564[256]) / 2×(584[265])

SPECIFICATIONS 6, 8tons: AQUA72RLBV1 / AQUA96RLBV1 AQUA72RLCV / AQUA96RLCV

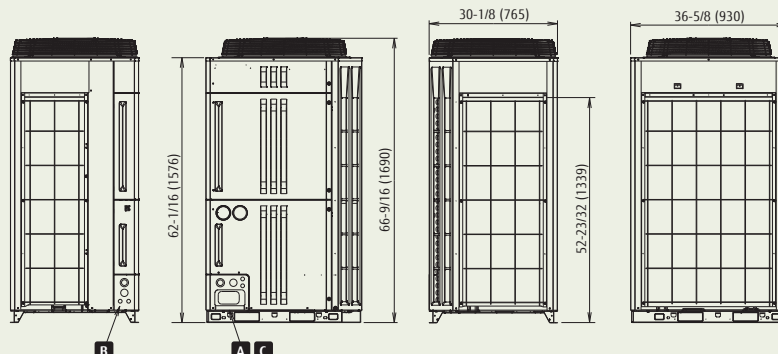
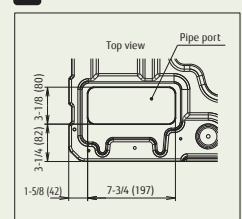
A Front side knockout position



B Left side knockout position



C Bottom side knockout position



16	18	20	22	24
AOUA192RLBVG1 / AOUA192RLCVG	AOUA216RLBVG1 / AOUA216RLCVG	AOUA240RLBVG1 / AOUA240RLCVG	AOUA264RLBVG1 / AOUA264RLCVG	AOUA288RLBVG1 / AOUA288RLCVG
1×(AOUA120RLBV1) + 1×(AOUA72RLBV1) / 1×(AOUA120RLCV) + 1×(AOUA72RLCV)	1×(AOUA120RLBV1) + 1×(AOUA96RLBV1) / 1×(AOUA120RLCV) + 1×(AOUA96RLCV)	2×(AOUA120RLBV1) / 2×(AOUA120RLCV)	2×(AOUA96RLBV1) + 1×(AOUA72RLBV1) / 2×(AOUA96RLCV) + 1×(AOUA72RLCV)	3×(AOUA96RLBV1) / 3×(AOUA96RLCV)
50% to 150%				
42	47	52	58	63
192,000 [56.2]	216,000 [63.3]	240,000 [70.3]	264,000 [77.4]	288,000 [84.4]
16.04	18.47	20.45	22.58	25.27
216,000 [63.3]	243,000 [71.2]	270,000 [79.1]	297,000 [87.0]	324,000 [95.0]
15.65	19.07	21.9	23.41	26.28
208 / 230 VAC, 3-Phase, 60Hz / 460 VAC, 3-Phase, 60Hz				
1×(50), 1×(60) / 1×(25), 1×(30)	1×(50), 1×(60) / 1×(25), 1×(30)	2×(60) / 2×(30)	3×(50) / 3×(25)	3×(50) / 3×(25)
1X (41), 1X (50) / 1X (21), 1X (25)	1X (41), 1X (50) / 1X (21), 1X (25)	2X (50) / 2X (25)	3X (41) / 3X (21)	3X (41) / 3X (21)
11.2 / 11.1	10.9 / 10.9	10.9 / 10.9	10.9 / 10.9	10.6 / 10.6
24.3 / 20.5	20.0 / 19.2	20.8 / 20.2	20.8 / 20.1	20.8 / 20.1
3.75 / 3.57	3.47 / 3.47	3.36 / 3.36	3.45 / 3.40	3.36 / 3.31
23 to 115 [-5 to 46]	23 to 115 [-5 to 46]	23 to 115 [-5 to 46]	23 to 115 [-5 to 46]	23 to 115 [-5 to 46]
-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]
5/8 [15.88]	5/8 [15.88]	5/8 [15.88]	5/8 [15.88]	3/4 [19.05]
1-1/8 [28.58]	1-3/8 [34.92]	1-3/8 [34.92]	1-3/8 [34.92]	1-3/8 [34.92]
R410A	R410A	R410A	R410A	R410A
1×(25.79[11.70]) + 1×(26.01[11.80])	1×(25.79[11.70]) + 1×(26.01[11.80])	2×(26.01[11.80])	3×(25.79[11.70])	3×(25.79[11.70])
1×(6533 [11,100]) + 1×(7652 [13,000])	1×(6533 [11,100]) + 1×(7652 [13,000])	2×(7652 [13,000])	3×(6533 [11,100])	3×(6533 [11,100])
0.32 [80]	0.32 [80]	0.32 [80]	0.32 [80]	0.32 [80]
62/63	63/64	64/65	63/63	64/64
2×Rotary Inverter	2×Rotary Inverter	2×Rotary Inverter	3×Rotary Inverter	3×Rotary Inverter
1×(7.5)+1×(11.0)	1×(7.5)+1×(11.0)	2×11.0	3×7.5	3×7.5
2×(2×35)	2×(2×35)	2×(2×35)	3×(2×35)	3×(2×35)
1×(66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765]), 1×(66-9/16 × 48-13/16 × 30-1/8 [1,690 × 1240 × 765])	1×(66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765]), 1×(66-9/16 × 48-13/16 × 30-1/8 [1,690 × 1240 × 765])	2×(66-9/16 × 48-13/16 × 30-1/8 [1,690 × 1240 × 765])	3×(66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765])	3×(66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765])
564[256]+611[277] / 635[288]+584[265]	564[256]+611[277] / 635[288]+584[265]	2×([611[277]) / 2×(635[288])	3×([564[256]) / 3×(584[265])	3×([564[256]) / 3×(584[265])

Note :
Specifications are based on the following conditions.

Cooling :
Indoor temperature of 80°F (26.7°C) DB / 67°F (19.4°C) WB, and outdoor temperature of 95°F (35.0°C) DB / 75°F (23.9°C) WB.

Heating :
Indoor temperature of 70°F (21.1°C) DB / 60°F (15.6°C) WB, and outdoor temperature of 47°F (8.3°C) DB / 43°F (6.1°C) WB.

Pipe length :
25ft. (7.5 m); Height difference between outdoor unit and indoor unit : 0ft. (0 m).

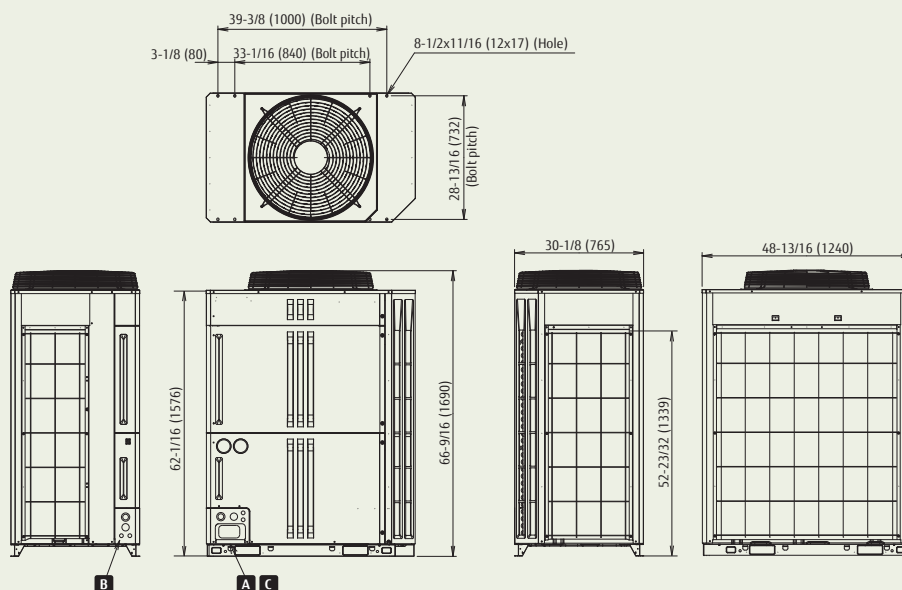
*1 Electrical data is only for outdoor unit.

VRF Communication Cable is required. It is shown on pg. 79

DIMENSIONS

10tons: AOUA120RLBV1
AOUA120RLCV

(UNIT: IN (MM))



HEAT RECOVERY

AIRSTAGE[®] VR-II series

For 208 /230V

For 460V

3 Phase

Smart, cutting edge design

Extensive lineup from 6 to 24 tons in 2Ton increments

Connectable indoor unit capacity up to 150%

A large number of Airstage systems can be connected to a single VRF communication network offering a variety of central and remote communication and BMS options.

Benefits



Simultaneous cooling and heating operation using 1 refrigerant system

Cooling and heating can be freely selected for each indoor unit to provide simultaneous cooling and heating in rooms with large temperature differences.



Lower life-cycle cost

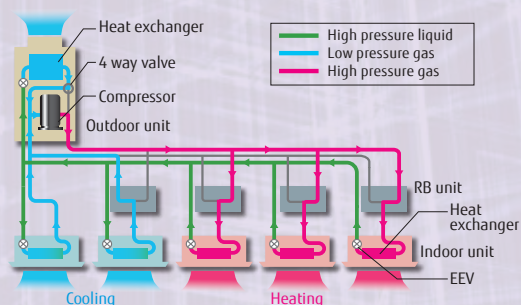
System operates with minimum energy usage. Only service the zones that need it, which allows for less required operating energy and maintenance.



Handles changes in temperature differences

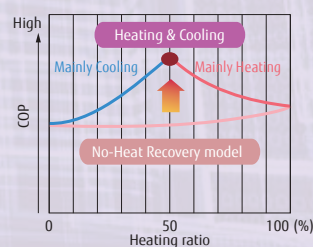
The operation mode can be freely changed when there are large temperature differences during the day.

Large Building



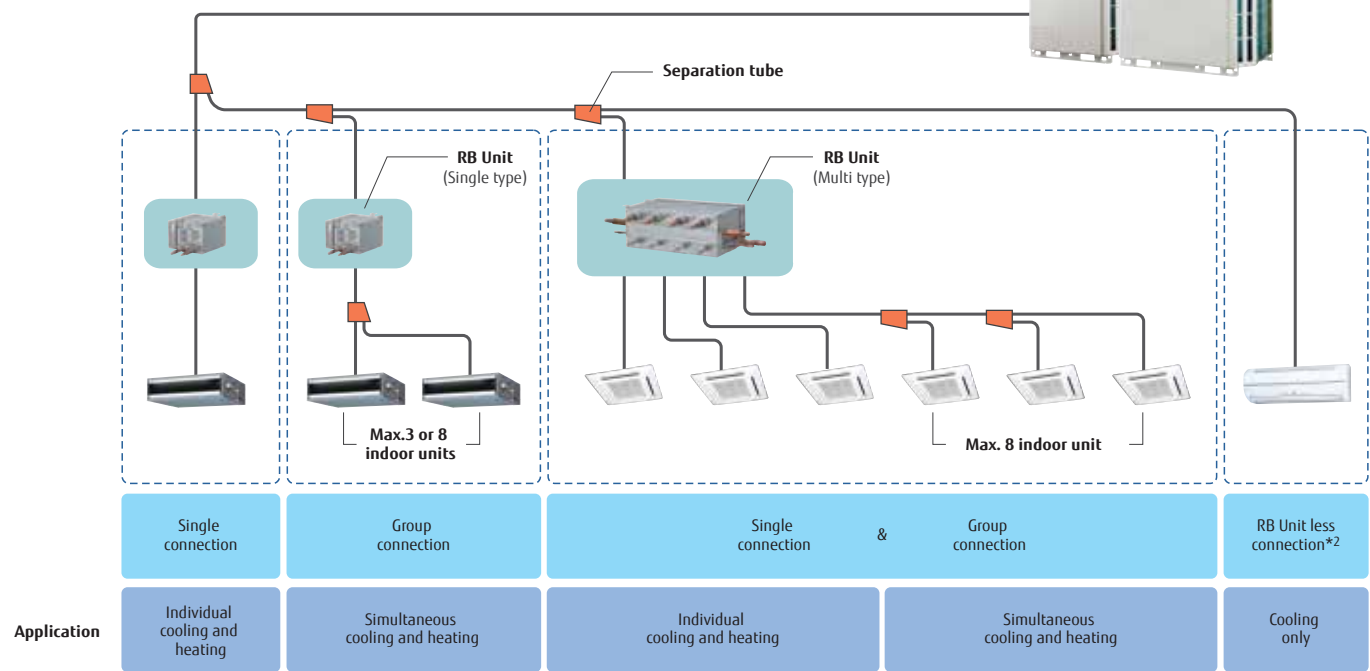
Our Heat recovery systems achieve high operating energy efficiency by drawing heat from the room to be cooled and transferring it as energy for rooms that are to be heated.

Energy savings have been improved as heating and cooling modes can be operated at the same time on the same air conditioning piping system.



FLEXIBLE PIPING CONNECTION

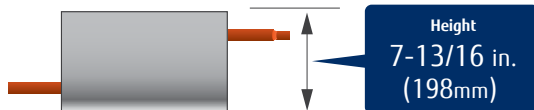
A more flexible refrigerant piping work is possible by the use of various piping and RB Unit connections, for adjustments to the floor layout and building structure.



- The RB unit can be freely positioned between the first branch and the indoor unit.
- The maximum height difference between RB units is 49ft. (15m).
- *2. RB Unit is not necessary for cooling only use.

FLEXIBLE INSTALLATION OF REFRIGERANT BRANCH (RB) UNIT

See specifications of RB units on pg 78.



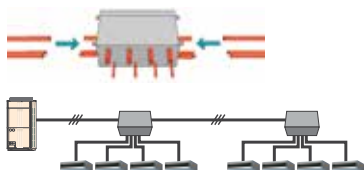
- Small & slim design saves space
- A drain pipe is not required
- The control box position can be changed to meet the installation conditions



Single RBUs offer flexible installation orientation to accommodate space requirements.

Simple installation series connection design

- 2-way connection
- Reducing overall piping length
- Up to 2 units can be connected in series.

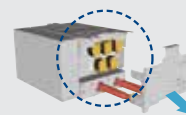


RB unit (single type)

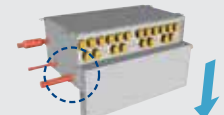


RB unit (multi type)

Easy to maintain in a narrow space.

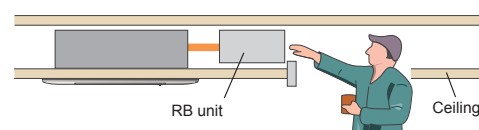


- Maintenance can be performed from the side.
- No top-access service needed.



- Electronics enclosure can be temporarily slid down for service access.

- Parts can be replaced easily even in a narrow ceiling space.



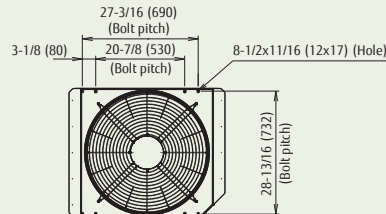
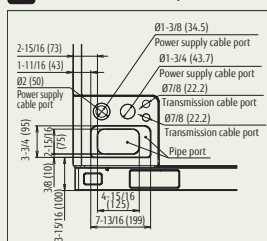
VR-II Specifications for 208 / 230 / 460V

Nominal Tonnage	Ton(s)	6	8	10	12	14
Model Name	Units	AQUA72TLBV / AQUA72RLCV	AQUA96TLBV / AQUA96RLCV	AQUA120TLBV / AQUA120RLCV	AQUA144TLBVG / AQUA144RLCV	AQUA168TLBVG / AQUA168RLCV
Unit Group Configuration		1×(AQUA72TLBV) 1×(AQUA72RLCV)	1×(AQUA96TLBV) 1×(AQUA96RLCV)	1×(AQUA120TLBV) 1×(AQUA120RLCV)	2×(AQUA72TLBV) 2×(AQUA72RLCV)	1×(AQUA72TLBV) + 1×(AQUA96TLBV) 1×(AQUA72RLCV) + 1×(AQUA96RLCV)
Indoor Unit Total Capacity		50% to 150%				
Maximum Connectable Indoor Units		14	16	18	22	26
CAPACITY						
Nominal Cooling Capacity	BTUh [kW]	72,000 [21.1]	96,000 [28.1]	120,000 [35.2]	144,000 [42.2]	168,000 [49.2]
Cooling Power Input (Nominal)	kW	5.31	7.56	9.75	11.69	14.03
Nominal Heating Capacity	BTUh [kW]	81,000 [23.7]	108,000 [31.7]	135,000 [39.6]	162,000 [47.5]	188,000 [55.1]
Heating Power Input (Nominal)	kW	5.35	7.82	10.11	12.73	13.93
ELECTRIC						
Electrical Power Requirements						
Maximum Circuit Breaker	A	50 / 25	50 / 25	60 / 30	2×(50) / 2×(25)	2×(50) / 2×(25)
Minimum Circuit Ampacity (MCA)	A	41 / 21	41 / 21	50 / 25	2X (41) / 2X (21)	2X (41) / 2X (21)
EFFICIENCY						
Cooling (Non-Ducted/Ducted)	EER	12.5 / 12.3	11.7 / 11.3	11.3 / 11.3	11.4 / 11.4	11 / 11
Cooling (Non-Ducted/Ducted)	IEER	24.1 / 20	23.6 / 20.20	23.8 / 20.1	22.2 / 20.4	22.2 / 20
Heating 47° (Non-Ducted/Ducted)	COP	4.06 / 3.64	3.72 / 3.60	3.61 / 3.49	3.44 / 3.44	3.48 / 3.48
SCHE (Non-Ducted/Ducted)	SCHE	30.1 / 24.00	26.5 / 25.5	25.4 / 25.8	22.2 / 22.2	22 / 22
TEMPERATURE						
Operating Temp. Cooling (DB)	°F [°C]	14 to 115 [-10 to 46]	14 to 115 [-10 to 46]	14 to 115 [-10 to 46]	14 to 115 [-10 to 46]	14 to 115 [-10 to 46]
Operating Temp. Heating (DB)	°F [°C]	-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]
PIPE						
Pipe Connection: Liquid	in [mm]	1/2 [12.70]	1/2 [12.70]	1/2 [12.70]	1/2 [12.70]	5/8 [15.88]
Pipe Connection: Discharge Gas	in [mm]	5/8 [15.88]	3/4 [19.05]	3/4 [19.05]	7/8 [22.22]	7/8 [22.22]
Pipe Connection: Suction Gas	in [mm]	7/8 [22.22]	7/8 [22.22]	1-1/8 [28.58]	1-1/8 [28.58]	1-1/8 [28.58]
REFRIGERANT						
Refrigerant Type		R410A	R410A	R410A	R410A	R410A
Refrigerant Charge	lbs [kg]	26.01 [11.80]	26.01 [11.80]	26.01 [11.80]	2×(26.01 [11.80])	2×(26.01 [11.80])
FAN						
Fan Airflow Rate	CFM [m³/h]	6533 [11,100]	6533 [11,100]	7652 [13,000]	2×(6533 [11,100])	2×(6533 [11,100])
External Static Pressure (Max)	in.WG [Pa]	0.32 [80]	0.32 [80]	0.32 [80]	0.32 [80]	0.32 [80]
Sound Pressure Levels (Cooling/Heating)	dB (A)	57/58	59 / 59	61 / 62	60/61	61/62
COMPRESSOR						
Compressor Type x Quantity		Rotary Inverter	Rotary Inverter	Rotary Inverter	2×Rotary Inverter	2×Rotary Inverter
Compressor Motor Output	kW	7.5	7.5	11	2×7.5	2×7.5
Compressor Crankcase Heater	W	2×35	2×35	2×35	2×(2×35)	2×(2×35)
DIMENSIONS / WEIGHT						
Dim.Net (HxWxD)	in [mm]	66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765]	66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765]	66-9/16 × 48-13/16 × 30-1/8 [1,690 × 1240 × 765]	2 × (66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765])	2 × (66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765])
Net Weight	lbs [kg]	597 [271] / 609 [276]	597 [271] / 609 [276]	639 [290] / 657 [298]	2X (597 [271]) / 2X (609 [276])	2X (597 [271]) / 2X (609 [276])

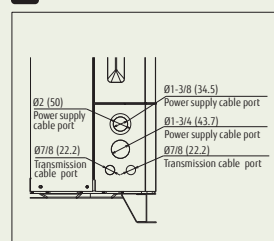
SPECIFICATIONS

6, 8 tons: AQUA72RLBV1 / AQUA96RLBV1
AQUA72RLCV / AQUA96RLCV

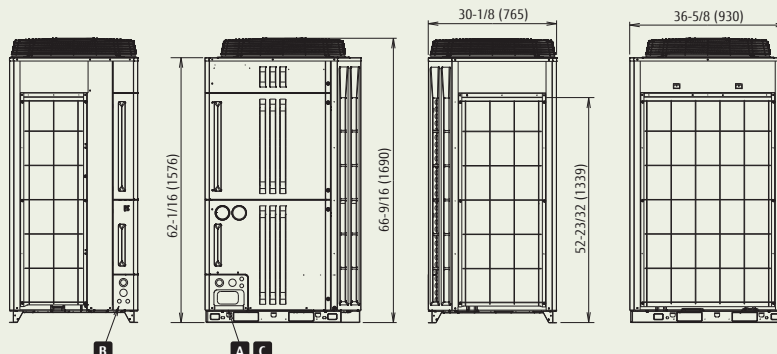
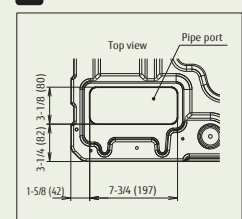
A Front side knockout position



B Left side knockout position



C Bottom side knockout position



16	18	20	22	24
AQUA192TLBVG / AQUA192TLCVG	AQUA216TLBVG / AQUA216TLCVG	AQUA240TLBVG / AQUA240TLCVG	AQUA264TLBVG / AQUA264TLCVG	AQUA288TLBVG / AQUA288TLCVG
1×(AQUA72TLBV) + 1×(AQUA120TLBV) 1×(AQUA72TLCV) + 1×(AQUA120TLCV)	1×(AQUA96TLBV) + 1×(AQUA120TLBV) 1×(AQUA96TLCV) + 1×(AQUA120TLCV)	2×(AQUA120TLBV) 2×(AQUA120TLCV)	1×(AQUA72TLBV) + 2×(AQUA96TLBV) 1×(AQUA72TLCV) + 2×(AQUA96TLCV)	3×(AQUA96TLBV) 3×(AQUA96TLCV)
50% to 150%				
30	34	37	41	45
192,000 [56.2]	216,000 [63.3]	240,000 [70.3]	264,000 [77.4]	288,000 [84.4]
15.78	18.27	20.19	22.35	25
216,000 [63.3]	243,000 [71.2]	270,000 [79.1]	297,000 [87.0]	324,000 [95]
14.79	18.91	21.7	23.2	26.07
208 / 230 VAC, 3-Phase, 60Hz / 460 VAC, 3-Phase, 60Hz				
1×(50) , 1×(60) / 1×(25) , 1×(30)	1×(50) , 1×(60) / 1×(25) , 1×(30)	2×(60) / 2×(30)	2×(50) , 1×(60) / 3×(25)	3×(50) / 3×(25)
1X (41), 1X (50) / 1X (21), 1X (25)	1X (41), 1X (50) / 1X (21), 1X (25)	2X (50) / 2X (25)	3X (41) / 3X (21)	3X (41) / 3X (21)
11.2 / 11.1	10.9 / 10.9	10.9 / 10.9	10.9 / 10.9	10.6 / 10.6
24.3 / 20.5	20 / 19.2	20.8 / 20.2	20.8 / 20.1	20.8 / 20.1
3.75 / 3.57	3.47 / 3.47	3.36 / 3.36	3.45 / 3.4	3.36 / 3.31
27.1 / 25	25.2 / 25.2	23.7 / 23.7	22.0 / 22.0	22.0 / 22.0
14 to 115 [-10 to 46]	14 to 115 [-10 to 46]	14 to 115 [-10 to 46]	14 to 115 [-10 to 46]	14 to 115 [-10 to 46]
-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]	-4 to 70 [-20 to 21]
5/8 [15.88]	5/8 [15.88]	5/8 [15.88]	5/8 [15.88]	3/4 [19.05]
7/8 [22.22]	1-1/8 [28.58]	1-1/8 [28.58]	1-1/8 [28.58]	1-1/8 [28.58]
1-1/8 [28.58]	1-3/8 [34.92]	1-3/8 [34.92]	1-3/8 [34.92]	1-3/8 [34.92]
R410A	R410A	R410A	R410A	R410A
2×(26.01 [11.80])	2×(26.01 [11.80])	2×(26.01 [11.80])	3×(26.01 [11.80])	3×(26.01 [11.80])
1×(6533 [11,100]) + 1×(7652 [13,000])	1×(6533 [11,100]) + 1×(7652 [13,000])	2×(7652 [13,000])	3×(6533 [11,100])	3×(6533 [11,100])
0.32 [80] 62 / 63	0.32 [80] 63/64	0.32 [80] 64/65	0.32 [80] 63/63	0.32 [80] 64/64
2×Rotary Inverter	2×Rotary Inverter	2×Rotary Inverter	3×Rotary Inverter	3×Rotary Inverter
1×(7.5) + 1×(11)	1×(7.5) + 1×(11)	2×(11)	3×7.5	3×7.5
2×(2×35)	2×(2×35)	2×(2×35)	3×(2×35)	3×(2×35)
1×(66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765]), 1×(66-9/16 × 48-13/16 × 30-1/8 [1,690 × 1240 × 765])	1×(66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765]), 1×(66-9/16 × 48-13/16 × 30-1/8 [1,690 × 1240 × 765])	2×(66-9/16 × 48-13/16 × 30-1/8 [1,690 × 1240 × 765])	3×(66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765])	3×(66-9/16 × 36-5/8 × 30-1/8 [1,690 × 930 × 765])
1X (597 [271]), 1X (639 [290]) / 1X (609 [276]), 1X (657 [298])	1X (597 [271]), 1X (639 [290]) / 1X (609 [276]), 1X (657 [298])	2X (639 [290]) / 2X (657 [298])	3×(584 [265])3X (597 [271]) / 3X (609 [276])	3X (597 [271]) / 3X (609 [276])

Note :
Specifications are based on the following conditions.

Cooling :
Indoor temperature of 80°F (26.7°C) DB / 67°F (19.4°C) WB, and outdoor temperature of 95°F (35.0°C) DB / 75°F (23.9°C) WB.

Heating :
Indoor temperature of 70°F (21.1°C) DB / 60°F (15.6°C) WB, and outdoor temperature of 47°F (8.3°C) DB / 43°F (6.1°C) WB.

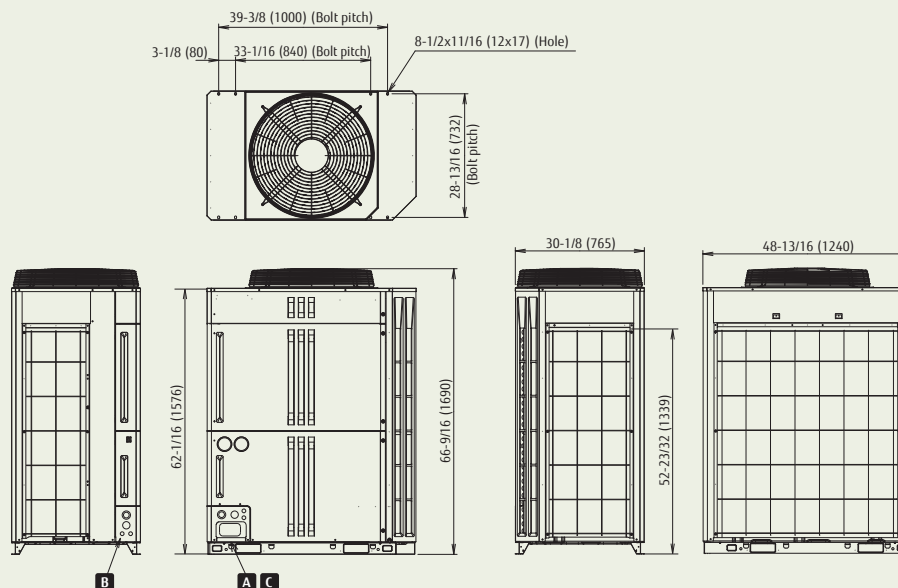
Pipe length :
25ft. (7.5 m); Height difference between outdoor unit and indoor unit : 0ft. (0 m).

*1 Electrical data is only for outdoor unit.

DIMENSIONS

10 tons: AQUA120RLBV1
AQUA120RLCV

(UNIT: IN (MM))



Compact Cassette

AUUA4TLAV1 AUUA14TLAV
AUUA7TLAV AUUA18TLAV
AUUA9TLAV AUUA24TLAV
AUUA12TLAV

Compact size panel design that fits in a standard 24" square ceiling panel (600 x 600mm)



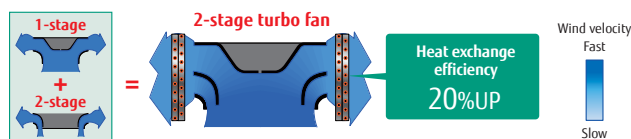
Note: IR Receiver is standard for communicating with optional Wireless Remote Control.

Compact Cassette Grille UTG-CCGVG sold separately. Must order one with each compact cassette.

2-STAGE TURBO FAN

High efficiency design by 2 stage structure

Evenly spread air distribution across the heat exchanger is possible due to the 2 stage turbo fan which produces two separate airflow streams.

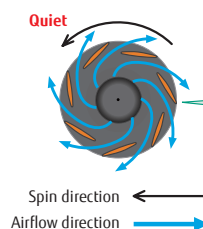


QUIET

Optimization of wing form (laminar wing type) and wing number (7 blades each)

Designed by Computational Fluid Dynamics (CFD) simulations

Adoption of laminar wing



SPECIFICATIONS

Model			AUUA4TLAV1	AUUA7TLAV	AUUA9TLAV	AUUA12TLAV	AUUA14TLAV	AUUA18TLAV	AUUA24TLAV
Power source			1 Phase ~ 208/230V 60Hz						
Capacity	Cooling	BTUh	4,000	7,500	9,500	12,000	14,000	18,000	24,000
		kW	1.2	2.2	2.8	3.5	4.1	5.3	7.0
	Heating	BTUh	4,400	9,500	10,900	13,500	15,600	20,000	27,000
		kW	1.3	2.8	3.2	4.0	4.6	5.9	7.9
Input power		W	23	25	25	29	35	36	84
Airflow rate	High	CFM (m³/h)	312 (530)	318 (540)	324 (550)	353 (600)	400 (680)	418 (710)	606 (1,030)
	Med		265 (450) / 247 (420)	265 (450)	265 (450)	312 (530)	347 (590)	341 (580)	489 (830)
	Low		206 (350) / 177 (300)	206 (350)	206 (350)	230 (390)	230 (390)	235 (400)	265 (450)
Sound pressure level	High	dB (A)	34	34	35	37	38	41	50
	Med		30 / 28	30	30	34	34	35	44
	Low		25 / 21	25	25	27	27	27	30
Dimensions (H × W × D)		in.(mm)	9-5/8 × 22-7/16 × 22-7/16 (245 × 570 × 570)						
Weight		lbs.(kg)	32 (14.5)	33 (15)	33 (15)	33 (15)	33 (15)	37 (17)	37 (17)
Connection pipe diameter	Liquid (Flare)	in.(mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	3/8 (9.52)	3/8 (9.52)
	Gas (Flare)		3/8 (9.52)	1/2 (12.70)	1/2 (12.70)	1/2 (12.70)	1/2 (12.70)	5/8 (15.88)	5/8 (15.88)
Drain hose diameter (I.D./O.U.)			3/4 / 1-1/16						
Cassette Grille	Model name		UTG-CCGVG						
	Dimensions (H×W×D)		1-15/16 × 24-7/16 × 24-7/16 (49 × 620 × 620)						
	Weight		5.1(2.3)						

Note : Specifications are based on the following conditions.

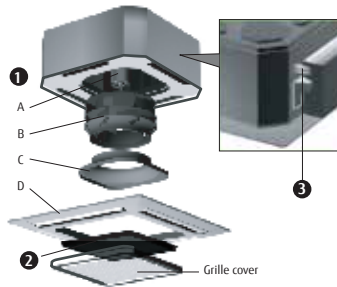
Cooling : Indoor temperature of 80°F(26.7°C)DB/67°F(19.4°C)WB, and outdoor temperature of 95.0°F(35°C)DB/75°F(23.9°C)WB.

Heating : Indoor temperature of 70°F(21.1°C)DB/60°F(15.6°C)WB, and outdoor temperature of 47°F(8.3°C)DB/43°F(6.1°C)WB.

Pipe length : 25ft.(7.5 m), Height difference : 0ft.(0 m) (Outdoor unit - Indoor unit).

Built-in protective functions may limit capacity or shut off unit if unit is operated outside of unit design operating temperature ranges.

IMPROVEMENT OF AIRFLOW DISTRIBUTION



1 Easy maintenance of fan and motor

Access and maintenance of the fan and motor can be accomplished by removing the panel. The fan and motor can be easily removed.

A : Fan motor B : 2-stage turbo fan
C : Bell-mouth D : Grille Panel

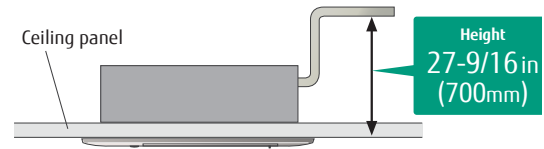
2 Air filter

standard equipment

3 Adaptation of transparent drainage parts

During installation, maintenance and operation, the drain pump and kit can be checked easily.

HIGH LIFT DRAIN PUMP



Built-in high-loft drain pump

HIGH CEILING MODE

AUUA12/14/18/24LAV models only -The compact cassette can be installed up to a height of 9'10-1/8" ft. (3.0m)

BTUh	Max height from floor to ceiling (ft.(m))	
	Standard mode	High ceiling mode
4,000	8'10-5/16"(2.7)	-
7,000	8'10-5/16"(2.7)	-
9,000	8'10-5/16"(2.7)	-
12,000	8'10-5/16"(2.7)	9'10-1/8"(3.0)
14,000	8'10-5/16"(2.7)	9'10-1/8"(3.0)
18,000	8'10-5/16"(2.7)	9'10-1/8"(3.0)
24,000	8'10-5/16"(2.7)	9'10-1/8"(3.0)

COMPACT DESIGN

World's first 24,000 BTUh model in the compact cassette category (Easy installation by taking off 24" square ceiling panel (600 x 600mm))

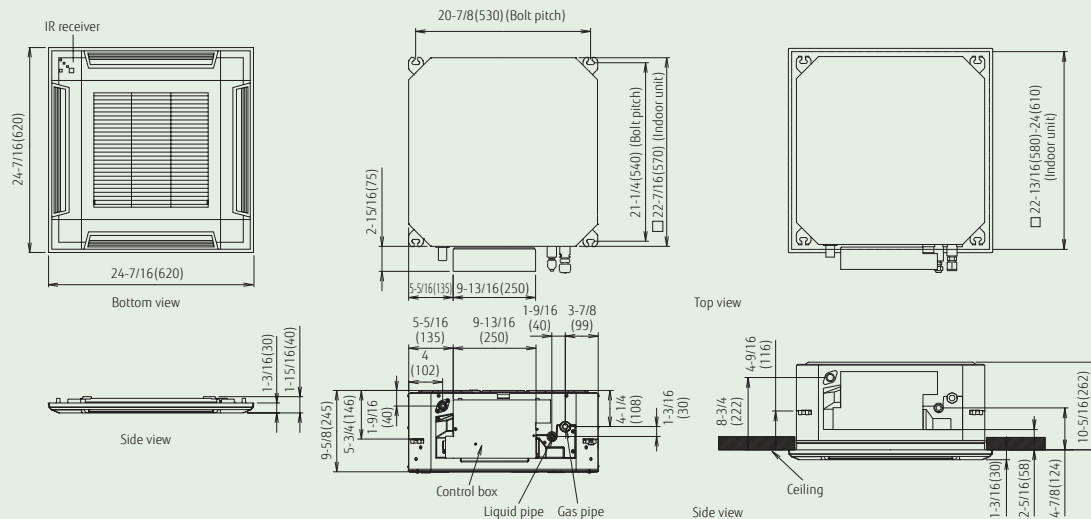


OPTIONAL PARTS

Wired Remote Control	UTY-RNKU
Wired Remote Control (Touch Panel)	UTY-RNRUZ2
Wireless Remote Control	UTY-LNHU
Wi-Fi Interface Module	FJ-RC-WIFI-INA
Simple Remote Control	UTY-RSRY, UTY-RHRY
Air Outlet Shutter Plate	UTR-YDZB
Fresh Air Intake Kit	UTZ-VXAA
Insulation Kit for High Humidity	UTZ-KXGC

DIMENSIONS

(UNIT: IN (MM))



Large 4-Way Cassette

AUUB18TLAV
AUUB24TLAV
AUUB30TLAV
AUUB36TLAV

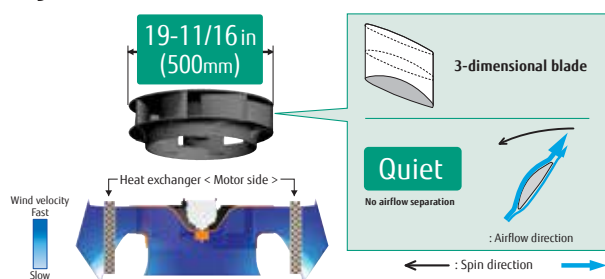
Powerful, wide airflow and quiet operation. Ability to use a branch duct off of the unit.



Cassette Grille UTG-LCGV sold separately. Must order one with each compact cassette.

HIGH EFFICIENCY TURBO FAN WITH 3-DIMENSIONAL BLADE

High efficiency airflow distribution has been achieved by improving the fan-blade design which increases the air passing over the heat exchanger.

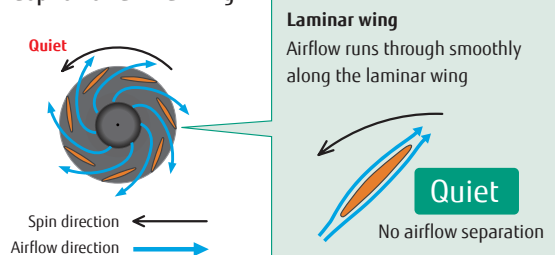


QUIET

Optimization of wing form (laminar wing type) and wing number (7 blades each)

Designed by Computational Fluid Dynamics (CFD) simulations

Adoption of laminar wing



SPECIFICATIONS

Model name			AUUB18TLAV		AUUB24TLAV		AUUB30TLAV		AUUB36TLAV	
Power source			1 Phase ~ 208/230V 60Hz							
Capacity	Cooling	BTUh	18,000	24,000	30,000	36,000				
		kW	5.3	7.0	8.8	10.6				
	Heating	BTUh	20,000	27,000	34,000	40,000				
		kW	5.9	7.9	10.0	11.7				
Input power		W	39	46	59	80				
Airflow rate	High	CFM (m³/h)	677 (1,150)	753 (1,280)	942 (1,600)	1,059 (1,800)				
	Med		553 (940)	612 (1,040)	765 (1,300)	765 (1,300)				
	Low		512 (870)	512 (870)	647 (1,100)	647 (1,100)				
Sound pressure level	High	dB (A)	36	38	40	44				
	Med		30	33	38	38				
	Low		29	29	33	33				
Dimensions (H × W × D)		in.(mm)	9-11/16 × 33-1/16 × 33-1/16 (246 × 840 × 840)			11-5/16 × 33-1/16 × 33-1/16 (288 × 840 × 840)				
Weight		lbs.(kg)	49 (22)	49 (22)	60 (27)	60 (27)				
Connection pipe diameter	Liquid (Flare)	in.(mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)				
	Gas (Flare)		5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	3/4 (19.05)				
Drain hose diameter (I.D./O.U.)			3/4 / 1-1/16							
Cassette Grille	Model name		UTG-LCGV							
	Dimensions (H×W×D)		1-15/16 × 37-3/8 × 37-3/8 (50 × 950 × 950)							
	Weight		13 (5.5)							

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 80°F(26.7°C)DB/67°F(19.4°C)WB, and outdoor temperature of 95.0°F(35°C)DB/75°F(23.9°C)WB.

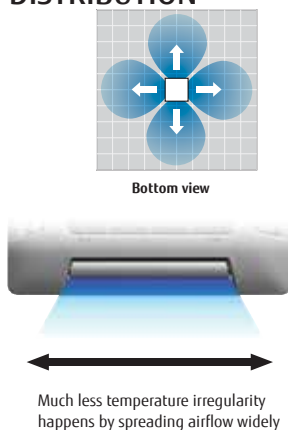
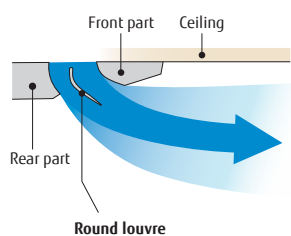
Heating : Indoor temperature of 70°F(21.1°C)DB/60°F(15.6°C)WB, and outdoor temperature of 47°F(8.3°C)DB/43°F(6.1°C)WB.

Pipe length : 25ft.(7.5 m), Height difference : 0ft.(0 m) (Outdoor unit - Indoor unit).

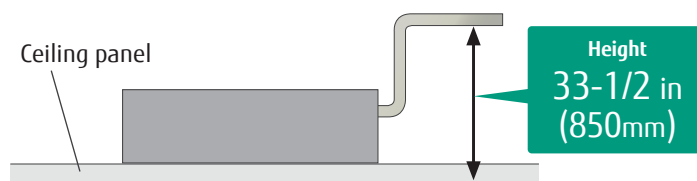
Built-in protective functions may limit capacity or shut off unit if unit is operated outside of unit design operating temperature ranges.

IMPROVEMENT OF AIRFLOW DISTRIBUTION

Aerodynamic louver design and dynamic motorized movement improves air distribution.



HIGH LIFT DRAIN PUMP



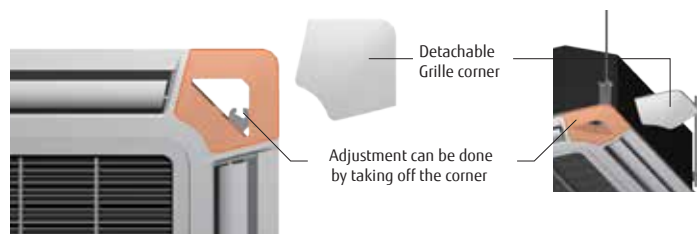
Built-in high-loft drain pump

HIGH CEILING MODE

This cassette can be installed up to a height of 13-3/4ft. (4.2m) (AUUA36).

Model code	The maximum height from floor to ceiling ft. (m)	
	Standard mode	High ceiling mode
18	9' 10-1/8" (3.0)	11' 6" (3.5)
24	9' 10-1/8" (3.0)	11' 6" (3.5)
30	10' 6" (3.2)	11' 9-3/4" (3.6)
36	10' 6" (3.2)	13' 9-3/8" (4.2)

ADJUSTABLE HANGER POSITION



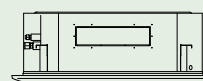
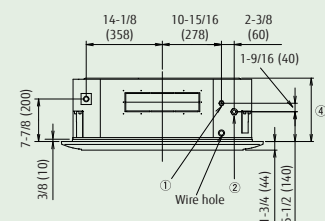
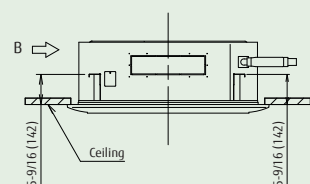
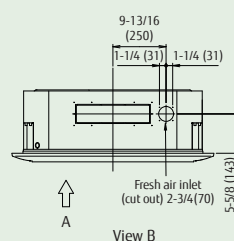
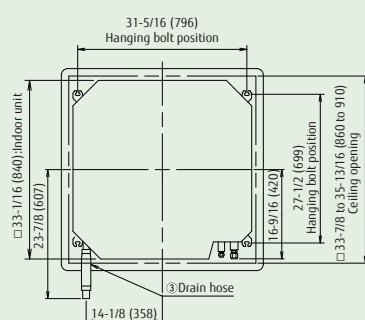
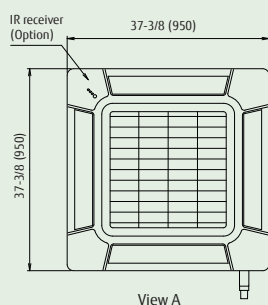
OPTIONAL PARTS

IR Receiver Kit UTY-LRHYB1
Air Outlet Shutter Plate UTR-YDZC
Panel Spacer UTG-BGYA-W

Insulation Kit for High Humidity UTZ-KXGA / UTZ-KXGB
Wide Panel UTG-AGYA-W
Fresh Air Intake Kit UTZ-VXGA

DIMENSIONS

(UNIT: IN (MM))



	AUUB 18/24	AUUB 30	AUUB 36
① Refrigerant pipe flare connection (Liquid)	ø 3/8 (9.52)	ø 3/8 (9.52)	ø 3/8 (9.52)
② Refrigerant pipe flare connection (Gas)	ø 5/8 (15.88)	ø 5/8 (15.88)	ø 3/4 (19.05)
③ Drain hose connection (Drain Hose)	ø 3/4 (I.D.), ø 1-1/16 (O.D.)		
④	10-1/16 (256)	11-3/4 (298)	11-3/4 (298)

Large Circular Flow Cassette

AUUB18TLAV1 (reduced height)

AUUB24TLAV1 (reduced height)

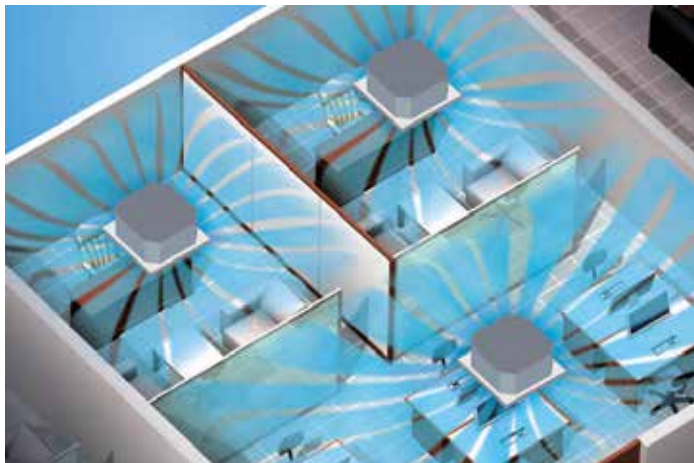
AUUB30TLAV1 (reduced height)

AUUB36TLAV1

AUUB48TLAV1

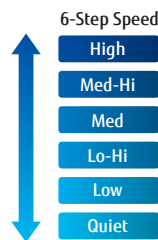
BETTER AIR DISTRIBUTION USING 360-DEGREE LOUVERS

Circular flow design allows conditioned air to reach every corner of a room.



QUIET OPERATION AND 6 FAN SPEED CONTROL

With 6 fan speeds to choose from, circular flow cassette models operate at whisper quiet sound levels.



* Compatible Remote Controller is as follows:

UTY-RNRU22 / UTY-RSRY / UTY-RHRY / UTY-DCGY / UTY-DTGYZ1 / UTY-ALGXZ1 / UTY-APGXZ1

SPECIFICATIONS

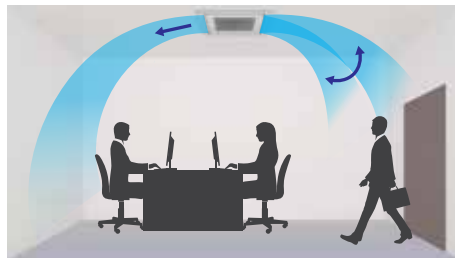
Model name			AUUB18TLAV1	AUUB24TLAV1	AUUB30TLAV1	AUUB36TLAV1	AUUB48TLAV1	
Power Source			1 Phase - 208 / 230 V ~ 60 Hz			1 Phase - 208 / 230 V ~ 60 Hz		
Capacity	Cooling	BTU/h	18,000	24,000	30,000	36,000	48,000	
		kW	5.3	7.0	8.8	10.6	14.1	
	Heating	BTU/h	20,000	27,000	34,000	40,000	54,000	
kW		5.9	7.9	10.0	11.7	15.8		
Input Power		W	20	25	49	61	116	
Airflow rate	High	CFM (m³/h)	618 (1,050)	659 (1,120)	865 (1,470)	954 (1,620)	1,201 (2,040)	
	Med-Hi		547 (930)	618 (1,050)	683 (1,160)	883 (1,500)	1,059 (1,800)	
	Med		530 (900)	547 (930)	630 (1,070)	824 (1,400)	936 (1,590)	
	Lo-Hi		512 (870)	530 (900)	547 (930)	789 (1,340)	848 (1,440)	
	Low		477 (810)	512 (870)	530 (900)	753 (1,280)	765 (1,300)	
	Quiet		459 (780)	459 (780)	459 (780)	677 (1,150)	677 (1,150)	
Sound pressure level	High	dB(A)	33	35	40	41	47	
	Med-Hi		32	33	36	40	45	
	Med		31	32	34	38	42	
	Lo-Hi		30	31	32	37	39	
	Low		29	30	31	35	36	
	Quiet		28	28	28	33	33	
Dimensions (H x W x D)		in.(mm)	9-11/16 x 33-1/16 x 33-1/16 (246 x 840 x 840)			11-5/16 x 33-1/16 x 33-1/16 (288 x 840 x 840)		
Weight		lbs.(kg)	53 (24)	54 (24.5)	54 (24.5)	65 (29.5)	65 (29.5)	
Connection pipe diameter		Liquid (Flare)	in.(mm)	1/4 (6.35)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
		Gas (Flare)	1/2 (12.70)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	
Drain hose diameter (I.D./O.D.)			in.	3/4 / 1-1/16			3/4 / 1-1/16	
Cassette Grille	Model name		UTG-LCGVCW / UTG-LCGVCB			UTG-LCGVCW / UTG-LCGVCB		
	Dimensions (H×W×D)	in.(mm)	2-1/16 x 37-3/8 x 37-3/8 (53 x 950 x 950)			2-1/16 x 37-3/8 x 37-3/8 (53 x 950 x 950)		
	Weight	lbs.(kg)	13.0 (6.0)	13.0 (6.0)	13.0 (6.0)	13.0 (6.0)	13.0 (6.0)	

Note : Specifications are based on the following conditions: Built-in protective functions may limit capacity or shut off unit if unit is operated outside of unit design operating temperature ranges.

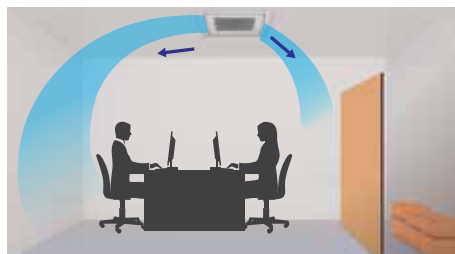
Cooling : Indoor temperature of 80°F(26.7°C)DB/67°F(19.4°C)WB; and outdoor temperature of 95°F(35°C)DB/75°F(23.9°C)WB. Heating : Indoor temperature of 70°F(21.1°C)DB/60°F(15.6°C)WB, and outdoor temperature of 47°F(8.3°C)DB/43°F(6.1°C)WB. Pipe Length : 25ft. (7.5m), Height difference : 0ft.(0m)(Outdoor unit - indoor unit).

INDIVIDUAL LOUVER CONTROL

Each louver can be set individually using to bring comfortable air exactly where you want it in any room configuration. Compatible remotes and central controllers are: Touch Panel Wired RC (UTY-RNRUZ2) / Touch Panel Controller (UTY-DTGYZ1), System Controller (UTY-APGXZ1) / System Controller Lite (UTY-ALGXZ1).



Control of louvers, including swinging direction, keeps individuals from having air blown directly on them.



Air is blown efficiently throughout the space.

OCCUPANCY/HUMAN SENSOR SETTING (OPTIONAL)

Automatically saves energy by detecting occupancy if unit is left on and room becomes unoccupied.

2 modes can be selected.

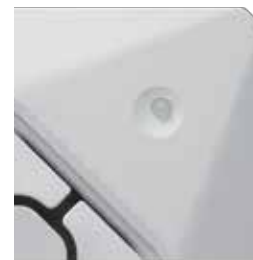
Auto saving

Power is saved while no one is around

Auto OFF

Operation is stopped while no one is around

*Human Sensor feature is only available through Wired Remote Control (Touch Panel) UTY-RNRUZ2.



OPTIONAL PARTS

Wired Remote Control (Touch Panel) .. UTY-RNRUZ2

Wireless Remote Control.....UTY-LNHU

Simple Remote Control.....UTY-RSRY, UTY-RHRY

IR Receiver Unit.....UTY-LBHxD

Human Sensor KitUTY-SHZXC

Air Outlet Shutter PlateUTR-YDZK

Wide Panel.....UTG-AKXA-W

Panel SpacerUTG-BKXA-W

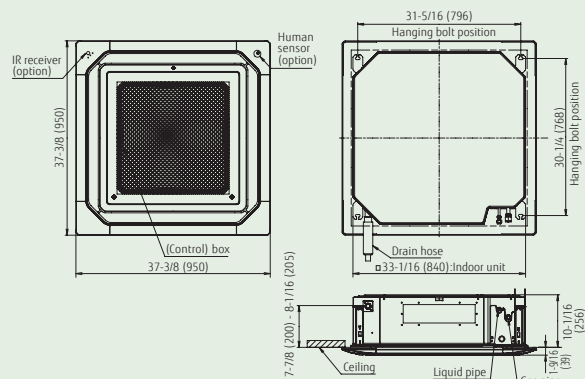
Insulation Kit For High Humidity UTZ-KXRA

DIMENSIONS

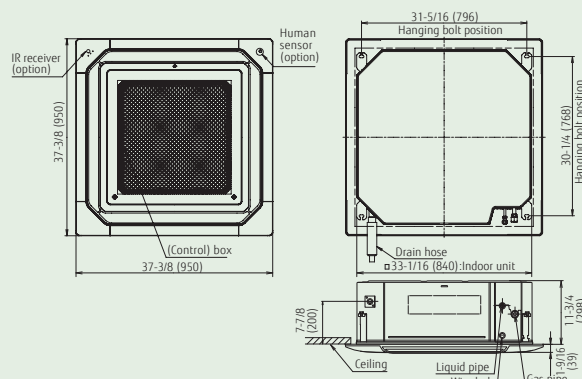
(UNIT: IN (MM))

Models:

AUUB18TLAV1 / AUUB24TLAV1 / AUUB30TLAV1



AUUB36TLAV1 / AUUB48TLAV1



Slim Compact Duct

ARUL4TLAV1 MINI
ARUL7TLAV SLIM
ARUL9TLAV SLIM
ARUL12TLAV SLIM
ARUL14TLAV SLIM
ARUL18TLAV SLIM

(Drain pump internal models)



ARUL4TLAV1



ARUL7, 9, 12, 14TLAV



ARUL18TLAV

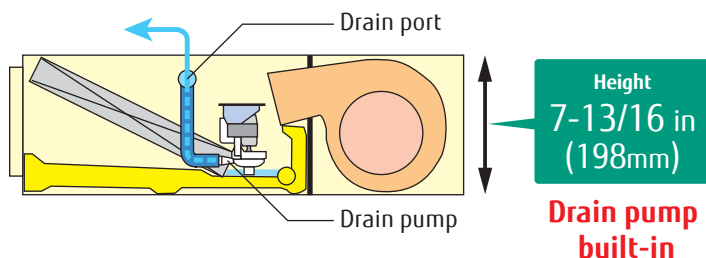


Shown with optional Auto Louver Grille Kit
(UTD-GXTA-W, UTD-GXSA-W, UTD-GXSB-W)

Offers slim design, wide range of static pressure settings and flexible installation orientation.

SLIM DESIGN

This model has a slim design so it can be installed in narrow ceilings with minimum height requirement.

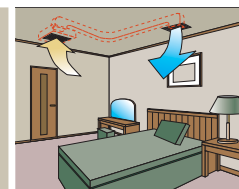
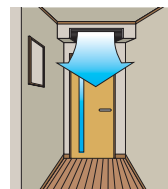


Note: Condensate drain pump cannot be used when unit is in a vertical position.

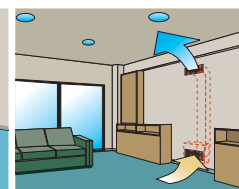
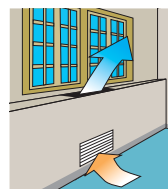
FLEXIBLE INSTALLATION

Slim Compact Duct units can be mounted horizontally or vertically and can deliver up to 0.36" external static pressure providing the power and flexibility to meet the needs of most applications.

Ceiling concealed



Floor concealed



SPECIFICATIONS

Model name			ARUL4TLAV1	ARUL7TLAV	ARUL9TLAV	ARUL12TLAV	ARUL14TLAV	ARUL18TLAV
Power source			1 Phase ~ 208/230V 60Hz					
Capacity	Cooling	BTUh	4,000	7,500	9,500	12,000	14,000	18,000
		kW	1.2	2.2	2.8	3.5	4.1	5.3
	Heating	BTUh	4,400	9,500	10,900	13,500	15,600	20,000
		kW	1.3	2.8	3.2	4.0	4.6	5.9
Input power		W	26	44	50	54	92	83
Airflow rate	High	CFM (m³/h)	271 (460)	324 (550)	353 (600)	353 (600)	471 (800)	553 (940)
	Med		247 (420)	288 (490)	324 (550)	300 (510)	418 (710)	494 (840)
	Low		218 (370)	258 (440)	283 (480)	265 (450)	359 (610)	441 (750)
Static pressure range		in.WG	0 to 0.12 (0 to 30)	0 to 0.36 (0 to 90)	0 to 0.36 (0 to 90)	0 to 0.36 (0 to 90)	0 to 0.36 (0 to 90)	0 to 0.36 (0 to 90)
Standard static pressure		(Pa)	0.04 (10)	0.10 (25)	0.10 (25)	0.10 (25)	0.10 (25)	0.10 (25)
Sound pressure level	High	dB (A)	25	28	29	30	34	34
	Med		23	25	26	27	32	32
	Low		21	22	24	24	28	28
Dimensions (H × W × D)		in.(mm)	7-13/16 × 27-9/16 × 17-11/16 (198 × 700 × 450)	7-13/16 × 27-9/16 × 24-7/16 (198 × 700 × 620)				7-13/16 × 35-7/16 × 24-7/16 (198 × 900 × 620)
Weight		lbs.(kg)	32 (14.5)	37 (17)	37 (17)	40 (18)	40 (18)	49 (22)
Connection pipe diameter	Liquid (Flare)	in.(mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	3/8 (9.52)
	Gas (Flare)		3/8 (9.52)	1/2 (12.70)	1/2 (12.70)	1/2 (12.70)	1/2 (12.70)	5/8 (15.88)
Drain hose diameter (I.D./O.U.)			3/4 / 1-1/16					

Note : Specifications are based on the following conditions.

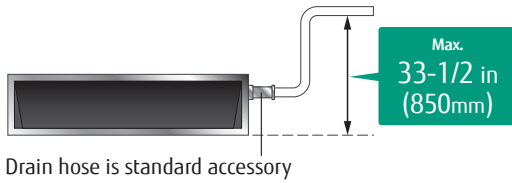
Cooling : Indoor temperature of 80°F(26.7°C)DB/67°F(19.4°C)WB, and outdoor temperature of 95.0°F(35°C)DB/75°F(23.9°C)WB.

Heating : Indoor temperature of 70°F(21.1°C)DB/60°F(15.6°C)WB, and outdoor temperature of 47°F(8.3°C)DB/43°F(6.1°C)WB.

Pipe length : 25ft. (7.5 m). Height difference : 0ft. (0 m) (Outdoor unit - Indoor unit).

Built-in protective functions may limit capacity or shut off unit if unit is operated outside of unit design operating temperature ranges.

CONDENSATE DRAIN PUMP (STANDARD)



SELECTABLE EXTERNAL STATIC PRESSURE

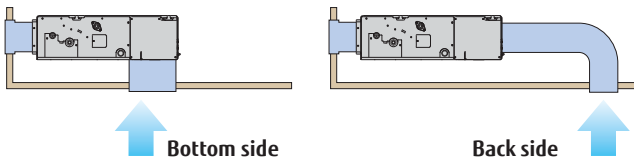
The external static pressure can be selected for any value from 0 to 0.36in.WG. (0 to 90 Pa). Static pressure setting can be changed using the remote controller.



Static pressure range
0.1 to 0.36 in.WG
(0 to 90Pa)

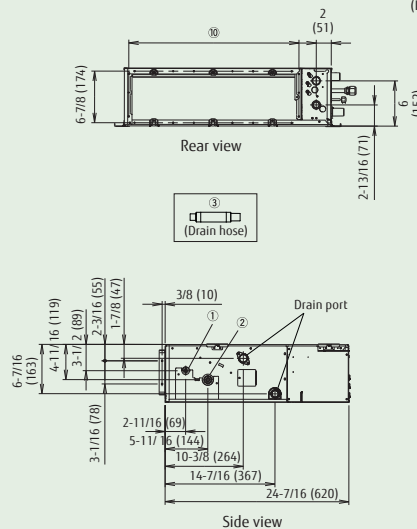
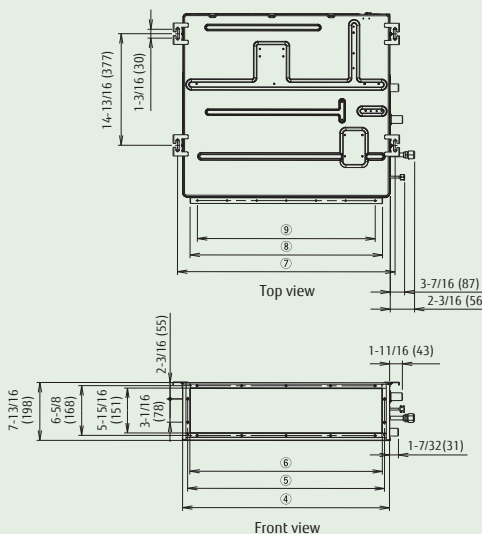
AIR-INTAKE

Air intake direction can be selected to match the installation site.



In locations where fan noise may be a concern, do not use bottom inlet without providing an elbow to prevent line of sight to the fan.

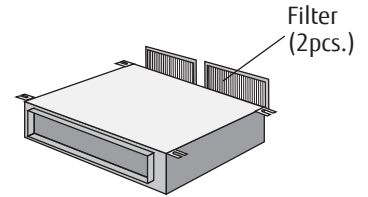
DIMENSIONS



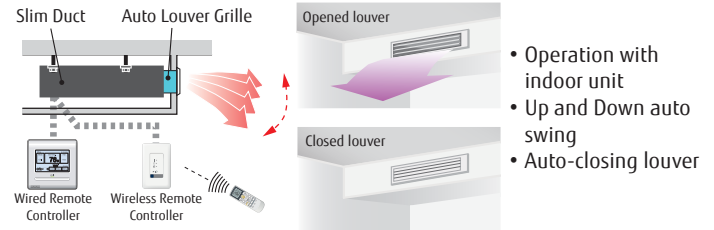
FILTER (INCLUDED)

ARUL7 / 9 / 12 / 14 / 18

Minimum Height Requirement 9-3/4"



AUTO LOUVER GRILLE KIT (OPTION)

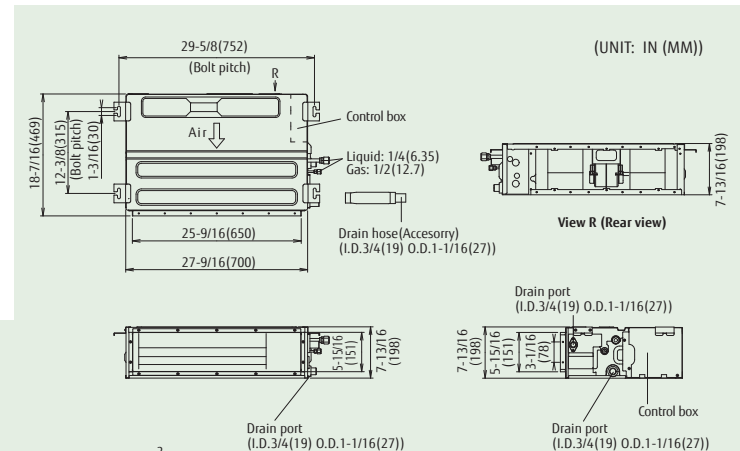


OPTIONAL PARTS

Auto Louver Grille Kit..... UTD-GXTA-W (for ARUL4TLAV1)
UTD-GXSA-W (for ARUL7/9/12/14TLAV)
UTD-GXSB-W (for ARUL18TLAV)

IR Receiver Unit UTB-YWC

Remote Sensor Unit..... UTY-XS2X

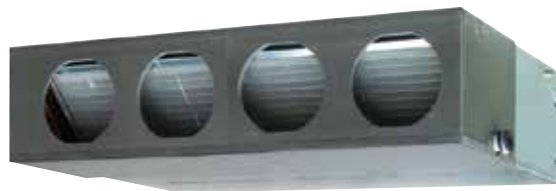


	ARUL 7/9/12/14	ARUL 18
① Refrigerant pipe flare connection (Liquid)	ø 1/4 (6.35)	ø 3/8 (9.52)
② Refrigerant pipe flare connection (Gas)	ø 1/2 (12.70)	ø 5/8 (15.88)
③ Drain hose connection (Drain Hose)	ø 3/4 (I.D.), ø 1-1/16 (O.D.)	
④ —	27-9/16 (700)	35-7/16 (900)
⑤ —	26-1/8 (664)	34 (864)
⑥ —	25-9/16 (650)	33-7/16 (850)
⑦ —	28-7/8 (734)	36-3/4 (934)
⑧ —	25-9/16 (650)	33-7/16 (850)
⑨ —	3-15/16 (100) x 6 = 23-5/8 (600)	3-15/16 (100) x 8 = 31-1/2 (800)
⑩ —	22-5/8 (574)	30-1/2 (774)

Economizer and filter box options are available through affiliated third party. Ask your local Fujitsu Airstage distributor for details.

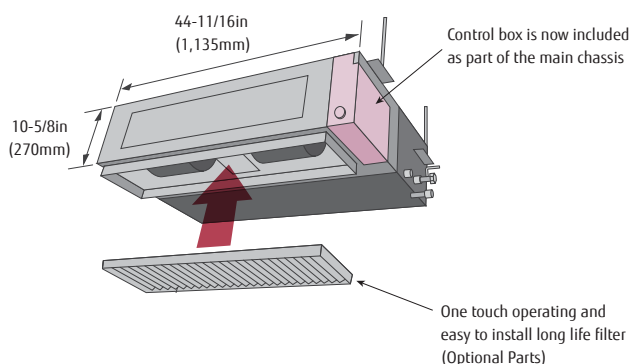
Medium Static Pressure Duct

ARUM24TLAV
ARUM30TLAV
ARUM36TLAV



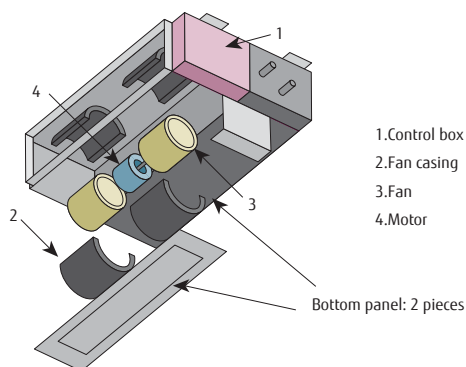
SLIM & COMPACT DESIGN

In the case of bottom return air connection, not only does the indoor unit design allow for installation in a narrow ceiling space of 10-5/8in (270mm), further space savings have been achieved by mounting the electrical control box internally inside the chassis.



EASY MAINTENANCE

Structural improvement is attained by making the bottom panel two pieces, front and rear. The internal fan casing is also manufactured in two pieces, namely upper and lower. The maintenance of the motor and fan can be easily carried out by removing the rear panel and the lower part of the casing while leaving the main chassis installed.



SPECIFICATIONS

Model name			ARUM24TLAV	ARUM30TLAV	ARUM36TLAV
Power source			1 Phase ~ 208/230V 60Hz		
Capacity	Cooling	BTUh	24,000	30,000	36,000
		kW	7.0	8.8	10.6
	Heating	BTUh	27,000	34,000	40,000
		kW	7.9	10.0	11.7
Input power		W	125	190	222
Airflow rate	High	CFM (m³/h)	859 (1,460)	1,042 (1,770)	1,112 (1,890)
	Med		724 (1,230)	812 (1,380)	895 (1,520)
	Low		589 (1,000)	589 (1,000)	677 (1,150)
Static pressure range		in.WG (Pa)	0 to 0.60 (0 to 150)	0 to 0.60 (0 to 150)	0 to 0.60 (0 to 150)
Standard static pressure			0.16 (40)	0.16 (40)	0.16 (40)
Sound pressure level	High	dB (A)	36	40	41
	Med		31	33	35
	Low		28	28	29
Dimensions (H × W × D)		in.(mm)	10-5/16 × 44-11/16 × 27-9/16 (270 × 1,135 × 700)		
Weight		lbs.(kg)	86 (39)	86 (39)	86 (39)
Connection pipe diameter	Liquid (Flare)	in.(mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
	Gas (Flare)		5/8 (15.88)	5/8 (15.88)	3/4 (19.05)
Drain hose diameter (I.D./O.U.)			3/4 / 1-1/16		

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 80°F(26.7°C)DB/67°F(19.4°C)WB, and outdoor temperature of 95.0°F(35°C)DB/75°F(23.9°C)WB.

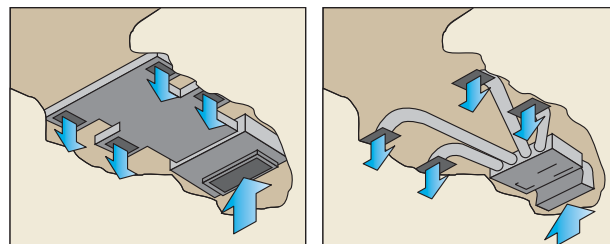
Heating : Indoor temperature of 70°F(21.1°C)DB/60°F(15.6°C)WB, and outdoor temperature of 47°F(8.3°C)DB/43°F(6.1°C)WB.

Pipe length : 25ft.(7.5 m), Height difference : 0ft.(0 m) (Outdoor unit - Indoor unit).

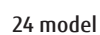
Built-in protective functions may limit capacity or shut off unit if unit is operated outside of unit design operating temperature ranges.

A schematic diagram of a two-unit bathroom layout. The layout is symmetrical, divided by a central vertical wall. Each unit contains a toilet, a sink, and a shower area. Two duct indoor units are located at the bottom of the layout, one for each unit. Blue arrows point upwards from these units, indicating airflow. Two-direction drain piping is shown at the bottom, connecting the units to the duct indoor units. Labels with leader lines identify the 'Duct indoor unit' and the 'Two-direction drain piping'.

Embedded in Ceiling



Improved motor efficiency from previous model.



Drain Pump Unit.....	UTZ-PU1NBA
Long Life Filter*	UTD-LF25NA
Flange (Square)	UTD-SF045T
Flange (Round)	UTD-RF204
IR Receiver Unit.....	UTB-YWC
Remote Sensor Unit.....	UTY-XSZX

*Note, Medium Static Pressure Duct models do not include a standard filter.

[illegible]

(UNIT: IN (MM))

	ARUM 24/30	ARUM 36
① Refrigerant pipe flare connection (Liquid)	ø 3/8 (9.52)	ø 3/8 (9.52)
② Refrigerant pipe flare connection (Gas)	ø 5/8 (15.88)	ø 3/4 (19.05)
③ Drain hose connection (Drain Hose)	ø 3/4 (I.D.), ø 1-1/16 (O.D.)	
④ Knock out hole (fresh air)	7-7/8 (200)	7-7/8 (200)
⑤ Hole for power cable	7/8 (23)	7/8 (23)

Economizer and filter box options are available through affiliated third party. Ask your local Fujitsu Airstage distributor for details.

High Static Pressure Duct (3, 4, 5 ton)

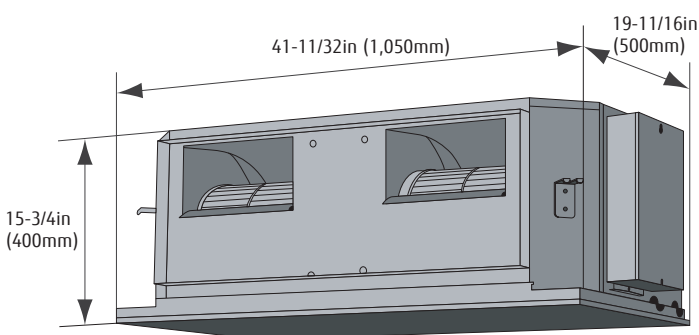
ARUH36TLAV
ARUH48TLAV
ARUH60TLAV

High Static Pressure Ducted Units combine efficient casing design with non metallic fan wheels and casings to reduce noise levels; units are capable of delivering hot or cold air at static pressures up to 1 in.WG. These units are perfect for conditioning hard-to-reach areas and are able to meet the needs of many different types of applications.



EASY INSTALLATION (COMPACT SIZE & LIGHTWEIGHT)

Equipped with a compact and lightweight chassis to simplify installation and provide better flexibility for tight installation spaces.



97lb (44kg)

SPECIFICATIONS

Model name			ARUH36TLAV	ARUH48TLAV	ARUH60TLAV
Power source			1 Phase ~ 208/230V 60Hz		
Capacity	Cooling	BTUh	36,000	48,000	60,000
		kW	10.6	14.1	17.6
	Heating	BTUh	40,000	54,000	67,000
		kW	11.7	15.8	19.6
Input power		W	496	752	806
Airflow rate	High	CFM (m³/h)	1,324 (2,250)	1,766 (3,000)	1,972 (3,350)
	Med		1,030 (1,750)	1,589 (2,700)	1,678 (2,850)
	Low		824 (1,400)	1,354 (2,300)	1,501 (2,550)
Static pressure range		in.WG	0.40 to 0.80 (100 to 200)	0.40 to 1.00 (100 to 250)	0.40 to 1.00 (100 to 250)
Standard static pressure		(Pa)	0.40 (100)	0.40 (100)	0.40 (100)
Sound pressure level	High	dB (A)	43	47	48
	Med		37	43	44
	Low		32	40	41
Dimensions (H × W × D)		in.(mm)	15-3/4 × 41-5/16 × 19-11/16 (400 × 1,050 × 500)		
Weight		lbs.(kg)	97 (44)	101 (46)	101 (46)
Connection pipe diameter	Liquid (Flare)	in.(mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
	Gas (Flare)		3/4 (19.05)	3/4 (19.05)	3/4 (19.05)
Drain hose diameter (I.D./O.U.)			3/4 / 1-1/16		

Note : Specifications are based on the following conditions.

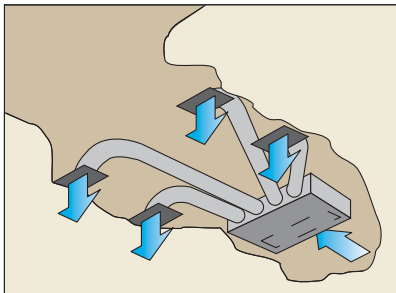
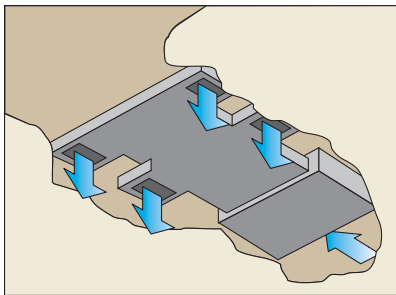
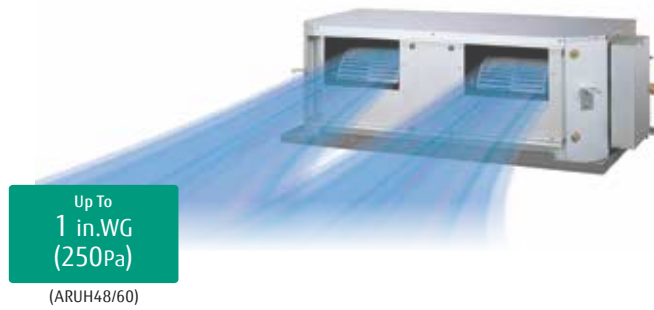
Cooling : Indoor temperature of 80°F(26.7°C)DB/67°F(19.4°C)WB, and outdoor temperature of 95.0°F(35°C)DB/75°F(23.9°C)WB.

Heating : Indoor temperature of 70°F(21.1°C)DB/60°F(15.6°C)WB, and outdoor temperature of 47°F(8.3°C)DB/43°F(6.1°C)WB.

Pipe length : 25ft.(7.5 m), Height difference : 0ft.(0 m) (Outdoor unit - Indoor unit).

Built-in protective functions may limit capacity or shut off unit if unit is operated outside of unit design operating temperature ranges.

HIGH STATIC PRESSURE DESIGN

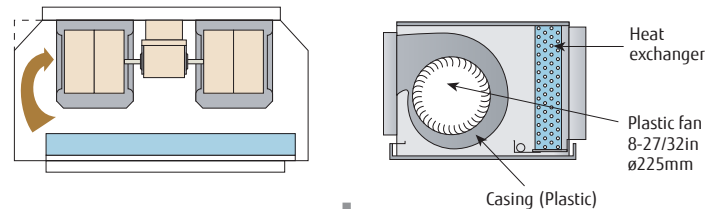


QUIET OPERATION

Indoor unit

Efficient chassis design reduces turbulence.

Non-metallic fan wheel and casing reduces fan noise.



Med. noise level
43dB(A)

(ARUH48)

OPTIONAL PARTS

Long-Life Filter*UTD-LF60KA

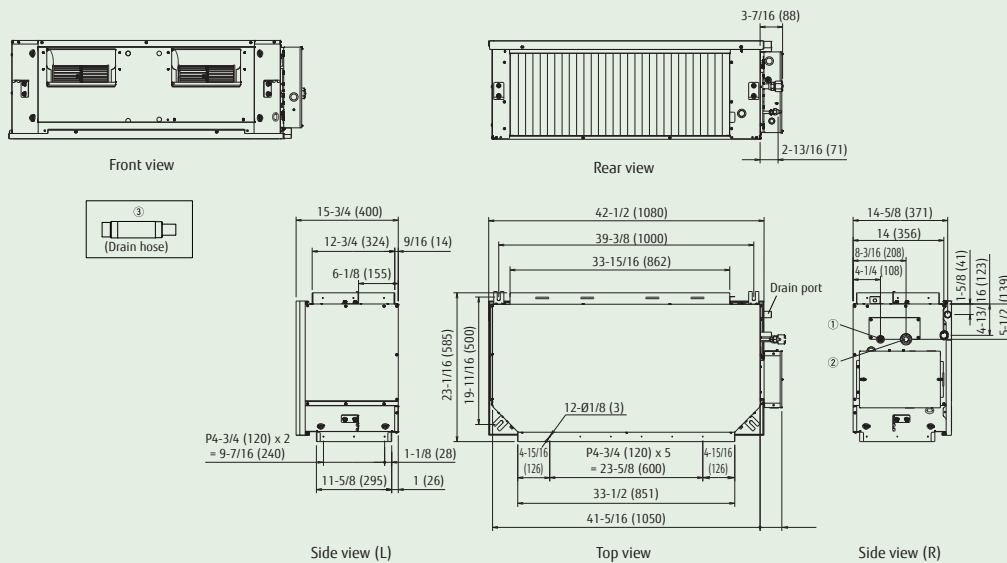
IR Receiver UnitUTB-YWC

Remote Sensor Unit.....UTY-XSZX

*Note, High Static Pressure Duct models do not include a standard filter.

DIMENSIONS

(UNIT: IN (MM))



	ARUH 36/48/60
① Refrigerant pipe flare connection (Liquid)	ø 3/8 (9.52)
② Refrigerant pipe flare connection (Gas)	ø 3/4 (19.05)
③ Drain hose connection (Drain Hose)	ø 3/4 (I.D.), ø 1-1/16 (O.D.)

Economizer and filter box options are available through affiliated third party. Ask your local Fujitsu Airstage distributor for details.

High Static Pressure Duct (6, 8 ton)

ARUH72TLAV1 ARUH96TLAV



ARUH72TLAV1



ARUH96TLAV

High static pressure ducted units combine efficient casing design and powerful DC blower fans to deliver efficient high static pressure up to 1.2 in.WG

*Connectable combination.

Outdoor unit : AOUA72RLAV
Indoor unit : ARUH72TLAV1

Outdoor unit : AOUA96RLAV
Indoor unit : ARUH96TLAV



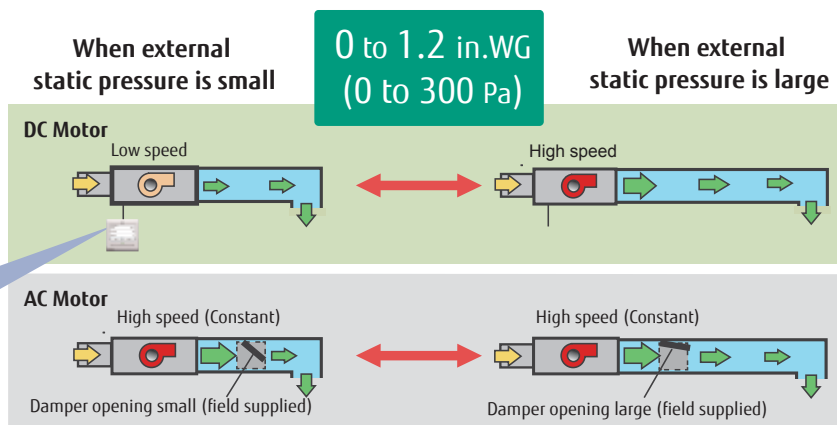
SPECIFICATIONS

Model name			ARUH72TLAV1	ARUH96TLAV
Power source			1 Phase ~ 208/230V 60Hz	
Capacity	Cooling	BTUh	72,000	96,000
		kW	21.1	28.1
	Heating	BTUh	81,000	108,000
		kW	23.7	31.7
Input power		W	618	838
Airflow rate	High	CFM (m³/h)	2296 (3900)	2855 (4850)
	Med		1942 (3300)	2502 (4250)
	Low		1766 (3000)	2119 (3600)
Static pressure range		in.WG (Pa)	0 to 1.2 (0 to 300)	0 to 1.2 (0 to 300)
Standard static pressure			0.6 (150)	0.6 (150)
Sound pressure level	High	dB (A)	47	48
	Med		43	45
	Low		40	42
Dimensions (H × W × D)		in.(mm)	17-11/16 × 62-1/2 × 27-9/16 (450 × 1587 × 700)	21-5/8 × 62-1/2 × 27-9/16 (550 × 1587 × 700)
Weight		lbs.(kg)	203 (92)	231(105)
Connection pipe diameter	Liquid (Flare)	in.(mm)	1/2 (12.70)	1/2 (12.70)
	Gas (Flare)		7/8 (22.22)	7/8 (22.22)
Drain hose diameter (I.D./O.U.)			3/4 / 1-1/16	

With its adjustable static pressure range from 0.0 to 1.2 in.WG, to its efficient DC fan motor, these high static pressure ducted units are designed for flexibility and efficiency.



DC fan motor

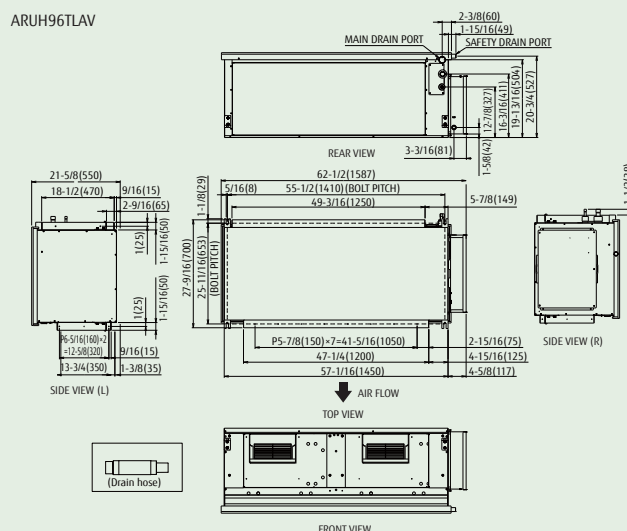
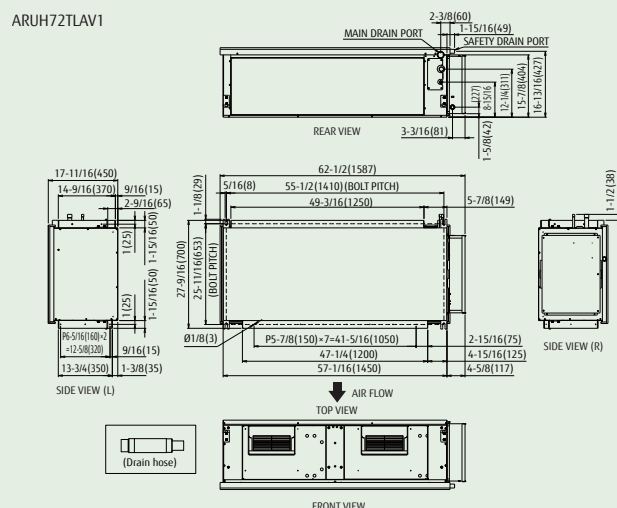


Left and right fan motors can be removed separately which has made servicing of the indoor unit easier.



IR Receiver Unit.....UTB-YWC
Remote Sensor Unit.....UTY-XSZX

(UNIT: IN (MM))



Economizer and filter box options are available through affiliated third party. Ask your local Fujitsu Airstage distributor for details.



Vertical Air Handler

ARUV12TLAV
ARUV18TLAV
ARUV24TLAV
ARUV30TLAV
ARUV36TLAV
ARUV48TLAV
ARUV60TLAV

The Vertical Air Handler is optimized to fit in narrow spaces. It offers a large range of static pressure settings up to 0.8 in.WG.



ARUV12TLAV
ARUV18TLAV
ARUV24TLAV



ARUV30TLAV
ARUV36TLAV



ARUV48TLAV
ARUV60TLAV

OPTIONAL PARTS

IR Receiver Unit.....UTB-YWC

Remote Sensor Unit.....UTY-XSZX

SPECIFICATIONS

Model name			ARUV12TLAV	ARUV18TLAV	ARUV24TLAV	ARUV30TLAV	ARUV36TLAV	ARUV48TLAV	ARUV60TLAV
Power source			1 Phase ~ 208/230V 60Hz						
Capacity	Cooling	BTUh	12,000	18,000	24,000	30,000	36,000	48,000	60,000
		kW	3.5	5.3	7.0	8.8	10.6	14.1	17.6
	Heating	BTUh	13,500	20,000	27,000	34,000	40,000	54,000	67,000
		kW	4.0	5.9	7.9	10.0	11.7	15.8	19.6
Input power		W	87	142	222	253	427	469	785
Airflow rate	High	CFM (m³/h)	394 (670)	630 (1071)	862 (1464)	1092 (1855)	1372 (2331)	1531(2602)	2013(3420)
	Med		347 (590)	547 (930)	800 (1360)	942 (1600)	1271 (2160)	1407(2390)	1883(3200)
	Low		306 (520)	506 (860)	689 (1170)	818 (1390)	954 (1620)	1130(1920)	1542(2620)
Static pressure range		in.WG (Pa)	0.1 to 0.8 (25 to 200)	0.1 to 0.8 (25 to 200)	0.1 to 0.8 (25 to 200)	0.1 to 0.8 (25 to 200)	0.1 to 0.8 (25 to 200)	0.1 to 0.8 (25 to 200)	0.1 to 0.8 (25 to 200)
Standard static pressure			0.5 (125)	0.5 (125)	0.5 (125)	0.5 (125)	0.5 (125)	0.5 (125)	0.5 (125)
Sound pressure level	High	dB (A)	41	43	45	45	48	48	53
	Med		39	40	43	43	46	46	50
	Low		37	39	39	40	40	41	45
Dimensions (H × W × D)		in.(mm)	51 × 17-11/16 × 23-13/16 (1,295 × 450 × 605)			51 × 22-3/16 × 23-13/16 (1,295 × 564 × 605)		57-1/2 × 25-1/8 × 23-13/16 (1,461 × 638 × 605)	
Weight		lbs.(kg)	139 (63)	148 (67)	153 (69)	174 (79)	179 (81)	212 (96)	223 (101)
Connection pipe diameter	Liquid (Flare)	in.(mm)	1/4 (6.35)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
	Gas (Flare)		1/2 (12.70)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	3/4 (19.05)	3/4 (19.05)	3/4 (19.05)
Drain hose diameter (I.D.)			3/4 (19.05)	3/4 (19.05)	3/4 (19.05)	3/4 (19.05)	3/4 (19.05)	3/4 (19.05)	3/4 (19.05)

FLEXIBLE LINE-UP WITH WIDE CAPACITY RANGE AND HIGH STATIC PRESSURE

- Selectable capacities from 1 to 5 tons.
- Broad static pressure range for a wide range of applications.
- Durable powder-coated thick steel gauge cabinet.
- Acoustical and thermal insulation is upgraded from 1/2" to 1" thick to reduce heat loss.
- Equipped with standard MERV 3 filter.
- Easily retrofitted into existing installations.

Static pressure range
0.1 to 0.8 in.WG
(25 to 200Pa)

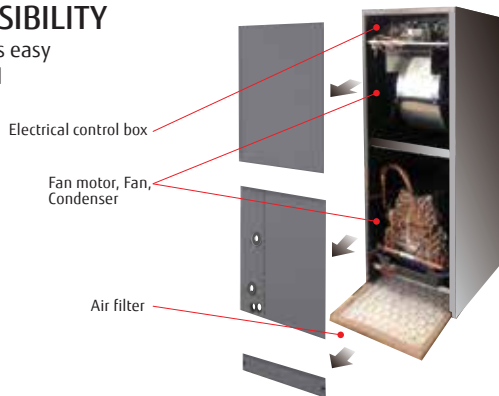
Makes the Fujitsu Airstage platform
an even more flexible solution.

*Except ARUV12TLAV
0.1 to 0.7 in.WG
(25 to 175 Pa).

Capacity class (BTUh)						
12,000	18,000	24,000	30,000	36,000	48,000	60,000
						

FRONT ACCESSIBILITY

Front panel provides easy access for setup and maintenance.



SMALL FOOTPRINT

ARUV12,18,24
17-3/4" x 23-3/4"

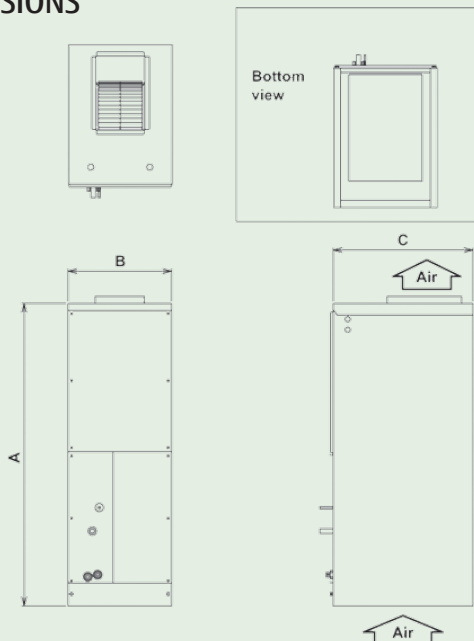
ARUV30, 36
22-1/4" x 23-3/4"

ARUV48, 60
25-1/8" x 23-3/4"



DIMENSIONS

(UNIT: IN (MM))



	ARUV 12/18/24	ARUV 30/36	ARUV 48/60
A	51 (1,295)	51 (1,295)	57-1/2 (1,461)
B	17-11/16 (450)	22-3/16 (564)	25-1/2 (638)
C	23-13/16 (605)	23-13/16 (605)	23-13/16 (605)

Floor Mount

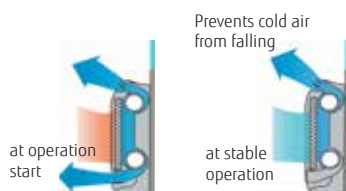
AGUA4TLAV1
AGUA7TLAV1
AGUA9TLAV1
AGUA12TLAV1
AGUA14TLAV1



DUAL FANS AND WIDE AIRFLOW

Individual vertical airflow by 2 fans control the whole room comfortably.

Cooling

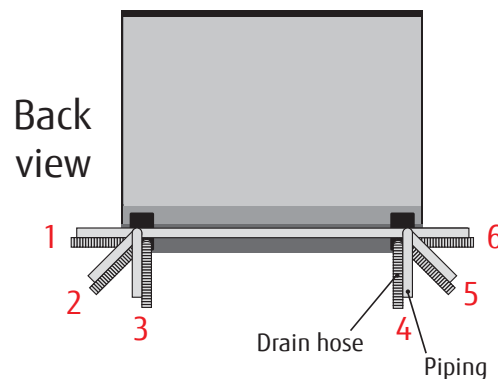


Heating



FLEXIBLE PIPING CONNECTION

There are 6 positions for drain hose and piping to choose from: right, left, side and down positions.



SPECIFICATIONS

Model name			AGUA4TLAV1	AGUA7TLAV1	AGUA9TLAV1	AGUA12TLAV1	AGUA14TLAV1
Power Source			1 Phase - 208 / 230V ~ 60Hz				
Capacity	Cooling	BTUh	4,000	7,500	9,500	12,000	14,000
		kW	1.2	2.2	2.8	3.5	4.1
	Heating	BTU/h	4,400	9,500	10,900	13,500	15,600
		kW	1.3	2.8	3.2	4.0	4.6
Input Power		W	12 / 14	16	17	22	29
Max. Operating Current		A	0.19 / 0.22	0.24	0.25	0.30	0.38
Airflow rate	High	CFM (m³/h)	224 (380) / 253 (430)*	277 (470)	294 (500)	347 (590)	394 (670)
	Med-Hi		206 (350)	247 (420)	265 (450)	306 (520)	347 (590)
	Med		188 (320)	230 (390)	235 (400)	277 (470)	306 (520)
	Lo-Hi		182 (310)	212 (360)	212 (360)	247 (420)	265 (450)
	Low		165 (280)	194 (330)	194 (330)	230 (390)	230 (390)
	Quiet		124 (210)	159 (270)	159 (270)	200 (340)	200 (340)
Sound pressure level	High	dB(A)	35/36*	37	38	42	46
	Med-Hi		33	35	36	39	42
	Med		31	33	34	37	39
	Lo-Hi		30	31	31	35	36
	Low		28	29	29	33	33
	Quiet		22	22	22	30	30
Dimensions (H x W x D)		in.(mm)	23-5/8 × 29-1/8 × 7-7/8 (600 × 740 × 200)				
Weight		lbs.(kg)	33 (15)	33 (15)	33 (15)	33 (15)	33 (15)
Connection pipe diameter	Liquid (Flare)	in.(mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)
	Gas (Flare)		3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	1/2 (12.70)	1/2 (12.70)
Drain hose diameter (I.D./O.D.)		in.	9/16 / 5/8 to 11/16				

Note : Specifications are based on the following conditions:

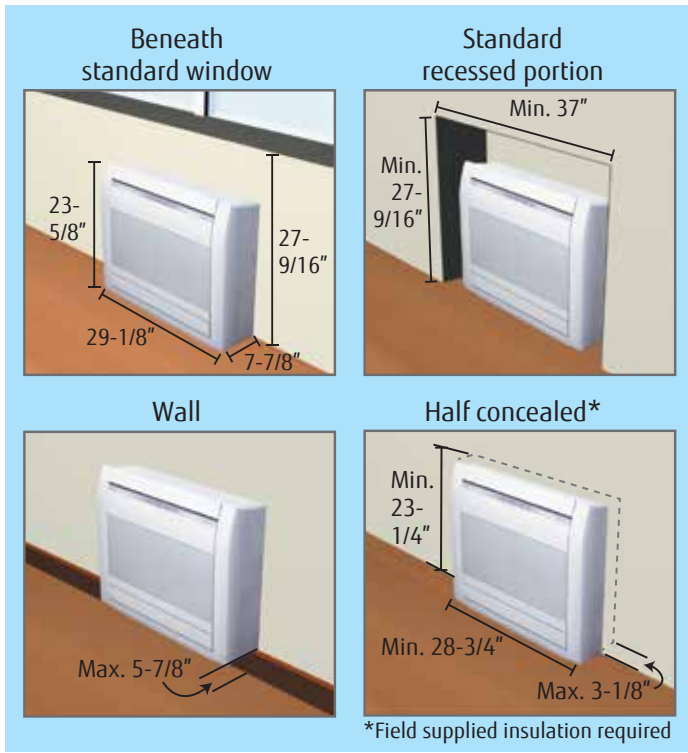
Built-in protective functions may limit capacity or shut off unit if unit is operated outside of unit design operating temperature ranges.

Cooling : Indoor temperature of 80°F(26.7°C)DB/67°F(19.4°C)WB; and outdoor temperature of 95°F(35°C)DB/75°F(23.9°C)WB.

Heating : Indoor temperature of 70°F(21.1°C)DB/60°F(15.6°C)WB, and outdoor temperature of 47°F(8.3°C)DB/43°F(6.1°C)WB.

Pipe Length : 25ft. (7.5m), Height difference : 0ft.(0m)(Outdoor unit - indoor unit).

*Cooling operation / heating operation.



QUIET OPERATION

With 6 fan speeds to choose from, floor mounted models operate as quietly as 22 dB(A).



6-Step Speed

High

Med-Hi

Med

Lo-Hi

Low

Quiet

OPTIONAL PARTS

Wired Remote ControllerUTY-RNRUZ2

Wireless Remote ControllerUTY-LNHU

Simple Remote Controller.....UTY-RSRY, UTY-RHRY

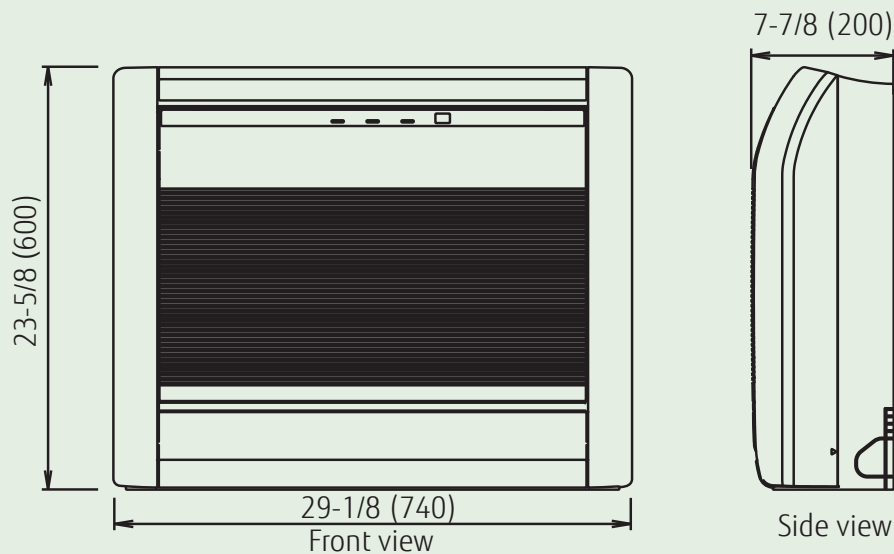
Half Concealed KitUTR-STA

FLEXIBLE AND EASY INSTALLATION

At less than 24" high and 30" wide, floor mount models fit easily under a standard window and can replace a radiator twice its size while producing more capacity.

DIMENSIONS

(UNIT: IN (MM))



Floor / Ceiling

ABUA12TLAV
ABUA14TLAV
ABUA18TLAV
ABUA24TLAV



The slim and lightweight design allows the unit to be suspended from the ceiling or installed on the floor, offering flexibility in design.

Note: IR Receiver is standard for communicating with optional Wireless Remote Control.

FLEXIBLE INSTALLATION

Example of floor installation

Floor console



EXAMPLE OF CEILING INSTALLATION

Under ceiling



SPECIFICATIONS

Model name			ABUA12TLAV	ABUA14TLAV	ABUA18TLAV	ABUA24TLAV
Power source			1 Phase ~ 208/230V 60Hz			
Capacity	Cooling	BTUh	12,000	14,000	18,000	24,000
		kW	3.5	4.1	5.3	7.0
	Heating	BTUh	13,500	15,600	20,000	27,000
		kW	4.0	4.6	5.9	7.9
Input power		W	30	42	74	99
Airflow rate	High	CFM (m³/h)	388 (660)	459 (780)	589 (1,000)	589 (1,000)
	Med		336 (570)	377 (640)	424 (720)	483 (820)
	Low		288 (490)	324 (550)	341 (580)	400 (680)
Sound pressure level	High	dB (A)	36	40	46	47
	Med		32	36	39	42
	Low		28	34	35	37
Dimensions (H × W × D)		in.(mm)	7-13/16 × 39 × 25-13/16 (199 × 990 × 655)			
Weight		lbs.(kg)	56 (25)	57 (26)	57 (26)	60 (27)
Connection pipe diameter	Liquid (Flare)	in.(mm)	1/4 (6.35)	1/4 (6.35)	3/8 (9.52)	3/8 (9.52)
	Gas (Flare)		1/2 (12.70)	1/2 (12.70)	5/8 (15.88)	5/8 (15.88)
Drain hose diameter (I.D./O.U.)			3/4 / 1-1/16			

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 80°F(26.7°C)DB/67°F(19.4°C)WB, and outdoor temperature of 95.0°F(35°C)DB/75°F(23.9°C)WB.

Heating : Indoor temperature of 70°F(21.1°C)DB/60°F(15.6°C)WB, and outdoor temperature of 47°F(8.3°C)DB/43°F(6.1°C)WB.

Pipe length : 25ft.(7.5 m), Height difference : 0ft.(0 m) (Outdoor unit - Indoor unit).

Built-in protective functions may limit capacity or shut off unit if unit is operated outside of unit design operating temperature ranges.

A combination of up/down and right/left directional louver swing provides better air distribution in larger spaces.



- High power
- High efficiency

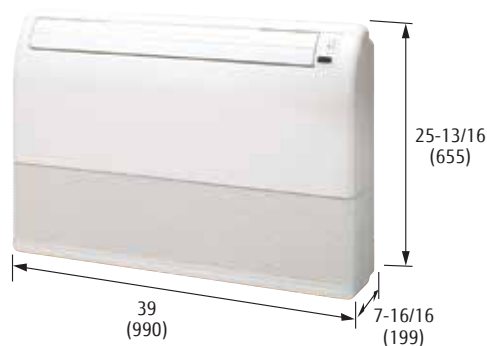


Engineered louver design boosts airflow sending cool air quickly to every corner of the room.

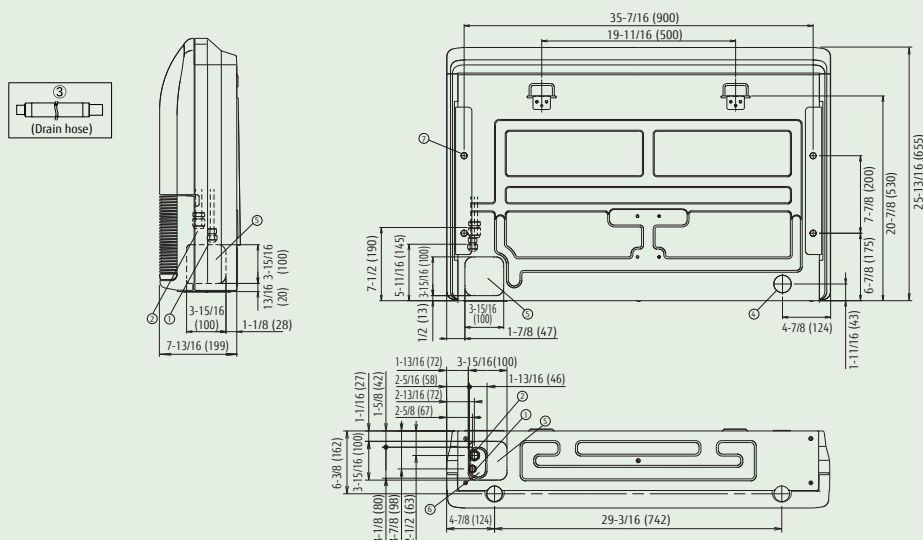
When operation is stopped, the louvers will automatically close.

Symmetrical, slim and compact design.

Unit : in (mm)



(UNIT: IN (MM))



	ABUA 12/14	ABUA 18/24
① Refrigerant pipe flare connection (Liquid)	ø 1/4 (6.35)	ø 3/8 (9.52)
② Refrigerant pipe flare connection (Gas)	ø 1/2 (12.70)	ø 5/8 (15.88)
③ Drain hose connection (Drain Hose)	ø 3/4 (I.D.), ø 1-1/16 (O.D.)	
④ Knock out hole (Drain Outlet)	ø 1-3/4 (45)	ø 1-3/4 (45)
⑤ ⑥ Knock out hole	—	—
⑦ Hole for lifting bolt	Use M10 screw bolt	

Ceiling

ABUA30TLAV ABUA36TLAV

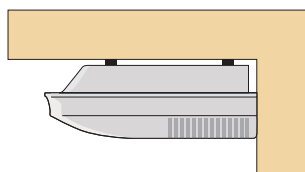
Powerful ceiling-hung indoor units are easy to install and can provide plenty of warm or cold air to a large space. Ceiling-hung units are the perfect solution for large spaces such as classrooms, restaurants, and kitchens.



Note: IR Receiver is standard for communicating with optional Wireless Remote Control.

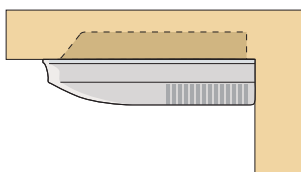
INSTALLATION

Open



General installation pattern which suspends the indoor unit from the ceiling.

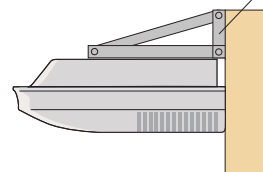
Concealed



Installation pattern where part of the indoor unit is embedded into the ceiling.

Wall mounted

(Locally purchased)



Installation which fixes the indoor unit to the wall by the use of wall brackets (field supplied). This type of installation can be used when the ceiling space is insufficient.

SLIM & COMPACT DESIGN



Height
9-7/16 in
(240mm)

HIGH POWER DC FAN MOTOR

- High power
- High efficiency



SPECIFICATIONS

Model name			ABUA30TLAV	ABUA36TLAV
Power source			1 Phase ~ 208/230V 60Hz	
Capacity	Cooling	BTUh	30,000	36,000
		kW	8.8	10.6
	Heating	BTUh	34,000	40,000
		kW	10.0	11.7
Input power		W	85	85
Airflow rate	High	CFM (m³/h)	859 (1,630)	995 (1,690)
	Med		806 (1,370)	824 (1,400)
	Low		671 (1,140)	689 (1,170)
Sound pressure level	High	dB (A)	42	45
	Med		38	38
	Low		33	34
Dimensions (H × W × D)		in.(mm)	9-7/16 × 65-3/8 × 27 -9/16 (240 × 1,660 × 700)	
Weight		lbs.(kg)	101 (46)	106 (48)
Connection pipe diameter	Liquid (Flare)	in.(mm)	3/8 (9.52)	3/8 (9.52)
	Gas (Flare)		5/8 (15.88)	3/4 (19.05)
Drain hose diameter (I.D./O.U.)				3/4 / 1-1/16

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 80°F(26.7°C)DB/67°F(19.4°C)WB, and outdoor temperature of 95.0°F(35°C)DB/75°F(23.9°C)WB.

Heating : Indoor temperature of 70°F(21.1°C)DB/60°F(15.6°C)WB, and outdoor temperature of 47°F(8.3°C)DB/43°F(6.1°C)WB.

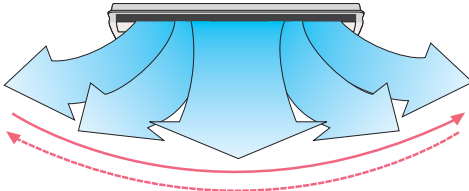
Pipe length : 25ft.(7.5 m), Height difference : 0ft.(0 m) (Outdoor unit - Indoor unit).

Built-in protective functions may limit capacity or shut off unit if unit is operated outside of unit design operating temperature ranges.

FOUR-WAY LOUVER SWING

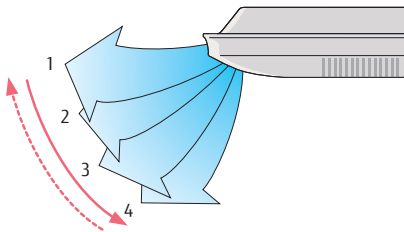
Auto airflow direction and auto swing

Right and left



5 selectable positions

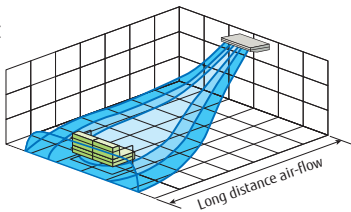
Up and down



4 selectable positions

LONG AIRFLOW

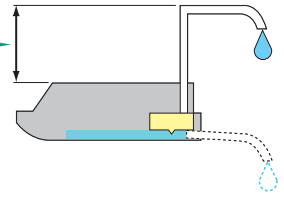
Long Airflow ensures comfort to every corner of a large room.



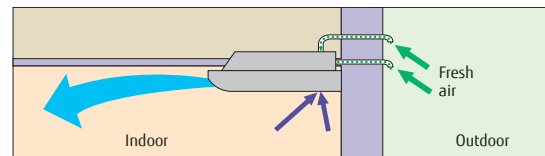
CONDENSATE DRAIN PUMP (OPTIONAL)

Optional drain lift-up mechanism allows flexible installation.

Height
19-11/16 in
(500mm)



FRESH AIR INTAKE



AIR FILTER

High Efficiency long-life filter doubles the life of the filter compared to standard filters.

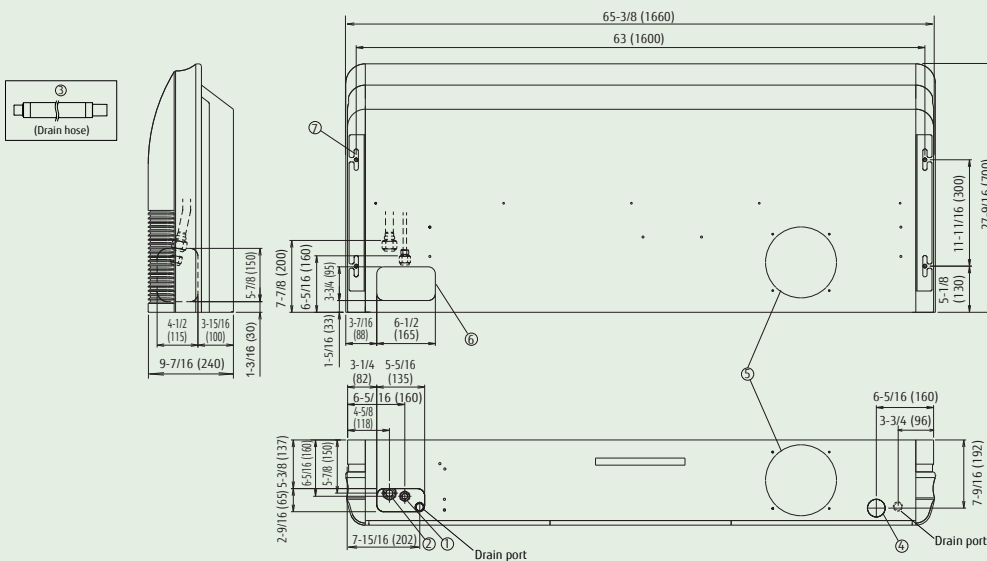
OPTIONAL PARTS

Drain Pump Unit..... UTZ-PU1EBA / UTR-DPB24T

Flange..... UTD-RF204

DIMENSIONS

(UNIT: IN (MM))



Compact Wall Mounted

ASUA4TLAV1
ASUA7TLAV1
ASUA9TLAV1
ASUA12TLAV1
ASUA14TLAV1



ASUA4/7/9TLAV1



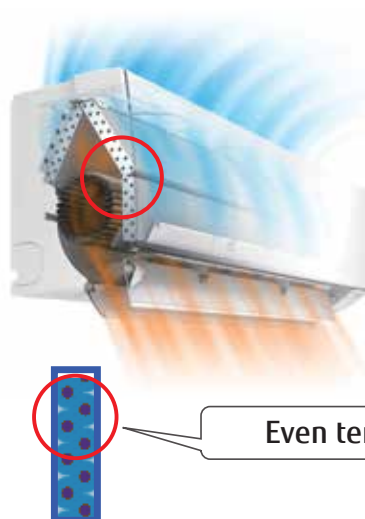
ASUA12/14TLAV1

EASY INSTALLATION

Communication wiring can be easily installed by opening the front panel and wire cover.



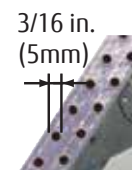
HIGH DENSITY HEAT EXCHANGER



Thin tube technology:

1/4 in. (7mm) → 3/16 in (5mm)

The heat exchanger volume has been increased by adopting a high density, large heat exchanger.



Even temperature

SPECIFICATIONS

Model name			ASUA4TLAV1	ASUA7TLAV1	ASUA9TLAV1	ASUA12TLAV1	ASUA14TLAV1
Power Source			1 Phase - 208 / 230V ~ 60Hz				
Capacity	Cooling	BTU/h	4,000	7,500	9,500	12,000	14,000
		kW	1.2	2.2	2.8	3.5	4.2
	Heating	BTU/h	4,400	9,500	10,900	13,500	15,600
		kW	1.3	2.8	3.2	4.0	4.6
Input Power		W	13	19	34	25	36
Airflow rate	High	CFM (m³/h)	253 (430)	324 (550)	424 (720)	406 (690)	471 (800)
	Med-Hi		247 (420)	271 (460)	336 (570)	359 (610)	436 (740)
	Med		230 (390)	247 (420)	294 (500)	330 (560)	400 (680)
	Lo-Hi		224 (380)	230 (390)	241 (410)	312 (530)	359 (610)
	Low		212 (360)	212 (360)	212 (360)	277 (470)	324 (550)
	Quiet		194 (330)	194 (330)	194 (330)	194 (330)	194 (330)
Sound pressure level	High	dB(A)	31	35	43	40	44
	Med-Hi		30	32	38	37	42
	Med		28	30	34	35	40
	Lo-Hi		26	27	29	33	37
	Low		24	24	24	30	34
	Quiet		22	22	22	24	24
Dimensions (H x W x D)		in.(mm)	10-5/16 × 32-5/16 × 8-1/8 (262 × 820 × 206)			10-9/16 × 33-1/16 × 8 (268 × 840 × 203)	
Weight		lbs.(kg)	17 (7.5)	17 (7.5)	17 (7.5)	20 (9)	20 (9)
Connection pipe diameter	Liquid (Flare)	in.(mm)	Ø1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)
	Gas (Flare)		Ø3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	1/2 (12.70)	1/2 (12.70)
Drain hose diameter (I.D./O.D.)		in.	9/16 / 5/8 to 11/16				

Note : Specifications are based on the following conditions.

Built-in protective functions may limit capacity or shut off unit if unit is operated outside of unit design operating temperature ranges.

Cooling : Indoor temperature of 80°F(26.7°C)DB/67°F(19.4°C)WB; and outdoor temperature of 95°F(35°C)DB/75°F(23.9°C)WB.

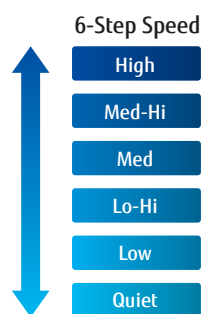
Heating : Indoor temperature of 70°F(21.1°C)DB/60°F(15.6°C)WB, and outdoor temperature of 47°F(8.3°C)DB/43°F(6.1°C)WB.

Pipe Length : 25ft. (7.5m), Height difference : 0ft.(0m)(Outdoor unit - indoor unit).

*Cooling / Heating

6 FAN SPEED CONTROL (ASUA4TLAV1 only)

With 6 fan speeds to choose from, these wall mounted models operate as quietly as 22 dB(A).



Six-speed fan control available through the following Remotes and Controllers:
UTY-RNRUZ2 / UTY-RSRY / UTY-RHRY / UTY-DCGY / UTY-DTGYZ1 / UTY-ALGXZ1 / UTY-APGXZ1

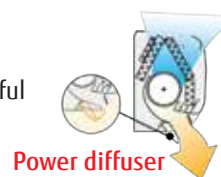
COMFORTABLE AIRFLOW

Models ASUA12/14TLAV1

UNIQUE POWER DIFFUSER

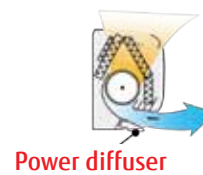
Heating

Vertical airflow provides powerful floor level heating



Cooling

Horizontal airflow does not blow cool air directly at the occupants in the room.



OCCUPANCY/HUMAN SENSOR SETTING

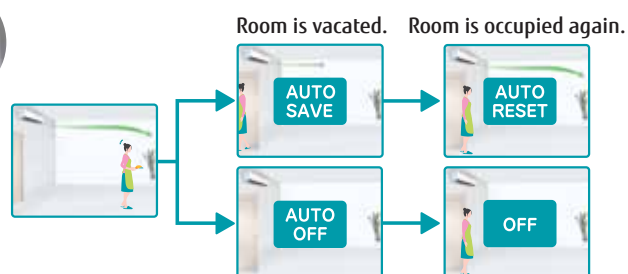
Models ASUA12/14TLAV1

The occupancy function automatically saves energy when zone becomes unoccupied. It does that by sensing occupancy based on an adjustable interval (15-180 minutes). In this case, the unit either goes into power save mode, or shuts off.

This setting is only available through optional Wired Remote Control (Touch Panel) UTY-RNRUZ2.



Human sensor



OPTIONAL PARTS

Wired Remote Control (Touch Panel):
UTY-RNRUZ2

Wireless Remote Control:
UTY-LNHU

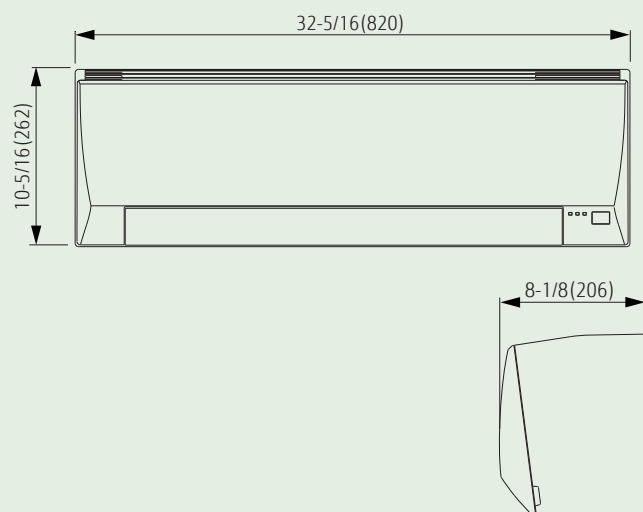
Simple Remote Control:
UTY-RSRY, UTY-RHRY

DIMENSIONS

(UNIT: IN (MM))

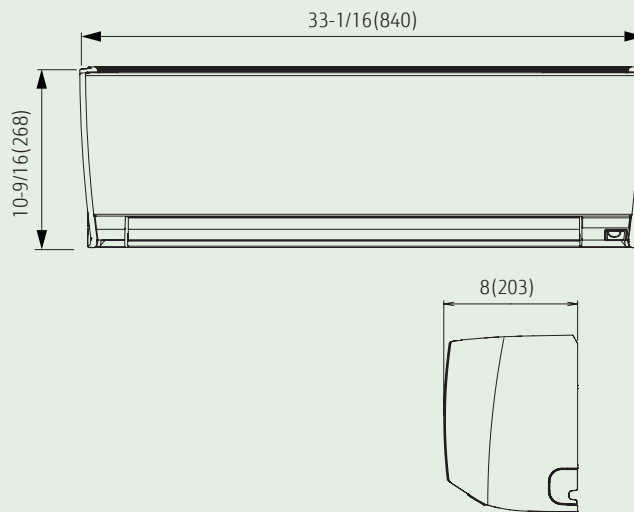
Models:

ASUA4TLAV1 / ASUA7TLAV1 / ASUA9TLAV1



Models:

ASUA12TLAV1/ASUA14TLAV1



Wall Mounted

ASUB18TLAV1
ASUB24TLAV1
ASUB30TLAV1
ASUB36TLAV1



ASUB18/24TLAV1

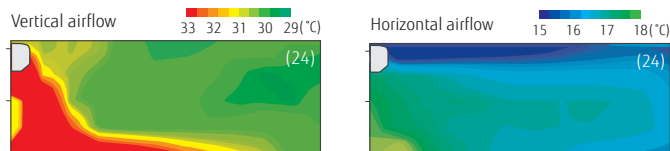


ASUB30/36TLAV1

COMFORTABLE AIRFLOW

Power diffuser

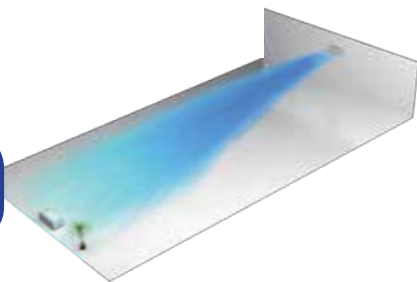
(ASUB18/24TLAV1)



Powerful Airflow

(ASUB30TLAV1)

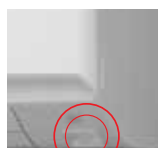
Distributes airflow
20% further!



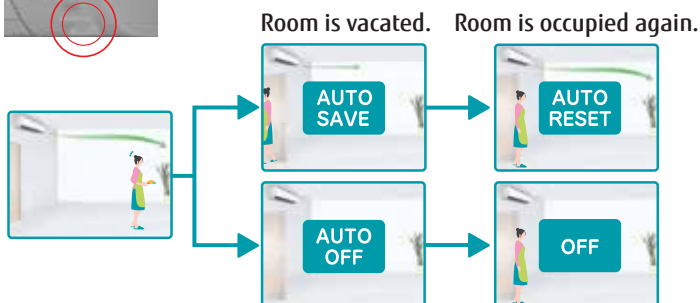
OCCUPANCY/HUMAN SENSOR SETTING

Models ASUB30/36TLAV1 only

The occupancy function automatically saves energy when zone becomes unoccupied. It does that by sensing occupancy based on an adjustable interval (15-180 minutes). In this case, the unit either goes into power save mode, or shuts off.



This setting is only available through optional Wired Remote Control (Touch Panel) UTY-RNRUZ2.



SPECIFICATIONS

Model name			ASUB18TLAV1	ASUB24TLAV1	ASUB30TLAV1	ASUB36TLAV1
Power Source			1 Phase - 208 / 230V ~ 60Hz			
Capacity	Cooling	BTU/h	18,000	24,000	30,000	34,000
		kW	5.3	7.0	8.8	10.0
	Heating	BTU/h	20,000	27,000	34,000	38,000
		kW	5.9	7.9	10.0	11.2
Input Power		W	32	60	74	103
Airflow rate	High	CFM (m³/h)	494 (840)	647 (1,100)	848 (1,440)	954 (1,620) / 895 (1,520)*
	Med-Hi		-	-	706 (1,200)	765 (1,300)
	Med		453 (770)	536 (910)	618 (1,050)	659 (1,120)
	Lo-Hi		-	-	553 (940)	577 (980)
	Low		406 (690)	430 (730)	524 (890)	524 (890)
	Quiet		-	-	412 (700)	412 (700)
Sound pressure level	High	dB(A)	41	48	53	55 / 54 *
	Med-Hi		-	-	49	51
	Med		39	43	45	47
	Lo-Hi		-	-	42	43
	Low		35	35	39	39
	Quiet		-	-	33	33
Dimensions (H x W x D)		in.(mm)	12-5/8 x 39-5/16 x 9-3/8 (320 x 998 x 238)		13-3/8 x 45-1/4 x 11 (340 x 1,150 x 280)	
Weight		lbs.(kg)	33 (15)		40 (18)	
Connection pipe diameter	Liquid (Flare)	in.(mm)	1/4 (6.35)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
	Gas (Flare)	in.(mm)	1/2 (12.70)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)
Drain hose diameter (I.D./O.D.)		in.(mm)	9/16 / 5/8 to 11/16			

Note : Specifications are based on the following conditions.

Built-in protective functions may limit capacity or shut off unit if unit is operated outside of unit design operating temperature ranges.

Cooling : Indoor temperature of 80°F(26.7°C)DB/67°F(19.4°C)WB; and outdoor temperature of 95°F(35°C)DB/75°F(23.9°C)WB.

Heating : Indoor temperature of 70°F(21.1°C)DB/60°F(15.6°C)WB, and outdoor temperature of 47°F(8.3°C)DB/43°F(6.1°C)WB.

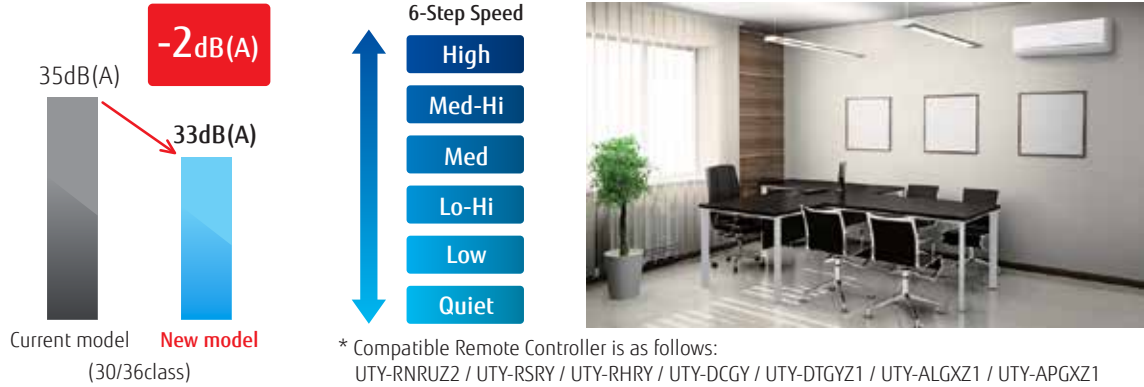
Pipe Length : 25ft. (7.5m), Height difference : 0ft.(0m)(Outdoor unit - indoor unit).

*Cooling / Heating

6 FAN SPEED CONTROL

With 6 fan speeds to choose from, these wall mounted models operate as quietly as 33 dB(A).

Note: This applies to models ASUB30TLAV1 and ASUB36TLAV1.



OPTIONAL PARTS

Wired Remote Control (Touch Panel) UTY-RNRUZ2

Wireless Remote Control..... UTY-LNHU

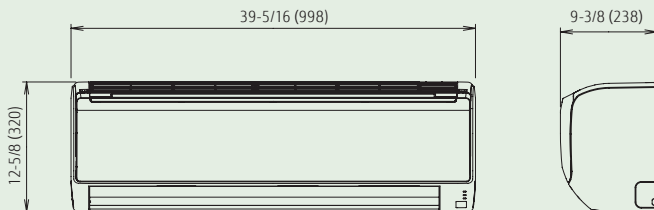
Simple Remote Control..... UTY-RSRY, UTY-RHRY

DIMENSIONS

(UNIT: IN (MM))

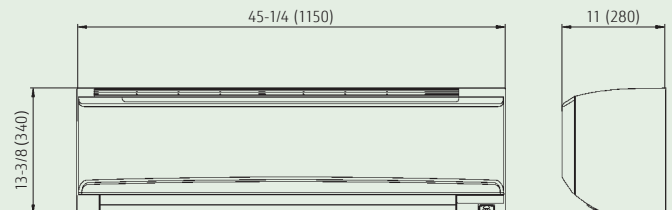
Models:

ASUB18TLAV1 / ASUB24TLAV1



Models:

ASUB30TLAV1 / ASUB36TLAV1





Compact Wall Mounted (while supplies last)

ASUA7TLAV
ASUA9TLAV
ASUA12TLAV
ASUA14TLAV



Compact (Only 8.5" inches deep) and stylish design.

Note: IR Receiver is standard for communicating with optional Wireless Remote Control.

FILTER FEATURES

High performance filter provides high quality heating and cooling.



Ion Deodorizing Filter

The filter deodorizes by decomposing absorbed odors using the oxidizing and reducing effects of ions generated by fine ceramic particles. 3 year life expectancy. Wash to restore surface action.

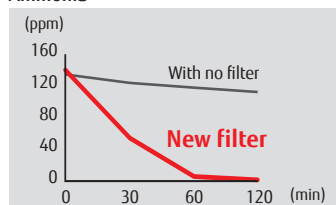


Apple-catechin Filter (polyphenol ingredient from apples)

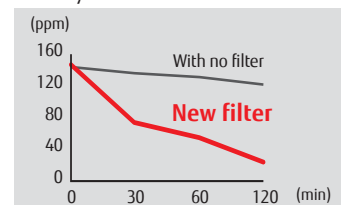
Fine dust, invisible mold spores, and harmful microorganisms are absorbed onto the filter by static electricity, and further growth is inhibited. 3-12 month life expectancy.

Deodorizing effect (Odor reduction rate)

Ammonia



Trimethylamine



Hydrogen sulfate



High performance filters have been thoroughly tested by the Environmental Sanitary Inspection Center using an advanced Deodorization Test.

SPECIFICATIONS

Model name			ASUA7TLAV	ASUA9TLAV	ASUA12TLAV	ASUA14TLAV
Power source			1 Phase ~ 208/230V 60Hz			
Capacity	Cooling	BTUh	7,500	9,500	12,000	14,000
		kW	2.2	2.8	3.5	4.1
	Heating	BTUh	9,500	10,900	13,500	15,600
		kW	2.8	3.2	4.0	4.6
Input power		W	17	18	22	34
Airflow rate	High	CFM (m³/h)	288 (490)	294 (500)	330 (560)	394 (670)
	Med		265 (450)	265 (450)	283 (480)	288 (490)
	Low		218/247* (370/420*)	218/247* (370/420*)	247 (420)	247 (420)
Sound pressure level	High	dB (A)	35	36	39	44
	Med		33	33	35	37
	Low		31 /27*	31 /27*	31	32
Dimensions (H × W × D)		in.(mm)	10-13/16 × 31-1/8 × 8-7/16 (275 × 790 × 215)			
Weight		lbs.(kg)	20 (9)	20 (9)	20 (9)	20 (9)
Connection pipe diameter	Liquid (Flare)	in.(mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)
	Gas (Flare)		1/2 (12.70)	1/2 (12.70)	1/2 (12.70)	1/2 (12.70)
Drain hose diameter (I.D./O.U.)			9/16 (13.8) / 5/8 (15.8) - 11/16 (16.7)			

Note : Specifications are based on the following conditions:

Cooling : Indoor temperature of 80°F(26.7°C)DB/67°F(19.4°C)WB, and outdoor temperature of 95.0°F(35°C)DB/75°F(23.9°C)WB.

Heating : Indoor temperature of 70°F(21.1°C)DB/60°F(15.6°C)WB, and outdoor temperature of 47°F(8.3°C)DB/43°F(6.1°C)WB.

Pipe length : 25ft.(7.5 m), Height difference : 0ft.(0 m) (Outdoor unit - Indoor unit).

Built-in protective functions may limit capacity or shut off unit if unit is operated outside of unit design operating temperature ranges.

*Cooling operation / heating operation.

COMPACT SIZE

Powerful output in a compact design

Though the indoor unit is compact, it features a large, high pressure cross fan (3-1/2in./90mm diameter) in a center mounted configuration and a Lambda type heat exchanger to provide plenty of power.

Width
31-1/8 in.
(790mm)

SYMMETRICAL DESIGN

Symmetrical, clean design that suits all interiors.

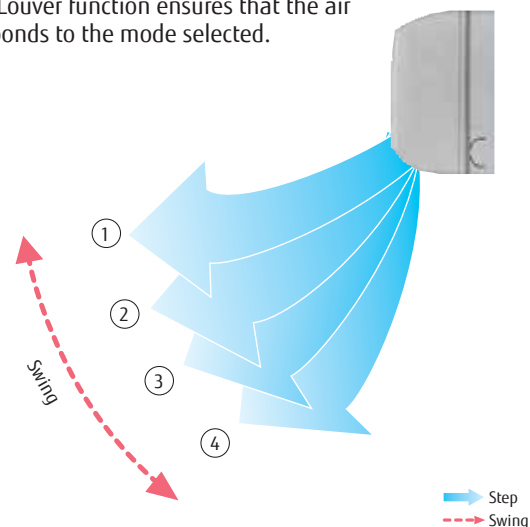
HIGH POWER DC FAN MOTOR

- High power
- Wide rotation range
- High efficiency
- Compact size



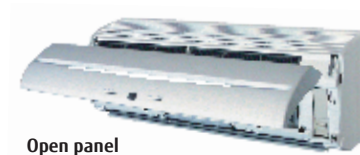
AUTO SWING LOUVER

The Auto Swing Louver function ensures that the air direction corresponds to the mode selected.



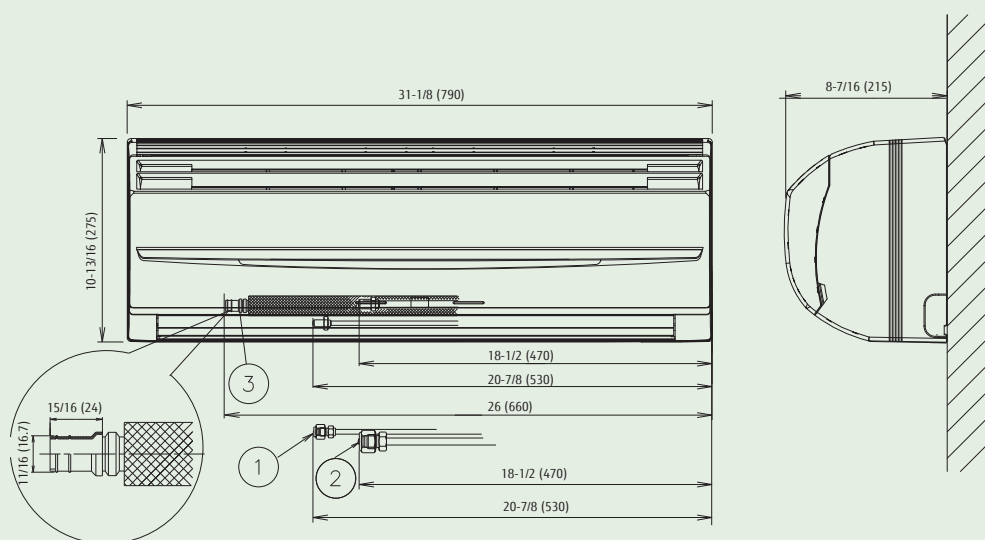
EASY MAINTENANCE

Maintenance is simple because the front panel can be removed for easy access.



DIMENSIONS

(UNIT: IN (MM))



	ASUA 7/9/12/14
① Refrigerant pipe flare connection (Liquid)	ø 1/4 (6.35)
② Refrigerant pipe flare connection (Gas)	ø 1/2 (12.70)
③ Drain hose connection (Drain Hose)	ø 9/16 (I.D.), ø 5/8 to 11/16 (O.D.) [ø 13.8 (I.D.), ø 15.8 to 16.7 (O.D.)] Total length : 23-5/8 (600)

Wall Mounted (while supplies last)

ASUB18TLAV
ASUB24TLAV



Note: IR Receiver is standard for communicating with optional Wireless Remote Control.

COMPACT & SLIM DESIGN

Stylish, slim and elegant, these popular wall mounted units are perfect for smaller rooms where a clean, aesthetic design is preferred. Variable speed DC fan motors deliver heating or cooling quietly and comfortably.



SPECIFICATIONS

Model name			ASUB18TLAV	ASUB24TLAV
Power source			1 Phase ~ 208/230V 60Hz	
Capacity	Cooling	BTUh	18,000	24,000
		kW	5.3	7.0
	Heating	BTUh	20,000	24,000
		kW	5.9	7.9
Input power		W	32	60
Airflow rate	High	CFM (m³/h)	494 (840)	647 (1,100)
	Med		453 (770)	536 (910)
	Low		406 (690)	430 (730)
Sound pressure level	High	dB (A)	41	48
	Med		39	43
	Low		35	35
Dimensions (H × W × D)		in.(mm)	12-5/8 × 39-5/16 × 9 (320 × 998 × 228)	
Weight		lbs.(kg)	33 (15)	33 (15)
Connection pipe diameter	Liquid (Flare)	in.(mm)	3/8 (9.52)	3/8 (9.52)
	Gas (Flare)		5/8 (15.88)	5/8 (15.88)
Drain hose diameter (I.D./O.U.)			1/2 (12) / 5/8 (16)	

Note : Specifications are based on the following conditions.

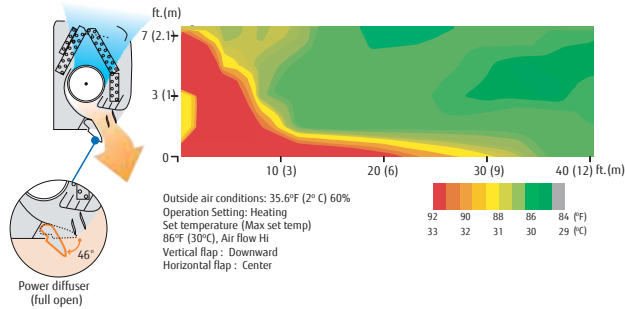
Cooling : Indoor temperature of 80°F(26.7°C)DB/67°F(19.4°C)WB, and outdoor temperature of 95.0°F(35°C)DB/75°F(23.9°C)WB.

Heating : Indoor temperature of 70°F(21.1°C)DB/60°F(15.6°C)WB, and outdoor temperature of 47°F(8.3°C)DB/43°F(6.1°C)WB.

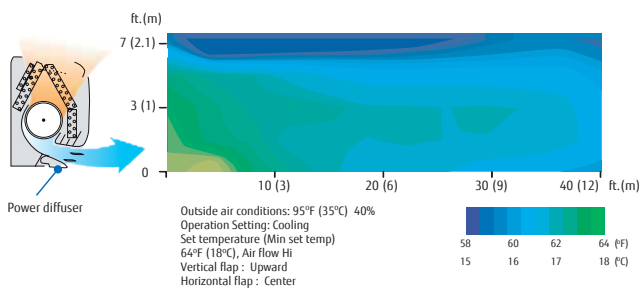
Pipe length : 25ft.(7.5 m), Height difference : 0ft.(0 m) (Outdoor unit - Indoor unit).

Built-in protective functions may limit capacity or shut off unit if unit is operated outside of unit design operating temperature ranges.

"VERTICAL AIRFLOW" PROVIDES POWERFUL FLOOR LEVEL HEATING



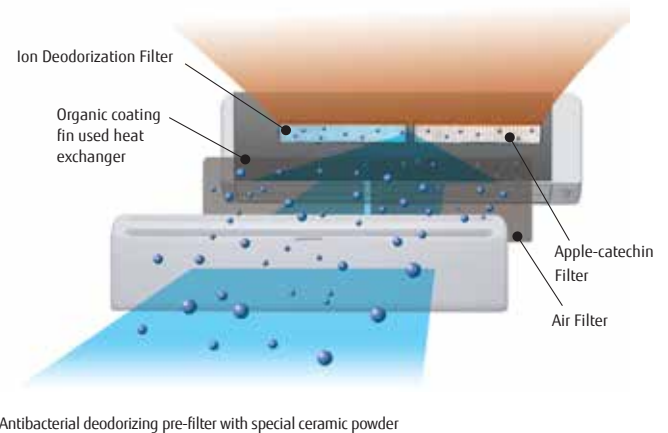
"HORIZONTAL AIRFLOW" DOES NOT BLOW COOL AIR DIRECTLY AT THE OCCUPANTS IN THE ROOM



EASY MAINTENANCE

Improved drain pan design simplifies cleaning and maintenance.

AIR CONDITIONER FILTER FEATURES



Long-life*¹ Ion Deodorization Filter

The filter deodorizes by powerfully decomposing absorbed odors using the oxidizing and reducing effects of ions generated by the ultra-fine-particle ceramic.

Apple-catechin Filter*²

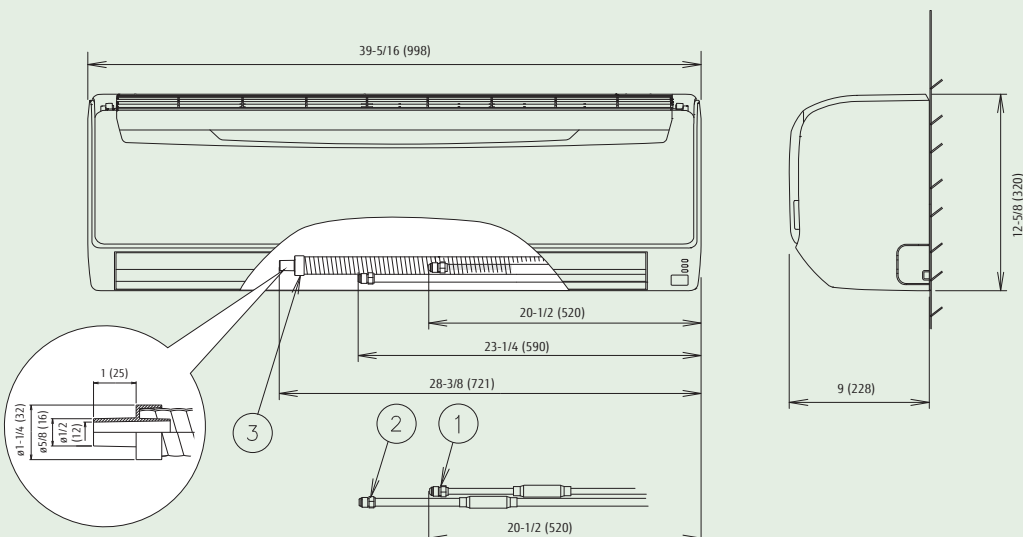
Fine dust, invisible mold spores, and harmful microorganisms are absorbed onto the filter by static electricity, and further growth is inhibited and deactivated by the polyphenol extracted from apples.

*¹ The filter can be used for approx. 3 years if it is washed under water to restore its surface action when it is dirty.

*² Using different filters at both sides.

DIMENSIONS

(UNIT: IN (MM))



	ASUB
	18/24
① Refrigerant pipe flare connection (Liquid)	ø 3/8 (9.52)
② Refrigerant pipe flare connection (Gas)	ø 5/8 (15.88)
③ Drain hose connection (Drain Hose)	ø 1/2 (I.D.), ø 5/8 (O.D.) [ø 12 (I.D.), ø 16 (O.D.)] Total length : 26-3/8 (670)

Outdoor Air Unit

AAUA48TLAV
AAUA72TLAV
AAUA96TLAV



AAUA48



AAUA72



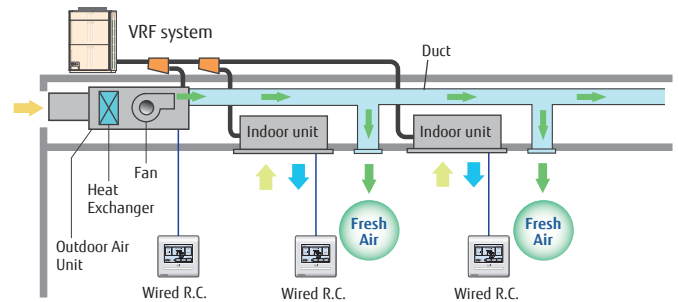
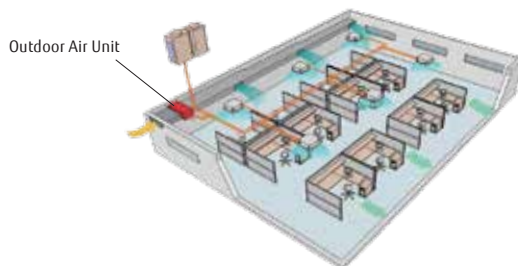
AAUA96

The 100% Outdoor Air Unit efficiently processes the outdoor air in cooling or heating to supply outdoor air to improve Indoor Air Quality (IAQ) for ventilation.

ONE VRF SYSTEM CAN PROVIDE AIR CONDITIONING AND AIR SUPPLY AT THE SAME TIME

Outdoor Air Unit can be connected to the VRF outdoor condenser as an indoor unit conditioning fresh outdoor air to comfort levels.

J-SERIES **V-SERIES**



* Make sure the connected capacity is within the range of 50% to 100% of the outdoor unit capacity. In addition, if there are mixed connections with indoor units, make the Outdoor Air Unit connection capacity 30% or less of the outdoor unit capacity.

SPECIFICATIONS

Model name			AAUA48TLAV	AAUA72TLAV	AAUA96TLAV
Power source			1 Phase ~ 208/230V 60Hz		
Capacity	Cooling	BTUh	48,000	72,000	96,000
	Heating		30,000	47,000	59,000
Input power	Cooling/Heating	W	179	292	370
Airflow rate		CFM (m³/h)	636 (1,080)	989 (1,680)	1,236 (2,100)
Static pressure range		in.WG (Pa)	0.20 to 0.74 (50 to 184)	0.20 to 0.80 (50 to 200)	0.20 to 0.96 (50 to 239)
Standard static pressure			0.74 (184)	0.80 (200)	0.80 (200)
Sound pressure level		dB (A)	42	44	47
Dimensions (H × W × D)		in. (mm)	16-3/4×53-13/16×22-1/2 (425×1,367×572)	16-3/4×53-13/16×22-1/2 (425×1,367×572)	17-11/16×62-5/16×27-9/16 (450×1,583×700)
Weight		lbs.(kg)	108 (49)	123 (56)	159 (72)
Connection Pipe Diameter (Small / Large)		in. (mm)	Ø3/8 / Ø3/4 (Ø9.52 / Ø19.05)	Ø1/2 / Ø7/8 (Ø12.70 / Ø22.22)	Ø1/2 / Ø7/8 (Ø12.70 / Ø22.22)
Operation Range	Cooling	°FDB (°CDB)	41 to 109 (5 to 43)	41 to 109 (5 to 43)	41 to 109 (5 to 43)
	Heating		19 to 70 (-7 to 21)	19 to 70 (-7 to 21)	19 to 70 (-7 to 21)
Refrigerant			R410A	R410A	R410A

Note : Specifications are based on the following conditions.

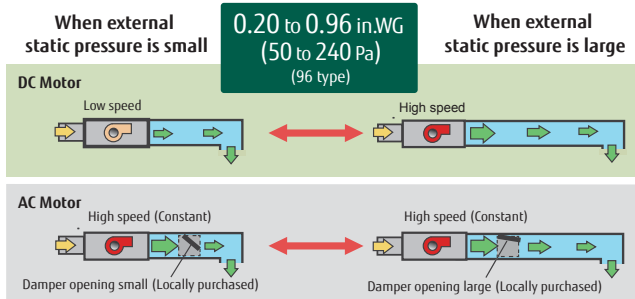
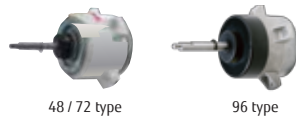
Cooling : Outdoor temperature of 91°FDB (33°CDB) / 82°FWB (28°CWB).

Heating : Outdoor temperature of 32°FDB (0°CDB) / 27°FWB (-2.9°CWB).

Pipe length : 25ft. (7.5 m)

HIGH ENERGY SAVINGS AND FLEXIBLE DUCT DESIGN BY USING DC MOTOR

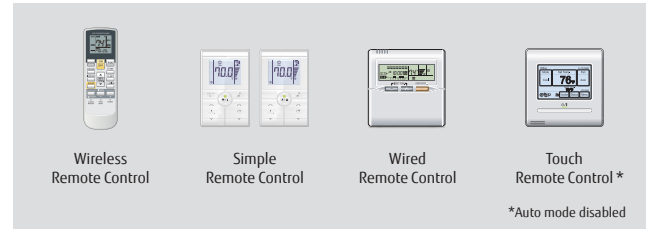
- Greatly reduces electricity consumption by adopting permanent magnet compared to when using an AC motor.
- With its built in DC motor, changes to static pressure from 0.20 to 0.96 in.WG is simplified using wired remote control.



VARIOUS CONTROLLERS

There are a variety of optional controllers, such as individual remote controls, central controllers and building management systems.

Remote Controls



Central Controller



* The temperature setting is discharged air temperature setting. The air volume is set to a constant speed.

TOP CLASS COMPACT DESIGN

- Top class lightweight compact design at just 53-13/16 in. (425mm) in height, 123 lbs. (56kg) in weight for AAUA72TLAV type. This unit can be installed easily even in a narrow space.

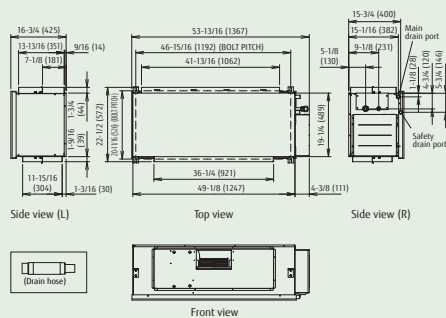
**123 lbs.
(56kg)
(72type)**



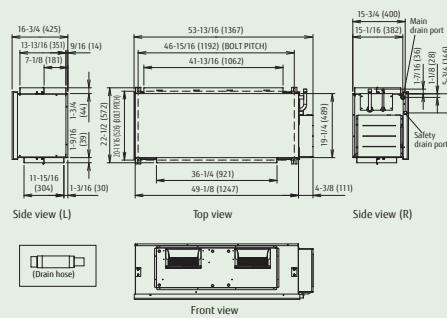
DIMENSIONS

(UNIT: IN (MM))

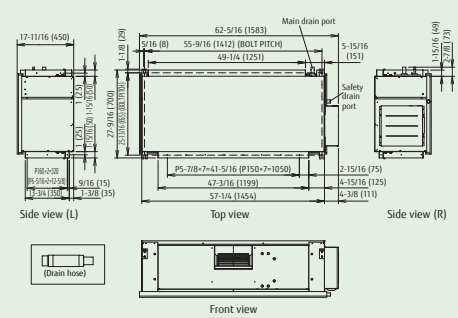
AAUA48TLAV



AAUA72TLAV



AAUA96TLAV





FUJITSU - VENTACITY Partnership



Fujitsu General America has partnered with Ventacity Systems to provide the first VRF - HRV/ERV solution that is powered by the Ventacity HVAC² Smarter Building Platform. The Airstage VRF system provides a superior level of comfort with very high efficiency at part-load conditions. The Ventacity HVAC² Smarter Building Platform can measure key indoor air quality parameters and outdoor parameters. It then regulates the amount of fresh air and its temperature that is being supplied to the building. The Ventacity HRV/ERV system, with its 85%-93% sensible recovery efficiency, minimizes the amount of energy required to condition the fresh air. This translates to huge energy savings for the building owner.

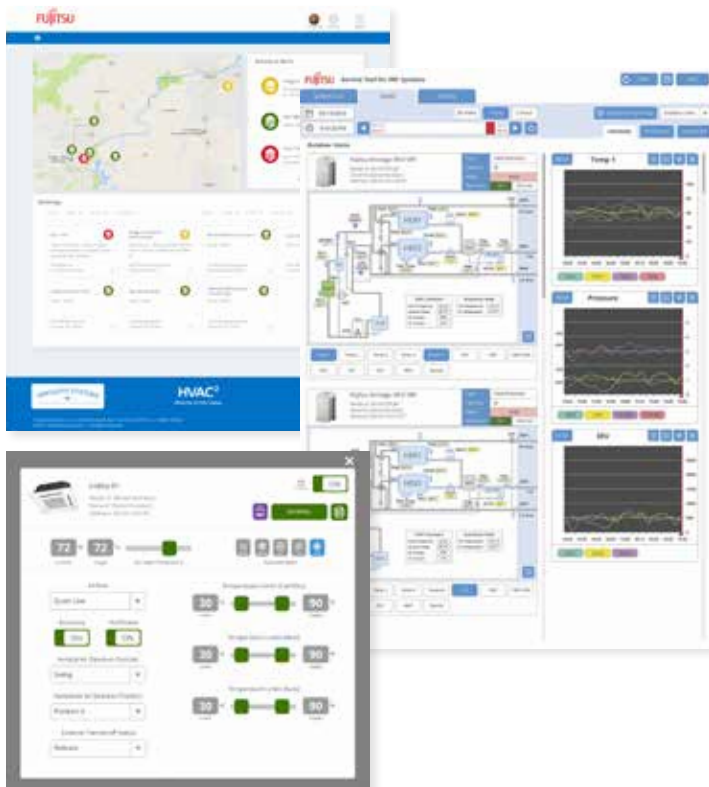
What does the Fujitsu-Ventacity solution bring?

IMPROVED COMFORT AND HEALTH IN BUILDINGS

When the Ventacity HRV/ERV system is connected to optional sensors, it will optimize ventilation, providing just the right amount of fresh air when and where needed for maximum health and comfort. The combination of zoned heating and cooling from Airstage systems with fresh air from Ventacity's HRV/ERV systems provides a healthy environment for building occupants, translating into higher building value.

CLOUD-BASED SYSTEM MANAGEMENT

System monitoring and control decisions can be made both locally at each device or building and remotely using any web-enabled device. Remote monitoring lowers maintenance costs, increases profits through efficient scheduling of field technicians and greatly reduced training time.



Smarter Building Gateway (SBG100)



Ventacity Cloud Apps

- Desktop & Mobile Apps
- Portfolio View
- Dashboards of Building/Zone/HVAC
- Equipment Config
- Environmental Sensors
- Deep Diagnostics
- Real-Time Visibility
- Scheduling
- Alerts

HIGH EFFICIENCY

The Airstage VRF system - which includes a variety of Building Management System controls - combined with a Ventacity HRV/ERV system makes an intelligent, ultra-efficient solution for buildings, offering tremendous Energy Use Intensity (EUI) reductions and savings in the building's annual energy use per unit area.

SBC100 SMARTER BUILDING CONTROLLER

The SBC100 Smarter Building Controller offers significant savings by providing the best, most feature rich VRF central controller at a competitive cost. Compared to other HVAC control systems, the SBC100 requires fewer components and much less integration time. The SBC100 connects a variety of devices to the HVAC² Smarter Building Platform over a secure network via LTE or Ethernet, and uses a cloud-based user interface, which is available from any Internet connected device. This offers immediate access to critical information to monitor energy efficiency and lower operating costs throughout a building's lifecycle.

PLUG AND PLAY HVAC SYSTEM

Upon installation, Airstage VRF systems are automatically detected and added to the secure Ventacity HVAC² Smarter Building Platform network, dramatically reducing installation and system integration time and expense.



SPECIFICATIONS

		Indoor Mount Ductless	Above Drop Ceiling Ventilator	Above Drop Ceiling Ventilator	Above Drop Ceiling Ventilator	Above Drop Ceiling Ventilator	Roof Top Mounted Ducted	Roof Top Mounted Ducted
								
MODEL NAME		VS500SQ / VS500Sqe	VS250 CMh/e	VS400 CMh/e	VS900 CMh/e	VS1200 CMh/e	VS1000RT/RTe	VS3000RT/RTe
Ventilation Flow - Max	cfm	539	309	467	992	1492	1,020 cfm	3,300 cfm
Ventilation Flow - Typical	cfm	117 to 500	60 to 270	120 to 480	200 to 900	300 to 1200	180 to 1,000 cfm	750 to 3,000 cfm
Ventilation Type		Heat Recovery Ventilator (HRV) / Energy Recovery Ventilator (ERV)						
Heat Exchanger		Counterflow Aluminum Static Plate / Counterflow Polymer Static Plate						
Heat Recover - Max	%	90 / 83	86.1/79.2	86.1/79.2	86.1/79.2	86.1/77.9	92 / 85	90 / 85
Temperature Range	°F	40 to 104	41 to 104	41 to 104	41 to 104	41 to 104	-13 to 140	-13 to 122
Modes		CAV, DCV, Economizer	CAV, DCV, VAV, BMS, Economizer				CAV, DCV, VAV, BMS, Economizer	
MECHANICAL								
Weight	lbs.	280 / 288	165	210	375	540	618 / 662	1654 / 1720
Dimensions	in.	84.3 x 44 x 17.9	46.9 x 12.2 x 30.7	55.1 x 12.2 x 42.5	66.9 x 15.4 x 54.5	78.7 x 18.5 x 67.3	63.6 x 35.2 x 52.5	86.3 x 48.3 x 73.5
OA Filter (2" or 4") MERV13	in.	15.16 x 16 x 3.75	11.2 x 9.25 x 3.78	17.9 x 9.25 x 3.78	23.03 x 12.2 x 3.78	29.53 x 15.55 x 3.78	17.5 x 28 x 3.75	51 x 26.5 x 3.75
RA Filter (2") MERV8	in.	10.6 x 16.7 x 2	11.2 x 9.25 x 3.78	17.9 x 9.25 x 3.78	23.03 x 12.2 x 3.78	23.03 x 12.2 x 3.78	16.5 x 28 x 17.5	51 x 25.25 x 3.75
ELECTRICAL								
Power Supply	kW	5.1	1.78	3.29	6.26	7.9	7	20.2
Voltage		240 VAC, 1-Phase, 60Hz	208-240 VAC	208-240 VAC	208-240 VAC	208-240 VAC	240 VAC, 1-Phase, 60Hz or 208/240 VAC, 3-Phase, 60Hz	*208/240 VAC, 3-Phase, 60Hz or 480 VAC, 3-Phase, 60Hz"
De-Ice Preheater	kW	2.1	1.51	2.93	5.3	6.9	6	16.3
Maximum Power - 1 Fan	W	322	125	170	470	503	500	1,900

DUCTLESS

The VS500SQ is a ductless HRV/ERV for decentralized applications. The VS500SQ optimizes for energy efficiency and healthy indoor air quality, while offering ultra-quiet operation and no drafts.

Top Applications: Classrooms, offices and conference rooms.



VENTILATOR

VS-CM Series HRVs & ERVs for installation above drop ceilings. Operates at much higher energy efficiency (up to 93%) which saves much more energy and significantly lowers operating costs. 4 capacities to choose from.



DUCTED

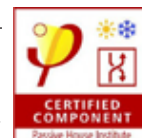
VS1000RT and VS3000RT make up a line of Smart Ventilation™ Management systems with a rugged design for easy rooftop or mechanical room installation that optimize healthy indoor air quality while minimizing building energy usage.

Top Applications: New and existing retail spaces, offices, restaurants, schools, public spaces and multifamily residential buildings.



PASSIVE HOUSE CERTIFIED

The VS1000RT is the first Passive House, UL, CSA Certified counterflow heat recovery ventilation (HRV) product in North America.



Remote Controls

Touch Remote Control
UTY-RNRUZ2



pg. 67

Wired Remote Control
UTY-RNKU




pg. 69

pg. 69

Simple Remote Control


UTY-RSRY
With mode selector



pg. 69

Simple Remote Control


UTY-RHRY
Without mode selector



pg. 69

Simple Remote Control


UTY-RSKU
With mode selector



pg. 69

Simple Remote Control

UTY-RHKU
Without mode selector



Wireless Remote Control
UTY-LNHU



pg. 70

Wi-fi Interface Module
FJ-RC-WIFI-1NA



pg. 71

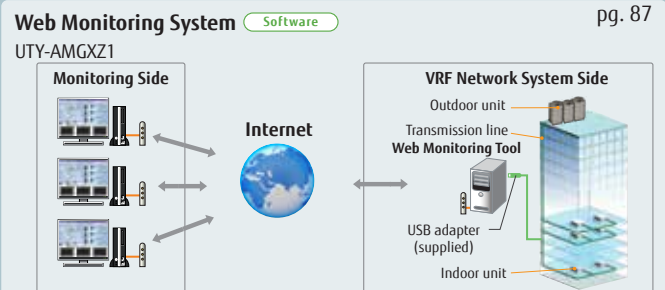
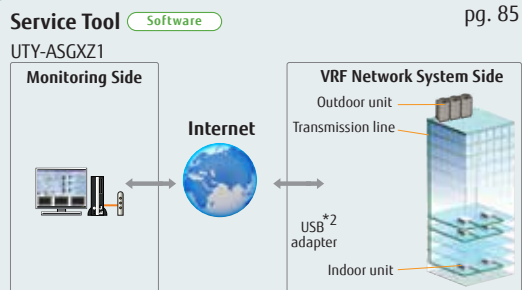
Wi-fi Interface Module
UTY-TFSXZ2



pg. 71



Service & Monitoring



Central Controllers

Touch Panel Controller UTY-DTGYZ1



pg. 72

Central Remote Controller UTY-DCGY



pg. 75

Central Remote Controller UTY-DCGYZ1



pg. 74

System Controller

Software

UTY-APGXZ1
UTY-ALGXZ1 (Lite edition)



pg. 76



Remote / Monitoring side

pg. 76

For all Airstage VRF and J-Series



BMS Communication Options

BACnet Gateway (Hardware)

UTY-VBGX



pg. 83

BACnet Gateway

Software

UTY-ABGXZ1



pg. 83

LONWORKS Network Converter

UTY-VLGX



pg. 84

MODBUS Converter

UTY-VMGU-KIT



pg. 84

Accessories

Network Converter

DC power supply
UTY-VTGX



Single split



pg. 80

Network Converter

AC power supply
UTY-VVGGXZ1



Single split



pg. 80

Signal Amplifier

UTY-VSGXZ1



pg. 80

Thermostat

Converter

UTY-TTRX



pg. 70

IR Receiver Unit

UTB-YWC



pg. 70

Cassette IR

Receiver Unit

UTY-LRHYB1*3

UTY-LBHXD*4

pg. 70



External Switch Controller

UTY-TERX
pg. 81



Card-key
(Field supplied)

HighRise 360 Kit

pg. 82



UTY-SPWX*5

*1. BMS/BAS: Building Management System / Building Automation System

*2. USB Adaptor is U10 USB Network Interface of Echelon® Corporation

*3. For Cassette

*4. For Circular Flow Cassette

*5. For V-II only

Building Management System

BMS/BAS*1















Smarter Building Controller

SBC100

pg. 65



REMOTES & CONTROLLERS

		REMOTES						CONTROLLERS						BMS/BAS*
		 Touch Remote Control	 Wired Remote Control	 Simple Remote Control	 Simple Remote Control*1	 Wireless Remote Control	 Wi-fi Interface Module	 Central Controller	 Central Controller	 Touch Panel Controller	 System Controller Lite Software	 System Controller Software	 Smarter Building Controller	
Model name		UTY-RNRUZ2	UTY-RNKU	UTY-RSRV	UTY-RHRY	UTY-LNHU	FJ-RC-WIFI-1NA	UTY-DCGY	UTY-DCGVZ1	UTY-DTGVZ1	UTY-ALGXZ1	UTY-APGXZ1	SBC100	
Max. controllable remote control groups		1	1	1	1	1	1	100	100	400	400	1600	320	
Max. controllable indoor units		16	16	16	16	16	1	100	100	400	400	1600	320	
Max. controllable groups		—	—	—	—	16	—	16	50	100	400	1600	320	
Air conditioning control function	On / Off	●*3	●	●	●	●	●	●	●	●	●	●	●	●
	Operation mode setting	●	●	●	—	●	●	●	●	●	●	●	●	●
	Fan speed setting	●	●	●	●	●	●	●	●	●	●	●	●	●
	Room temp. setting	●	●	●	●	●	●	●	●	●	●	●	●	●
	Room temp. set point limitation	●	—	●	●	—	●	●	●	●	●	●	●	●
	Test operation	●	●	●	●	●	●	●	●	●	—	—	—	—
	Up/down air direction flap setting	●	●	●	●	●	●	●	●	●	●	●	●	●
	Right/left air direction flap setting	●	●	—	—	●	●	●	●	●	●	●	●	●
	Individual louver control	●	—	—	—	—	—	—	—	●	—	—	—	—
	Group setting	—	—	—	—	—	—	●	●	●	●	●	—	—
	RC prohibition	—	—	—	—	—	—	●	●	●	●	●	●	●
	Anti freeze setting	—	—	—	—	—	●	●	●	●	●	●	●	●
	Set temp. auto return	●	●	—	—	—	●	—	—	—	—	—	—	—
	Away setting	●	—	—	—	—	●	—	—	—	—	—	—	—
	Economy mode setting	●	●	—	—	●	●	●	●	●	●	●	●	●
	Occupancy sensor control	—	—	—	—	—	—	—	—	—	●	●	—	—
Display	Error	●	●	●	●	—	●	●	●	●	●	●	●	●
	Defrosting	●	●	●	●	—	●	●	●	●	●	●	●	●
	Current time	●	●	—	—	●	●	●	●	●	●	●	—	—
	Day of week	●	●	—	—	—	—	—	—	●	●	●	—	—
	R.C. prohibition	●	●	●	●	—	—	●	●	●	●	●	●	●
	Cooling/heating priority	●	●	●	●	—	●	●	●	●	●	●	—	—
	Address display	●	●	●	●	—	—	●	●	●	●	●	—	—
	Room temp	●	—	●	●	—	●	—	—	—	—	—	—	—
	Multi language	●	—	—	—	—	●	●	●	●	●	●	—	—
	Daylight Saving Time setting (Summer)	●	—	—	—	—	—	●	●	●	●	●	—	—
	Time zone setting	—	—	—	—	—	—	—	—	●	—	—	—	—
	Name registration	●	—	—	—	—	●	●	●	●	●	●	—	—
	Backlight	●	—	●	●	—	●	●	●	●	—	—	—	—
	2D floor layout / 3D building display	—	—	—	—	—	—	—	—	—	—	●	—	—
Timer	Schedule timer	Period	Week	Week	—	—	Unlimited	Week	Week	Year	Year	Year	—	—
		On/Off, Temp, mode, times per day	8*3 *4	4	—	—	Unlimited	20	20	20	144	144	—	—
	On/off timer	—	●	—	—	●	●	—	—	—	—	—	—	—
	Sleep timer	—	—	—	—	●	●	—	—	—	—	—	—	—
	Program timer	—	—	—	—	●	●	—	—	—	—	—	—	—
	Auto off timer	●	—	—	—	—	●	—	—	—	—	—	—	—
	Day off	●	●	—	—	—	●	●	●	●	●	●	—	—
	Min. unit of timer setting (Minutes)	10 · 30	30	—	—	5	—	10	10	10	10	10	—	—
Control	Status monitoring system	—	—	—	—	—	—	●	●	●	●	●	●	●
	Electricity charge apportionment	—	—	—	—	—	—	—	—	—	○	●	—	—
	Error history	●	●	—	—	—	—	●	●	●	●	●	●	●
	Emergency stop	—	—	—	—	—	—	●*2	●*2	●*2	—	—	—	—
	Remote management	—	—	—	—	—	●	—	—	—	○	●	●	●
	Energy saving management	—	—	—	—	—	—	—	—	—	○	○	—	—
	Low noise mode	—	—	—	—	—	—	—	—	●	—	—	—	—
Internet	E-mail notification for malfunction	—	—	—	—	—	—	—	●	—	●	●	●	●
	Key lock	● Child lock	—	—	—	—	● Password setting	● Password setting	● Password setting	● Password setting	● Password setting	● Password setting	● Password setting	● Password setting
BMS	Third party Modbus communication	—	—	—	—	—	—	—	—	—	○	○	○	—
Other	Service Tool Functionality	—	—	—	—	—	—	—	▲	—	—	—	—	●

*1 "Operation mode" setting is not available for this model. *2 This function is available only through external input. control. *3 On / Off (Occupied / Unoccupied) *4 Mode deleted

●: Supported ○: Optional function —: Not supported yet ▲: Limited

Smarter Building Controller

SBC100

The SBC100 Smarter Building Controller is a state of the art building management system that integrates heating, ventilation, and air-conditioning (HVAC) equipment and controls. Pre-configured equipment including Fujitsu's Airstage VRF connect to the HVAC²-Smarter Building Platform over a secure network via LTE or Ethernet, and uses a cloud-based user interface, which is available from any Internet connected device. This offers immediate access to critical information to monitor energy efficiency and lower operating costs throughout a building's life-cycle.



THE CLOUD EXPERIENCE IS CUSTOMIZED FOR THE SPECIFIC ROLE OF THE USER:

- Owners
- Occupants
- Property Managers
- HVAC Contractors

PLUG AND PLAY

- Simple configuration and integration.
- Pre-Programmed and ready for compatible field equipment.

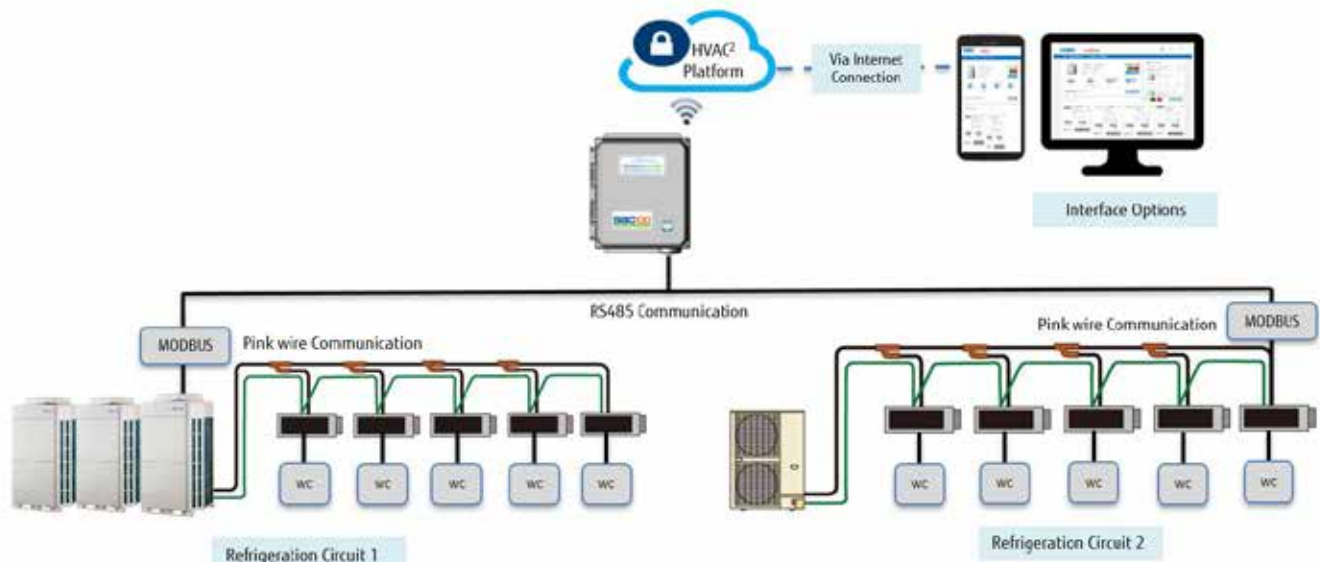
REMOTE CONNECTIVITY

- Mobile access over a secure internet connection.
- User interface with a simple layout provides critical building information.
- Optimum system performance is achieved with remote service tool monitoring, providing a good understanding of a potential issue minimizing downtime.
- Remotely examine full diagnostic data and error codes from the VRF to pinpoint the cause of an issue. All data are stored permanently in our secure cloud.
- Remote monitoring provides peace of mind, and when needed will reduce the total truck rolls, benefiting the contractor, the building owner, the occupants, and the environment!

BUILDING MANAGEMENT SYSTEM

- Suitable for a single building or a portfolio of buildings.
- BACnet ready and open to other HVAC² systems.

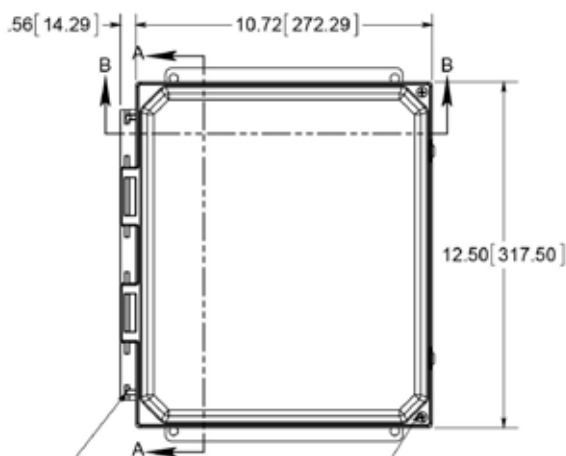
AIRSTAGE INTEGRATION USING SMARTER BUILDING CONTROLLER



SBC100 cont'd

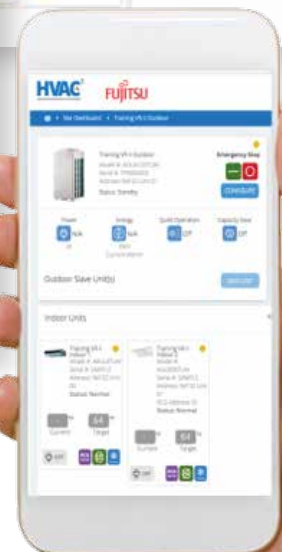
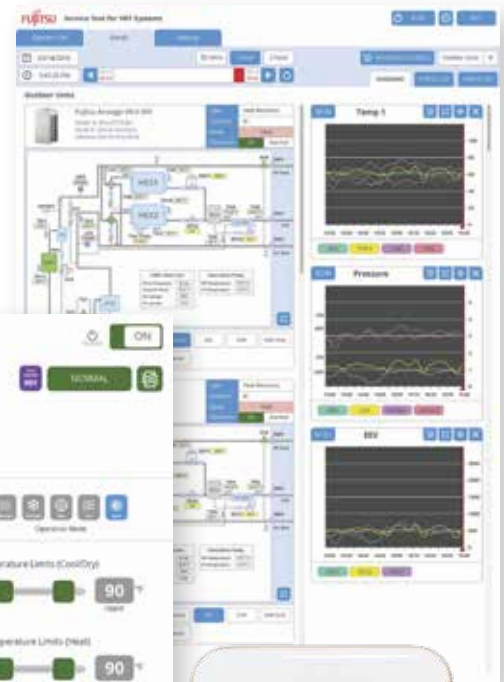
DIMENSIONS

(UNIT: IN (MM))



UNIT SPECIFICATIONS

Model #	SBC100
Power Supply	100 – 240 VAC / 1 ph / 50 – 60Hz
Power Wire	IEC connector with plug.
Dimensions (HxWxD)	13.5" x 11.3" x 7.2" 34.3cm x 28.7cm x 18.3cm
Weight	7 lbs / 13.8 kg
Input Power	17.6W
Operating Temp Range	32 – 122°F / 0 – 50°C



COMMUNICATIONS

Modbus TCP	Currently supported
Modbus RTU	Currently supported
BACnet	Coming soon

CONNECTOR TYPES	COUNT	FUNCTION / PURPOSE
Barrel-type power connector	1	For power supply by plug
microSD	1	Data storage
Ethernet	2	WAN/LAN
USB	2	General purpose
Relay output connectors	2	General purpose
Modbus RTU port	1	Connection point for devices under control
Switch closure input	2	General purpose
Wi-Fi / Bluetooth antenna	1	Supports Wi-Fi A/B/G and Bluetooth 4.0
GPS antenna	1	Geolocation
Cellular antenna	1	Cellular LTE internet connection

REMOTE CONTROLS

Touch Remote Control (2-WIRE): UTY-RNRUZ2

Easy operation by high-definition large STN-LCD touch screen

- Built-in temperature sensor
- Built-in weekly/Daily timer (ON/OFF (Occupied/Unoccupied), Temp.)
- Backlight enables easy operation in a darkened room
- Room temperature display
- Administrator temperature set point limitation
- Corresponds to 12 different languages (English, Chinese, French, German, Spanish, Russian, Polish, Italian, Greek, Portuguese, Turkish and Dutch)

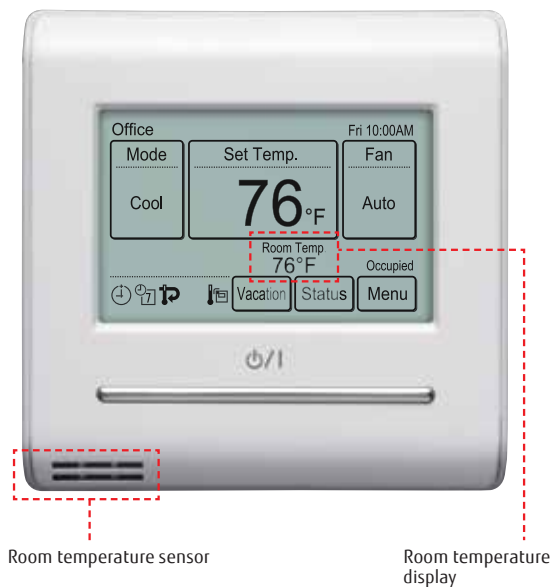
HIGH PERFORMANCE AND COMPACT SIZE

- In addition to the individual control, various energy saving controls can be realized using one remote controller only.



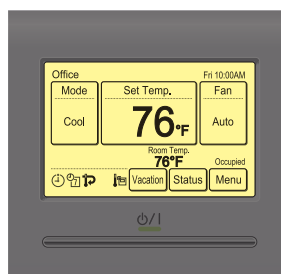
ACCURATE AND COMFORTABLE CONTROL

- Indoor temperature can be detected accurately by the inclusion of a thermo sensor in the body of the wired controller.

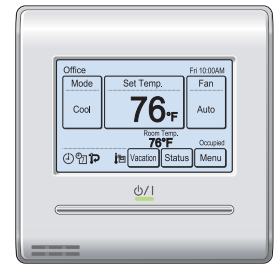


BACKLIGHT

- Backlight enables easy operation in a dark room.
- Backlight display time of 30 or 60 seconds can be set.



Max. controllable
16
indoor units

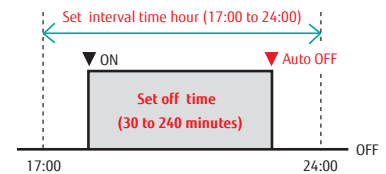


VARIOUS ENERGY SAVING SETTINGS

Auto OFF Timer

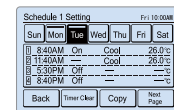
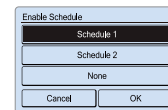
- The indoor unit automatically turns off after a set time has passed.
- The time interval for which auto off works can be set.

Ex) At interval time hour (17:00 to 24:00) to prevent forgetting to turn off

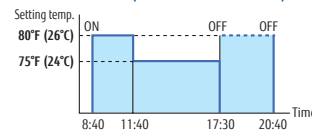


2 schedules Weekly Timer

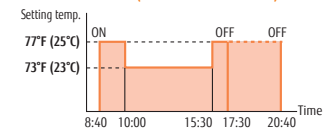
- 2 schedules such as for the summer and winter can be set.
- 8 setting changeable per day of week (Setting items: ON / OFF (Occupied/Unoccupied), Temperature, Time)



Schedule 1 (Summer schedule)

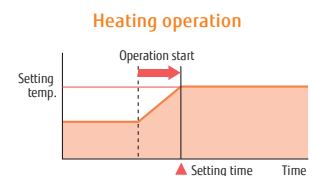
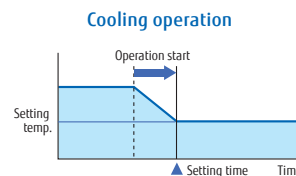


Schedule 2 (Winter schedule)



Optimum start function

- Provides configurable operation start (Boost) to get space to temperature before scheduled time.

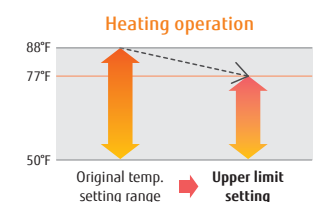
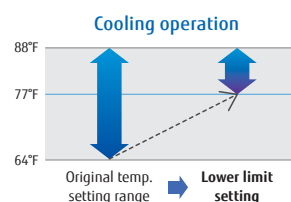


Set Temperature Auto Return

- The set temperature automatically returns to the previous setting.
- The time range in which the set temperature can be changed is 10 to 120 minutes.

Set Temperature Upper and Lower Limit Setting

- The set temperature range can be set for each operation mode. (Cooling / Heating / Auto)

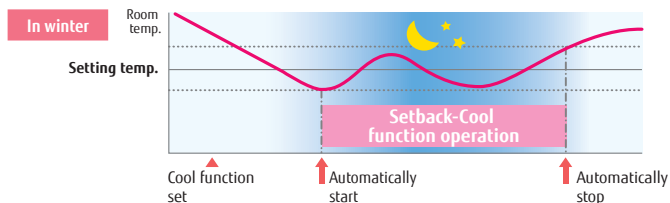
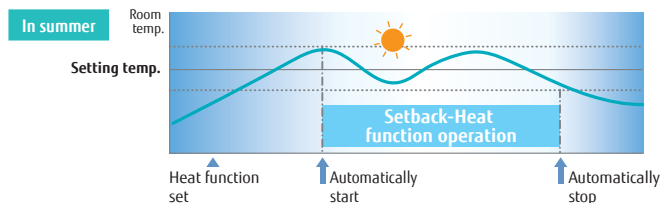


UTY-RNRUZ2 cont'd

ADDITIONAL FUNCTIONS

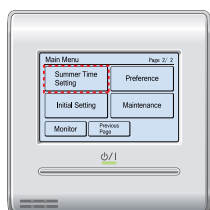
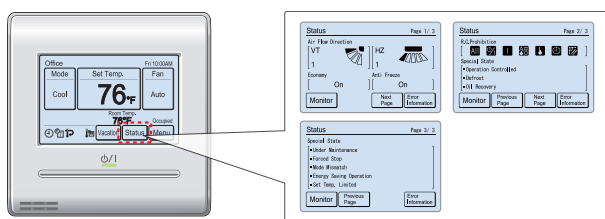
Away mode

- Cooling / Heating is automatically started when the room temperature reaches a setting temperature even if the indoor unit is off.



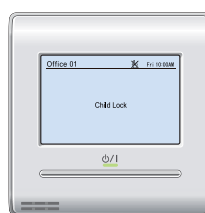
Displays setting status and limitations

- The remote controller settings can be easily checked



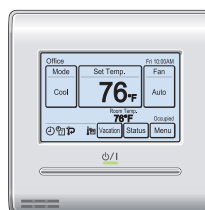
Daylight savings time (Summer Time)

- Provides Daylight Savings adjustment option for regions that uses it.



Child lock

- Lock / unlock method: Push the ON/OFF button and the screen (4 seconds)



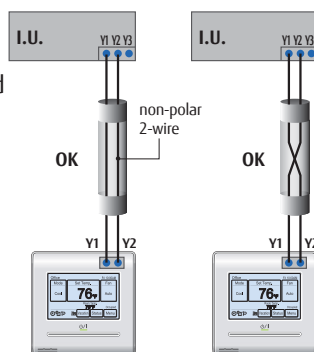
Name registration

- Indoor unit names can be registered in the remote control screen. This makes it easy to identify the indoor unit.

SIMPLIFIED INSTALLATION

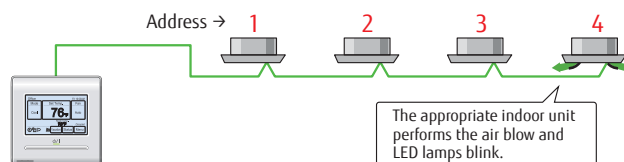
Uses non-polar 2-wire type

- The faulty wiring can be prevented by using non-polar 2-wire.



Auto Address Setting/Setting Position Notification

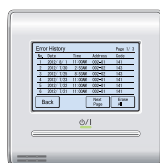
- Reduce errors and install time compared with manual addressing



EASY MAINTENANCE

Error History Display

- The errors that occur in the indoor unit or remote control are saved.
- A maximum of 32 error incidents can be saved.



SPECIFICATIONS

Model name	UTY-RNRUZ2
Power source	DC 12V
Dimensions (H x W x D) (in./mm)	4-3/4 x 4-3/4 x 11/16 (120 x 120 x 20.4)
Weight (oz./g)	8 (220)

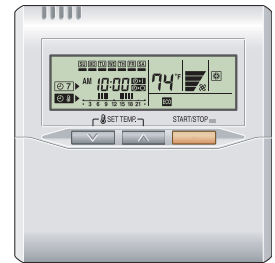
DC12V is supplied by the indoor unit.

REMOTE CONTROLS

Wired Remote Control

(3-WIRE) UTY-RNKU

Max. controllable
16
indoor units



The room temperature can be controlled by detecting the temperature accurately from the built-in sensor

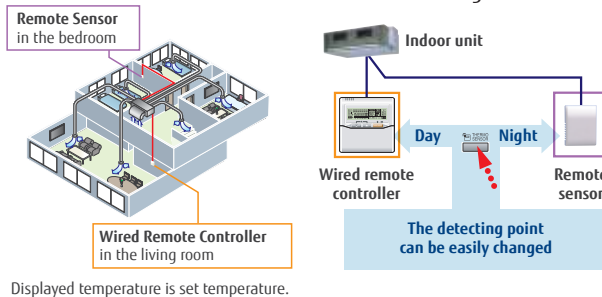
- Simple operation with Built-in Weekly / Daily Timer.
- Control up to 16 indoor units.
- Up to 2 wired remote controls can be connected to a single indoor unit.

ACCURATE AND COMFORTABLE

Indoor temperature can be detected accurately by the inclusion of a thermo sensor in the body of the wired controller.

This wired remote controller and the optional remote sensor allows flexibility in sensor location, suitable for all requirements.

Example of changing sensor:



BUILT-IN TIMERS

A weekly timer with up to four different On/Off and temperature settings per day

SIMPLE INSTALLATION

Designed for flush mount or usage of standard electric box.

Simple Remote Control

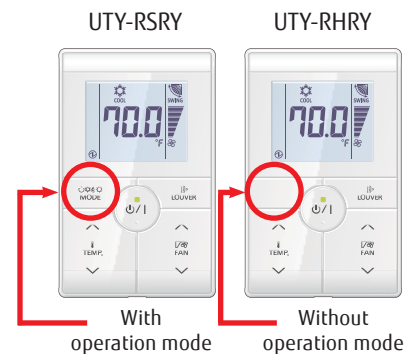
(2-WIRE) UTY-RSRY / UTY-RHRY (WITHOUT OPERATION MODE)

(3-WIRE) UTY-RSKU / UTY-RHKU (WITHOUT OPERATION MODE)

Compact wired remote control unit provides access to basic functions

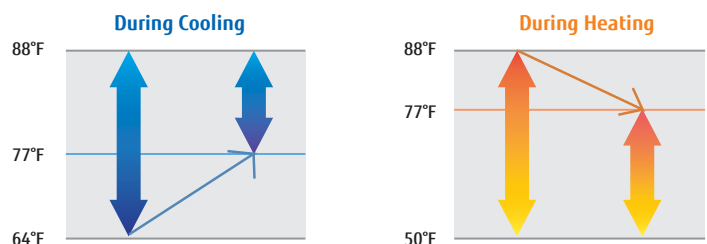
- Built-in temperature sensor
- Backlit display
- Equipped with Remote control prohibition
- Suitable for hotels, classrooms or offices as it is easily operated with no complex functions.

Max. controllable
16
indoor units



ROOM TEMPERATURE SET POINT LIMITATION

The Simple Remote Control can manage set point limitation in small buildings without the central controller requirement.



VERTICAL LOUVER CONTROL

Offers vertical louver movement control for ducted and cassette units.



SPECIFICATIONS

Model name	UTY-RNKU	UTY-RSRY	UTY-RHRY
Power Supply	DC 12V	DC 12V	DC 12V
Dimensions (H x W x D) (in.(mm))	4-3/4 x 4-3/4 x 11/16 (120 x 120 x 18)	4-3/4 x 2-15/16 x 9/16 (120 x 75 x 14)	4-3/4 x 2-15/16 x 9/16 (120 x 75 x 14)
Weight (oz.(g))	6 (160)	4 (120)	4 (120)

DC12V is supplied by the indoor unit.

Wireless Remote Control

UTY-LNHU

Simple and sophisticated operations with a choice of 4 daily timers

- A single controller controls up to 16 indoor units.

ACCURATE AND COMFORTABLE

Select from 4 different timer programs: On / Off / Program / Sleep

Program timer: The program timer operates the ON and OFF timer once within a 24 hour period.

Sleep timer: The sleep timer function automatically corrects the set temperature according to the time setting to prevent excessive cooling or heating during sleep hours.

EASY INSTALLATION AND OPERATION

- Code selector switch prevents indoor unit mix-up. (Up to 4 codes can be set.)
- Wide and precise transmitting range.
- IR Built-in receiver is standard in compact cassette, ceiling/floor, and wall mounted indoor units.

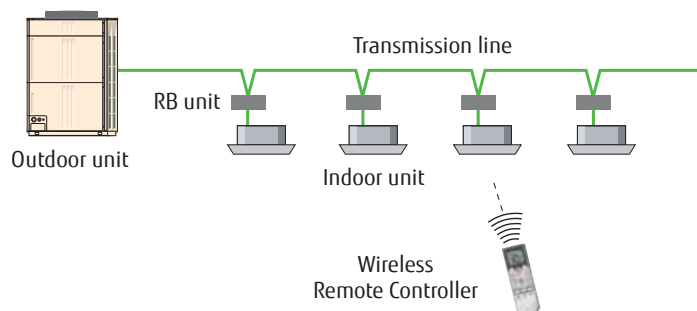
Max. controllable
16
indoor units

Selectable
4
daily timers



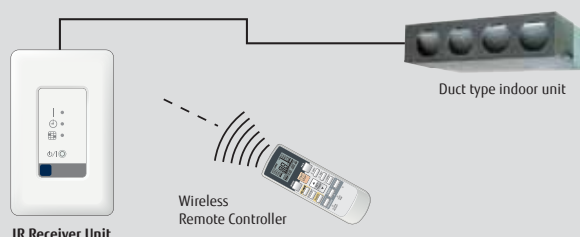
ADDRESS SETTING

During installation, address setting can be performed using the Wireless Remote Control, thus eliminating manual switch setting.



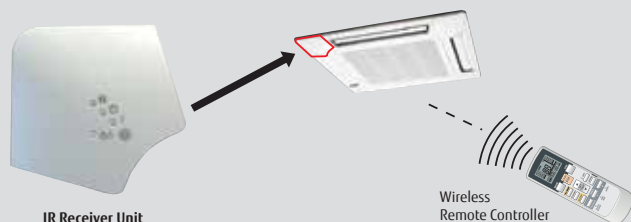
IR RECEIVER UNIT: UTB-YWC

Necessary to control all duct types by Wireless Remote Control



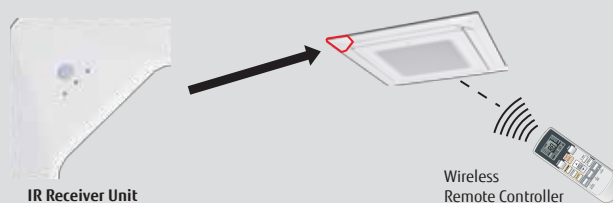
IR RECEIVER UNIT: UTY-LRHYB1

Cassette type indoor unit can be controlled with Wireless Remote Control



IR RECEIVER UNIT : UTY-LBHXD

Cassette type indoor unit can be controlled with Wireless Remote Control.



THIRD PARTY THERMOSTAT CONVERTOR: UTY-TTRX

Thermostat adapter allows a Fujitsu ductless system to be connected to a third-party thermostat such as Honeywell, Nest, etc.



REMOTE CONTROLS

Wi-fi Interface Module

FJ-RC-WIFI-1NA

UTY-TFSXZ2 (for 2-wire indoor units)

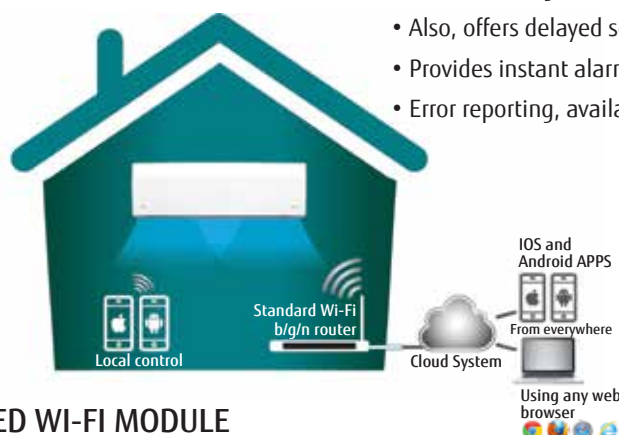
For: Cassettes, Ducted Units, Ceiling Mount, Floor/Ceiling Mount (Universal), Wall Mounted, Floor Mount Units

WI-FI INTERFACE FOR VRF

Control your Fujitsu Airstage VRF indoor unit from anywhere

HOW DOES IT WORK?

- The indoor units are controlled from a webpage or using an iOS or Android APP in a very intuitive way.
- A wired device installed near each unit controls its operation and communicates over Wi-fi to the Internet router.
- A server in the cloud manages the whole process.



COMPATIBILITY FOR WIRED WI-FI MODULE

Type	FJ-RC-WIFI-1NA		UTY-TFSXZ2
	Indoor Unit Model	Required Parts	
Compact Wall Mounted (ASUA)	7, 9, 12, 14RLAV	Plug model: K9707476019*	4, 7, 9, 12, 14TLAV1
	7, 9, 12, 14TLAV		
Wall Mounted (ASUB)	18, 24RLAV	Plug model: K9709223017*	18, 24, 30, 36TLAV1
	18, 24TLAV, 24TLAV1		
Compact Cassette (AUUA)	7, 9, 12, 14, 18, 24RLAV	Built-in Low voltage terminal block	--
	7, 9, 12, 14, 18, 24TLAV, 4TLAV1		
Cassette (AUUB)	18, 24, 30, 36RLAV		--
	18, 24, 30, 36TLAV		
Floor Mount (AGUA)	--		4, 7, 9, 12, 14TLAV1
Floor/Ceiling (ABUA)	12, 14, 18, 24RLAV		--
	12, 14, 18, 24TLAV		
Ceiling (ABUA)	30, 36RLAV		--
	30, 36TLAV		
Slim Duct (ARUL)	7, 9, 12, 14, 18RLAV		--
	7, 9, 12, 14, 18TLAV, 4TLAV1 (mini duct)		
Medium Static Pressure Duct (ARUM)	24, 30, 36RLAV		--
	24, 30, 36TLAV		
High Static Pressure Duct (ARUH)	36, 48, 60RLAV		--
	36, 48, 60, 72, 96TLAV		
Vertical Air Handler (ARUV)	12, 18, 24, 30, 36, 48, 60TLAV		--

*Plug included with indoor wall mount units



Remotely manage your VRF indoor unit using a smartphone, tablet or PC via the Internet.

FEATURES

- Manages the VRF indoor unit using the iOS or Android app.
- Programs the indoor unit operation schedule.
- Offers access to several indoor unit settings including Mode, temperature set point, and much more.
- Offers early startup that brings the space to the desired set point before arriving.
- Also, offers delayed setback after leaving.
- Provides instant alarm notifications.
- Error reporting, available in several languages

TECHNICAL FEATURES

Enclosure UL Approval	ABS (UL 94HB)
Dimensions	2-3/4 x 4-1/4 x 1-1/8 (70 x 108 x 28)
Weight	0.17 lbs (80g)
Color	White
Power Supply	12V, 55mA Can be powered through indoor unit.
Mounting	Wall
LED indicators	1 x Device status
Operating Temperature	32°F ~ 104°F (0°C ~ 40°C)
Operating humidity	<93% HR, no condensation
RoHS conformity	Compliant with RoHS directive (2002/95/CE).
Certifications	CE conformity to EMC directive (2004/108/EC) and Low-voltage directive (2006/95/EC)
	<ul style="list-style-type: none"> • EN 60950-1 • EN 301489-1 v1.8.1 • EN 301489-17 v2.1.1

Touch Panel Controller with Internet

UTY-DTGYZ1

High visibility and easy operation via high resolution 7.5 inch TFT-LCD touch panel screen

- Controls up to 400 indoor units*
- Provides Internet/LAN remote control and operation
- Indoor units can be grouped for batch monitoring and setting
- Schedules are programmable with up to 20 settings per day
- Easy-to-understand Graphical User Interface (GUI)
- Data can be transferred to USB for further analysis
- Does not require a 4X4 electric box. Mounts flush to the wall.
- Large-sized 7.5-inch no-glare TFT color touch screen
- Selectable 2 display types (Icon / List) in monitoring mode
- Supports 7 different-languages ,English, Chinese, French, German, Spanish, Russian, Polish.

Max. controllable
400
indoor units



* For Heat Recovery network systems the limit is 320 indoor units, consult the D&T manual for proper wiring and the use of signal amplifiers.

FUNCTIONS



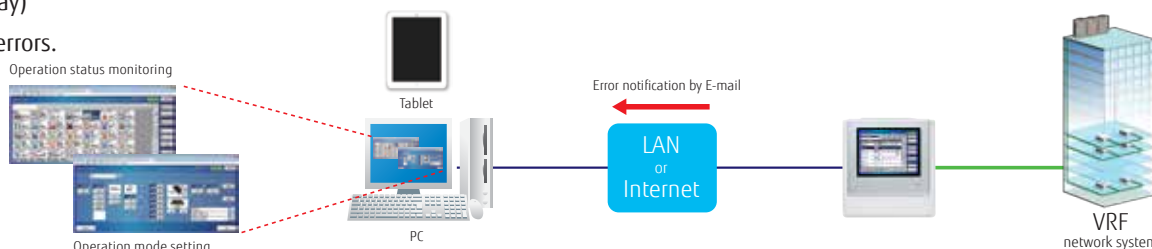
EASY MAINTENANCE

- Flat touch screen is easily cleaned
- Non-glare coating on touch panel controller minimizes fingerprint marking
- Easy-to-remove front cover



REMOTE MONITORING AND OPERATION FUNCTIONS

- Internet/LAN remote monitoring and control of the VRF system using a web browser. (Operation status monitoring, Operation mode setting, and error history display)
- Automatically emails errors.



EASY OPERATION

- Easy-to-understand icon-driven Graphical User Interface (GUI)



- Operation can be selected using your finger or the dedicated touch pen by pressing the appropriate on-screen icon
- Up-to-date status display
- Background color identifies current control operation; Blue for monitoring, green for operational control

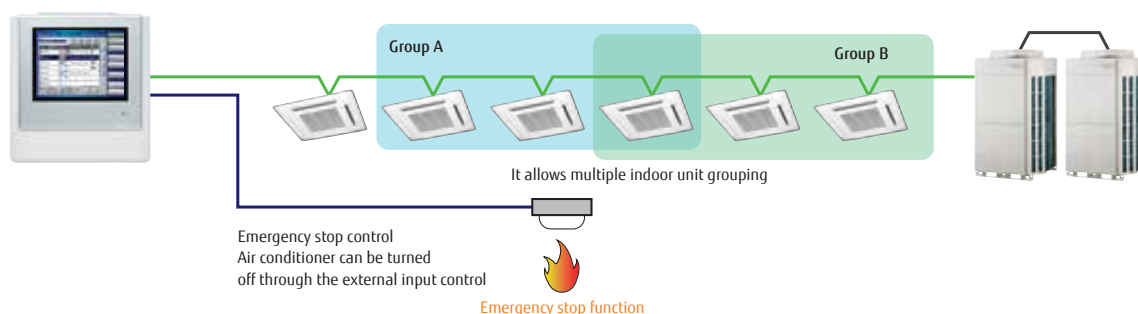
OPTIONAL: ELECTRICITY CHARGE APPORTIONMENT

Electricity Charge Apportionment optional add-on USB drive can be added to help users be energy aware and help building owners apply sub-tenant billing.

- UTY-PTGXA must be ordered separately

CENTRAL CONTROLLERS

UP TO 400 INDOOR UNITS CAN BE CONTROLLED



FUNCTION

- Up to 400 indoor units can be controlled
- Multiple indoor units can be grouped and controlled
- Schedule timer function is standard (20 patterns per day)
- Emergency stop function (through the external input control)
- Temperature upper and lower limit setting



Individual control



Flexible grouping



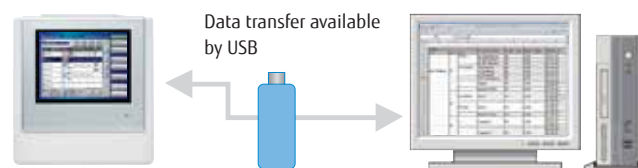
Schedule control



Indoor units operation monitoring

VERSATILITY

- Emergency stop function: Air conditioner can be turned off through the external input control
- The stored data can be transferred to USB port
- CSV format data edited by PC can be imported to Touch Panel Controller.



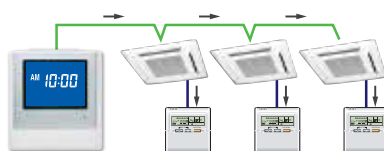
EASY INSTALLATION

- Touch Panel Controller does not require mounting an additional power supply.
- No additional components are required for installation.



AUTOMATIC CLOCK ADJUSTMENT

The time setting of each remote control can be set in batch automatically.



SPECIFICATIONS

Model name	UTY-DTGYZ1
Power Supply	100-240V 50/60Hz, Single phase
Dimensions (H x W x D) (in.(mm))	10-1/4 x 9-11/16 x 2-1/8 (260 x 246 x 54)
Weight (lbs.(g))	5 (2150)
Interface	Transmission / LAN / USB / EXT IN / EXT OUT / Reset SW

Central Remote Controller

UTY-DCGYZ1

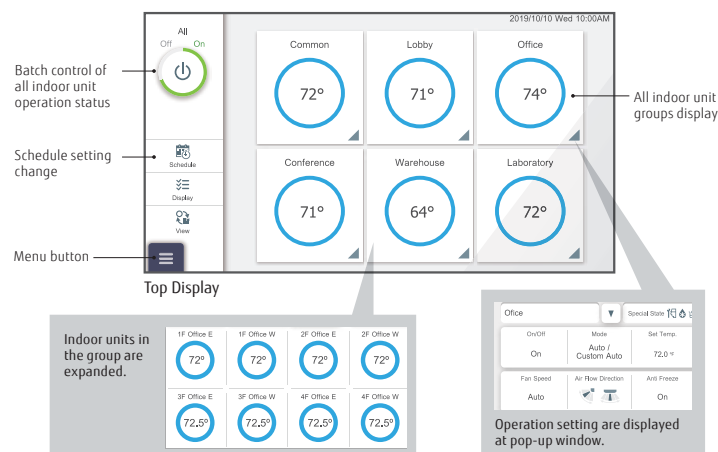
For small- and medium-sized buildings and tenants

- Individual control and monitor of 100 indoor units and max. 50 groups
- 7.0inch TFT color screen
- High visibility and easy operation
- Supports max.23 different languages
- Standard language corresponds to 12 different languages. (English, Spanish, German, French, Italian, Russian, Portuguese, Turkish, Polish, Greek, Dutch, Chinese)
- Additional language can be integrated by creative language database. *(Bulgarian, Czech, Danish, Estonian, Finnish, Croatian, Hungarian, Romanian, Slovak, Slovenian, Swedish)

*: The other language can be overwritten on the registered one.

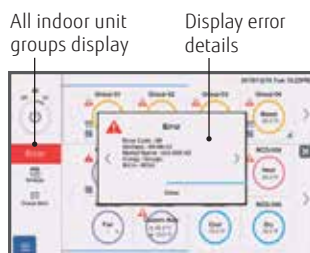
EASY OPERATION

- The new central remote controller realized an intuitive operation feeling by touch panel operation.
- All functions can be accessed from the top screen and the following operations are displayed at pop-up window.



TROUBLE SUPPORT FUNCTION

- Display error details
- Display descriptive explanation when an error occurs



Sensor value monitoring function
Monitor sensor data of indoor unit / outdoor unit, send mail

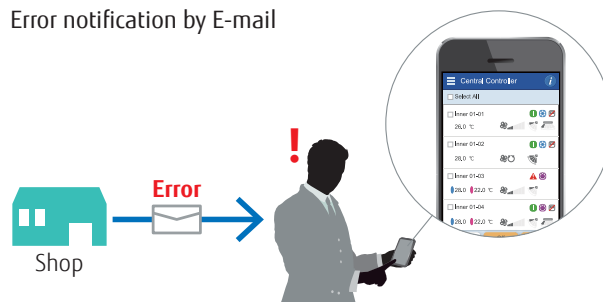
Notify room temperature by email
Notify by e-mail when the temperature around the air conditioner is too high or too low

REMOTE MONITORING / REMOTE OPERATION

New central remote controller can control your tenant's air conditioner anytime and anywhere.

Example

- Control / Monitoring Fujitsu air conditioner
- Error notification by E-mail



SPECIFICATIONS

Model name	UTY-DCGYZ1
Power Supply	100-240 V 50/60 Hz
Dimensions (H x W x D) (in.(mm))	5-5/16 × 8-1/2 × 1-1/2 (134.6 × 216.1 × 37.9)
Weight (lbs. (g))	1-21/32 (750)

CENTRAL CONTROLLERS

Central Controller

UTY-DCGY

Central Controller fits small- and medium-sized buildings and tenants.

- Individual control and monitor of up to 100 indoor units
- 5 inch TFT color screen
- User friendly view and easy operation
- External input / output contact
- Detachable power supply unit
- Corresponds to 7 different languages like English, Chinese, French, German, Spanish, Russian, Polish.

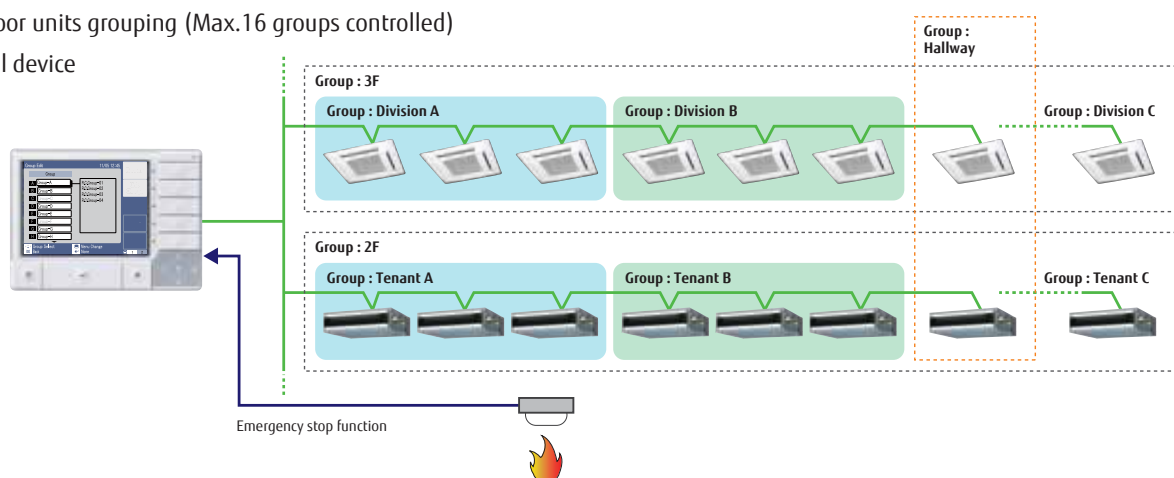


Max. controllable
100
indoor units

Max. controllable
16
groups

SYSTEM OVERVIEW

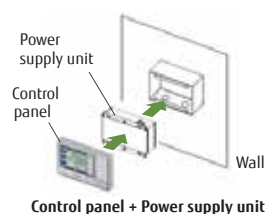
- It allows multiple indoor units grouping (Max.16 groups controlled)
- Interlock with external device



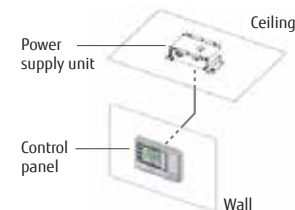
EASY INSTALLATION

- The control panel and power supply unit can be installed separately.
- For flexibility in installation, the control panel can be built into the wall or flush mounted.

Setting pattern 1



Setting pattern 2



FUNCTIONS

- Diverse control of indoor units
- Automatic clock adjustment
- Weekly timer
- Error history

SPECIFICATIONS

	Control Panel	Power Supply Unit
Power Supply	DC 5V	100-240V, 50-60Hz, Single phase
Dimensions (H x W x D) (in.(mm))	4-3/4 x 6-3/8 x 1 (120 x 162 x 25.7)	3-7/8 x 5-5/16 x 1-9/16 (99 x 135 x 39.2)
Weight (oz.(g))	11 (308)	13 (355)
Packing List	Control Panel / Power Supply Unit / Connecting cable, etc.	

System Controller

UTY-APGXZ1 Software

System Controller provides the advanced integrated monitoring & control of VRF network system from small scale buildings to large scale buildings.

- Up to a maximum of 4 VRF network systems, 1600 indoor units, and 400 units units can be controlled.
- In addition to air conditioning precision control function, central remote control, electricity charge calculation, schedule management, and energy saving functions are strengthened and building manager and owner needs are met.



Max. controllable
4
VRF network systems

Max. controllable
400
outdoor units

Max. controllable
1,600
indoor units

System Controller Lite

UTY-ALGXZ1 Software

System Controller Lite is designed for small and medium scale buildings.

- Controls up to a maximum of 1 VRF network system, 400 indoor units, and 100 outdoor units.
- In addition to air conditioning precision control function, a variety of management software add-ons are available as options to give customers a wide range of choice.



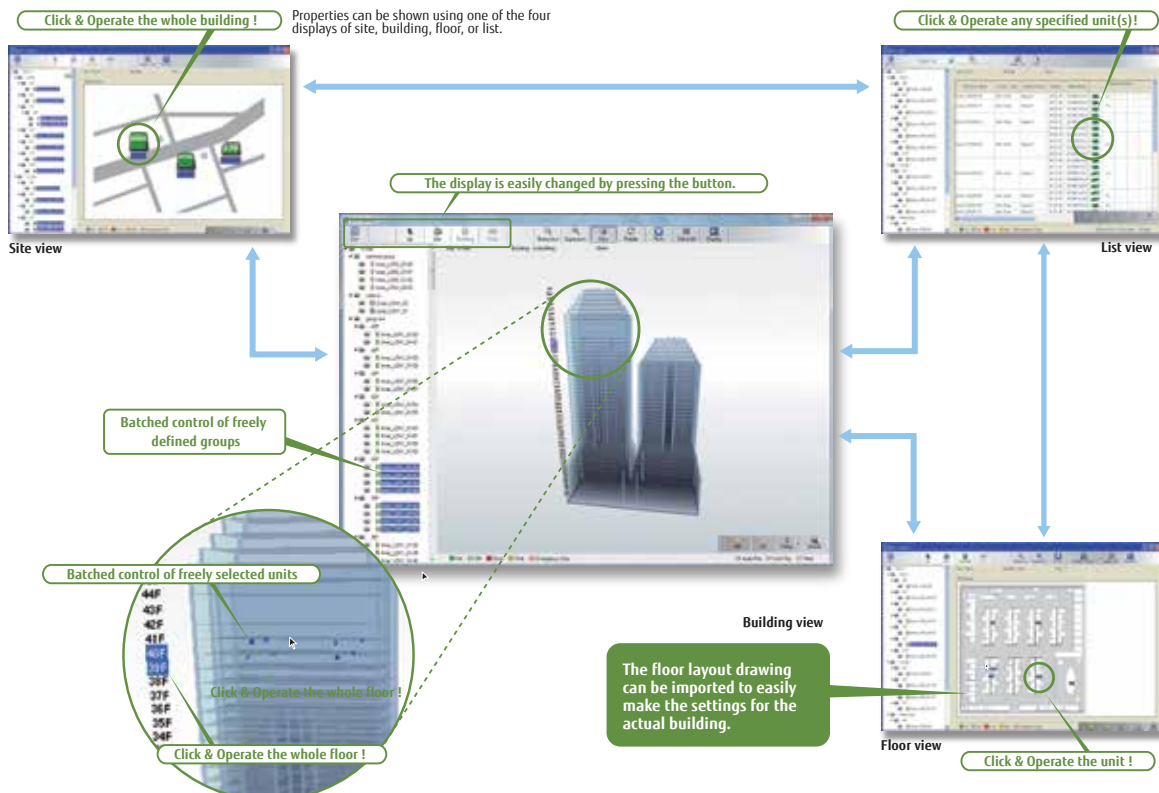
Max. controllable
1
VRF network systems

Max. controllable
100
outdoor units

Max. controllable
400
indoor units

USER FRIENDLY VIEW AND OPERATION

- **Click & Operate** : The building can be viewed and controlled in a 3D click-able perspective view. Four different views are available: site, building, floor, or list view.
- **Freely define groups for batched control** : Indoor units can be freely grouped for simple batched control from a BMS tree menu. Grouping by hierarchal structure, such as by section, division or department is possible.



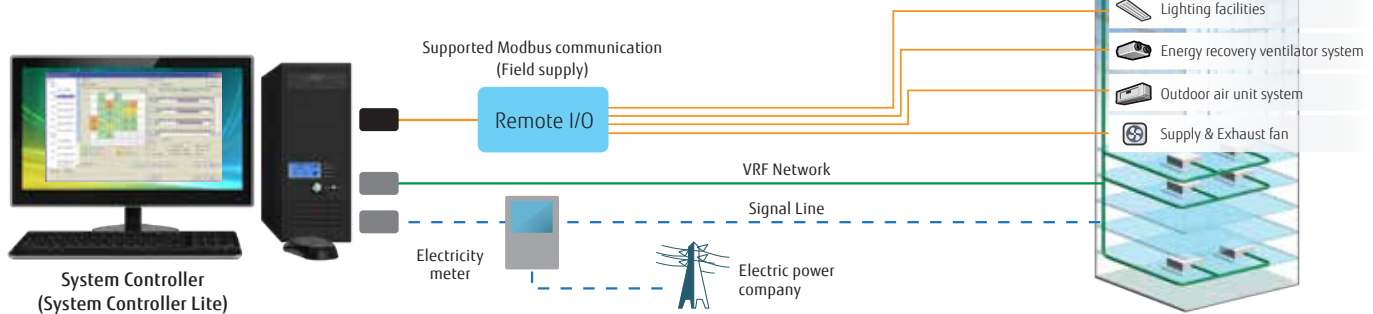
Note:
2D floor layout / 3D building display are
not available for System Controller Lite.

CENTRAL CONTROLLERS

3RD PARTY DEVICES CONNECTED BY MODBUS CAN BE CONTROLLED

When Modbus Adaptor (locally purchased) is connected to system controller PC, the devices connected to the Modbus can be centrally controlled.

Standard for System Controller
Option for System Controller Lite UTY-PLGXX2



DIVERSE OPERATION MANAGEMENT & DATA MANAGEMENT

Schedule management

- Annual schedules can be set for each remote control group / user defined group.
- Start / stop, operating mode, remote control prohibition, and temperature settings can be set up to 143 times per day at 10 minute intervals for up to 101 configurations for each remote controller group.
- Allows programming of special settings for holidays, including public holidays, for a complete year.
- Low noise operation of outdoor unit can be scheduled.



Diverse control of indoor unit

- Indoor unit operation state, operation mode, etc. are displayed
- Indoor unit start / stop and operation mode switching
- Room temperature set point limitation

Remote control prohibition

This prohibits changes to the operation mode, temperature, start/stop, etc.

Automatic clock adjustment

The time setting of each controller can be set in batch automatically.

Error display & E-mail notification

Errors provide popup messages, audible sound and e-mails. Errors for the past year are logged and can be reviewed later.

Database import/export

Imports/exports registration data, layout data, and image data.

Only the administrator can use this setting.

Operating & control record

Displays the history of operation status and control.

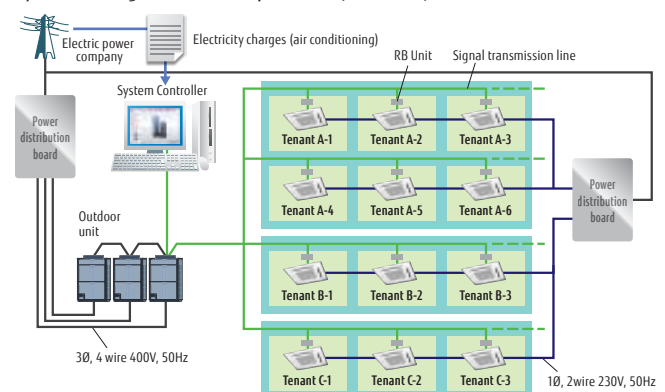
ELECTRICITY CHARGE APPORTIONMENT

Electricity charge apportionment calculation framework

Suppose you want to find the power consumed by the air conditioners of each tenant from the electricity charge for each month. With Electricity Charge Apportionment function, used energy apportionment ratio will be provided, calculating in detail the energy consumed by the units used by each tenant. This information is then used to calculate the charges for the electricity consumed for air conditioning by each tenant from the total electricity charges in the bill from the electric power company. (See figure at right)

The detailed calculation takes into consideration such things as unused rooms and nighttime electricity charges and shows them in a charges calculation sheet.

System Configuration Example
Standard for System Controller
Option for System Controller Lite UTY-PLGXA1



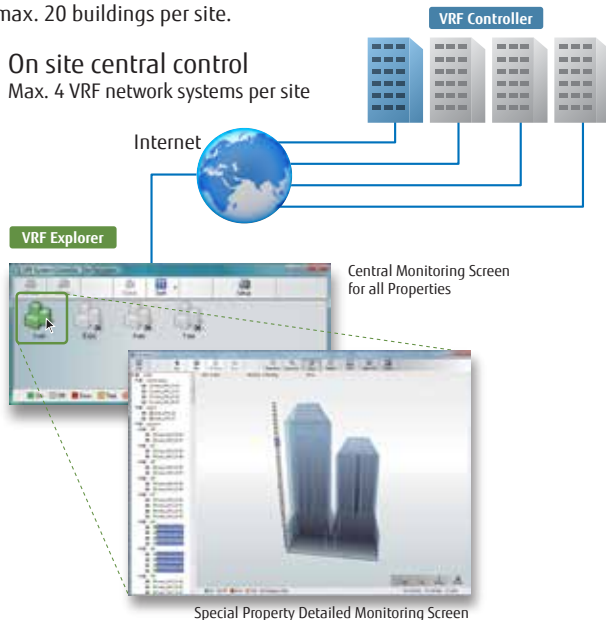
System Controller and System Controller Light (continued) Software

REMOTE MANAGEMENT

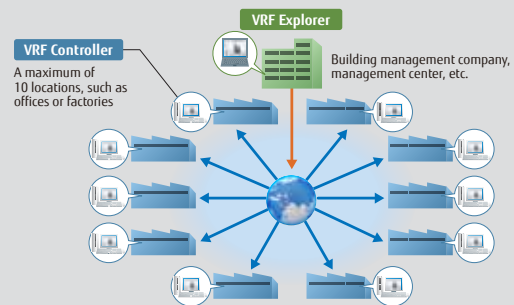
STANDARD FOR SYSTEM CONTROLLER UTY-PEGXZ1, OPTION FOR SYSTEM CONTROLLER LITE UTY-PLGXR2

System Controller may be used on site or remotely over various networks for remote central control. System Controller requires 2 software programs working together. VRF Controller runs on site and communicates with VRF system. VRF Explorer runs remotely and provides user interface and communicates with the VRF Controller. VRF Controller and VRF Explorer programs may run on a single PC or on different PCs. By using VRF Explorer software, one PC can perform central control of 10 VRF system sites with max. 20 buildings per site.

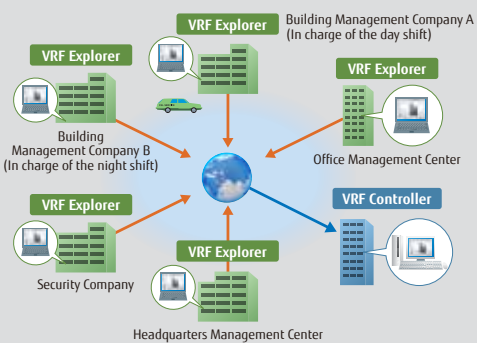
On site central control
Max. 4 VRF network systems per site



Remote central control and monitor
1 VRF Explorer can control or monitor up to 10 sites.



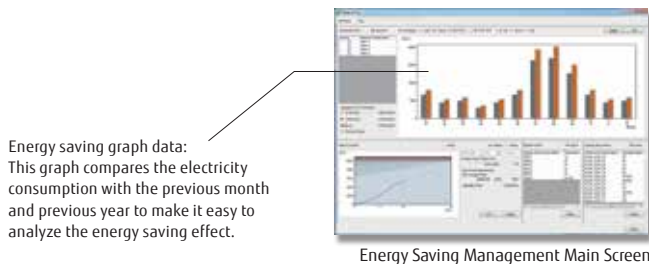
1 VRF Controller can be monitored from any number of VRF Explorers (Up to 5 simultaneous connections).



ENERGY SAVING MANAGEMENT

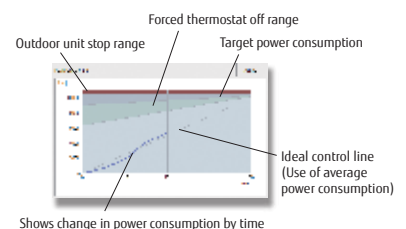
OPTION FOR SYSTEM CONTROLLER UTY-PEGXZ1, OPTION FOR SYSTEM CONTROLLER LITE UTY-PLGXR2

A variety of energy saving operations can be set and managed depending on the season, weather, and time period. Excellent energy saving operation is performed while keeping users comfortable.



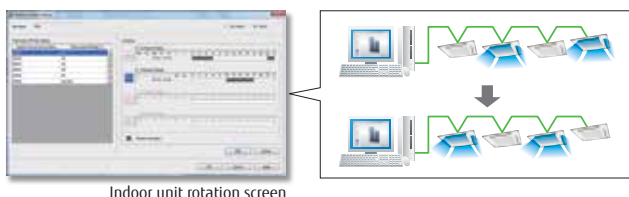
PEAK CUT OPERATION

To control power consumption and load shedding, the system can be programmed to change the indoor unit set temperature, turn the indoor unit thermostat off, or take other measures to carefully control the amount of power consumed while maintaining comfort.



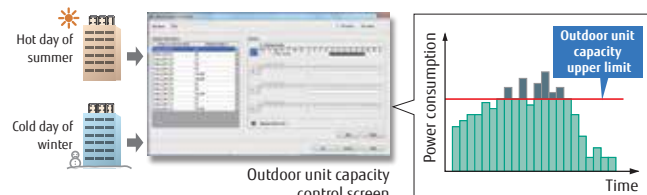
INDOOR UNIT ROTATION OPERATION

The operation of indoor units can be automatically rotated within a group in accordance with the set annual schedule to reduce power consumption while maintaining comfort. The indoor unit operation stoppage rate can be selected.



OUTDOOR UNIT CAPACITY SAVE

Outdoor unit capacity save switches the outdoor unit capability upper limit to suppress power consumption during hot summers and cold winters by averaging the power saving effect of each refrigerant system. You can select from 50% or more of the capacity upper limit.



CENTRAL CONTROLLERS

FUNCTIONS SUMMARY

Function	Type	System controller		System controller lite				
		UTY-APGXZ1	Option UTY-PEGXZ1	UTY-ALGXZ1	Option UTY-PLGXR2	Option UTY-PLGXA2	Option UTY-PLGXE2	Option UTY-PLGXX2
System specification	Max. VRF networks supported	4	—	1	—	—	—	—
	Max. indoor unit / remote controller groups per VRF network	400	—	400	—	—	—	—
	Max. outdoor units per System controller	100	—	100	—	—	—	—
	Max. indoor units / remote controller groups per System controller	1600	—	400	—	—	—	—
	Max. outdoor units per System controller	400	—	100	—	—	—	—
Site supervision	Multi site display	10	—	10	—	—	—	—
	Number of building / 1 site	20	—	—	—	—	—	—
	Number of floor per 1 site	200	—	—	—	—	—	—
	Number of floor per 1 building	50	—	—	—	—	—	—
	3D graphical layout view	●	—	—	—	—	—	—
	2D graphical layout view	●	—	—	—	—	—	—
	List display	●	—	●	—	—	—	—
	Tree display	●	—	●	—	—	—	—
	Group display	●	—	●	—	—	—	—
	Error notification	●	—	●	—	—	—	—
Error management	Audible alarm	●	—	●	—	—	—	—
	Error e-mail notification	●	—	●	—	—	—	—
History	Error history	●	—	●	—	—	—	—
	Operation history	●	—	●	—	—	—	—
	Control history	●	—	●	—	—	—	—
Operation control	Individual control	On/Off	—	●	—	—	—	—
		Operation mode	—	●	—	—	—	—
		Room temperature	—	●	—	—	—	—
		Fan speed	—	●	—	—	—	—
		Air flow direction	—	●	—	—	—	—
		Economy mode	—	●	—	—	—	—
		Room temperature set point limitation	—	●	—	—	—	—
		Test operation	—	●	—	—	—	—
		Antifreeze	—	●	—	—	—	—
		Outdoor unit low noise setting	—	●	—	—	—	—
	Individual management	Remote control prohibition setting	—	●	—	—	—	—
		Temperature upper and lower limit setting	—	●	—	—	—	—
		Filter sign reset	—	●	—	—	—	—
	Other	Memory operation	—	●	—	—	—	—
		Pattern operation	—	●	—	—	—	—
Schedule	Annual Schedule	●	—	●	—	—	—	—
	Special day setting	●	—	●	—	—	—	—
	On / off per day	72	—	72	—	—	—	—
	On / off per week	504	—	504	—	—	—	—
	Day off	—	—	●	—	—	—	—
	Min. unit of timer setting (Minutes)	10	—	10	—	—	—	—
	Low noise mode Weekly schedule	—	—	●	—	—	—	—
Remote management	Remote monitoring	●	—	—	●	—	—	—
	Remote operation control	●	—	—	●	—	—	—
	Remote function setting	●	—	—	●	—	—	—
	Web Remote Controller	●	—	—	●	—	—	—
Electricity charge apportionment	Apportionment charge/bill calculation	●	—	—	—	●	—	—
	Tenant (block) setting	●	—	—	—	●	—	—
	Common facilities apportionment setting	●	—	—	—	●	—	—
	Rated power consumption allotment setting	●	—	—	—	●	—	—
	Individual calculation at cooling and heating	—	● *	—	—	●	—	—
Energy saving management	Electricity meter supported	—	●	—	—	●	—	—
	Indoor unit rotation	—	●	—	—	—	●	—
	Peak cut control	—	●	—	—	—	●	—
	Outdoor unit capacity save	—	●	—	—	—	●	—
	Record of energy saving operation	—	●	—	—	—	●	—
	Energy saving information	—	●	—	—	—	●	—
	Power consumption monitor	—	●	—	—	—	●	—
External Device Control	Electricity meter supported	—	●	—	—	—	●	—
	Monitor	●	—	—	—	—	—	●
Others	Control	●	—	—	—	—	—	●
	Database import/export	●	—	●	—	—	—	—
	Automatic clock adjustment	●	—	●	—	—	—	—
	Multi language	7 languages	—	7 languages	—	—	—	—

● : Available. — : Not available.

*:Power calculation application software is necessary, please contact the local Fujitsu representative.

PERSONAL COMPUTER SYSTEM REQUIREMENTS

Model name	System Controller	System Controller Lite
Operating system	<ul style="list-style-type: none"> Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish	
CPU	Intel® Core™ i3 2 GHz or higher	
Memory	• 2 GB or more (for Windows Vista® and Windows® 7 [32-bit]) • 4 GB or more (for Windows® 7 [64-bit], Windows® 8.1, and Windows® 10)	
HDD	40 GB or more of free space	
Display	1024 x 768 or higher resolution	
Interface	<ul style="list-style-type: none"> Ethernet port (for getting access to the Internet using LAN) or Modem (for getting access to the Internet using Public Telephone Line) •USB ports (Maximum of 6 ports) (Required only for the Server PC that works as VRF Controller) - Maximum of 2 USB ports are required for WHITE-USB-KEY/WibuKey connection - Maximum of 4 USB ports are required for Echelon® U10 USB Network Interface * Maximum number of required USB port depends on the applicable system configuration. 	<ul style="list-style-type: none"> Ethernet port (for getting access to the Internet using LAN) or Modem (for getting access to the Internet using Public Telephone Line) •USB ports (Maximum of 6 ports) (Required only for the Server PC that works as VRF Controller) - Maximum of 4 USB ports are required for WHITE-USB-KEY/WibuKey connection - 1 USB port is required for Echelon® U10 USB Network Interface * The maximum number of required USB port depends on the applicable system configuration.
Graphic accelerator	Microsoft® DirectX® 9.0c compatible	
Software	Adobe® Reader® 9.0 or later	

*Personal computer that satisfies the following system requirements

*Echelon® U10 USB Network Interface (Required for each VRF Network.)

Packing list	For System controller			For System controller Lite			
	System controller	Option Energy manager	System Controller Lite	Option Remote access	Option Electricity charge apportionment	Option Energy saving	Option Central Control
Model name	UTY-APGXZ1	UTY-PEGXZ1	UTY-ALGXZ1	UTY-PLGXR2	UTY-PLGXA2	UTY-PLGXE2	UTY-PLGXX2
WHITE-USB-KEY	1	1	1	1	1	1	1

Software protection key to be inserted in a USB slot running System Controller or System Controller Lite.

System Controller or System Controller Lite may only run on a PC with WHITE-USB-KEY. However, WHITE-USB-KEY is not required for remote VRF Explorer software.

Network Convertor

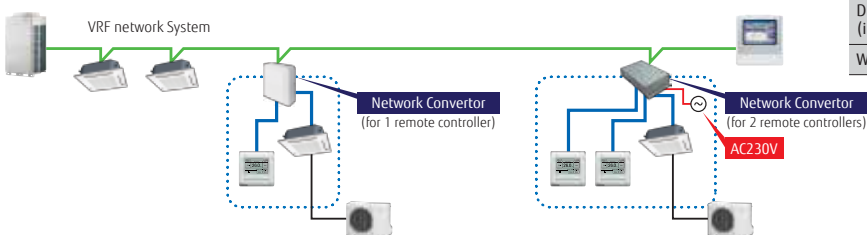
UTY-VTGX (DC power supply)
UTY-VGGXZ1 (AC power supply)

Network Convertors add Fujitsu mini-split control to the VRF communication network.

INSTALLATION EXAMPLE

- The convertors are required when connecting single split units to the VRF communication network system. Administrators can manage the VRF system including single split by way of VRF central controller.

Single split with VRF



Max. controllable
16
single indoor units

Max. controllable
100
Network Convertors



UTY-VTGX
DC power supply



UTY-VGGXZ1
AC power supply

SPECIFICATIONS

Model name	UTY-VTGX		UY-VGGXZ1
Power Supply	polar 3-wire DC12V	non-polar 2-wire DC12V	220-240 V 50/60 Hz
Input power (W)	Max. 2		Max. 3
Dimensions (H x W x D) (in.(mm))	4-5/8 x 5-1/2 x 1-9/16 (117 x 140 x 40)		2 x 10 x 6 (54 x 260 x 150)
Weight (oz.(g))	9 (250)		38.8 (1,100)

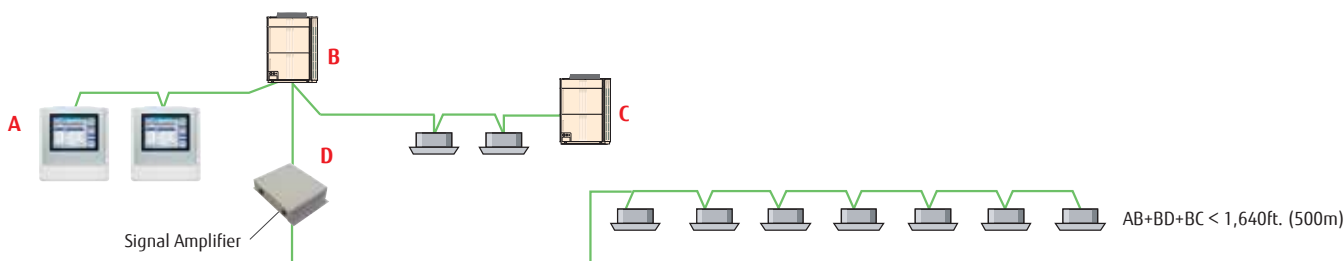
Signal Amplifier

UTY-VSGXZ1

- Transmission Line length can be extended up to 11,811ft. (3,600m) with multiple Signal Amplifiers.
- Up to 8 signal amplifiers can be installed in a single VRF communication network system.
- A signal amplifier is required,
 - (1) When the total wiring length of the transmission line exceeds 1,640ft. (500m).
 - (2) When the total number of units on the transmission line exceeds 64.



INSTALLATION EXAMPLE



SPECIFICATIONS

Model name	UTY-VSGXZ1
Power Supply	208-240V 50/60Hz, Single phase
Input power (W)	4.5
Dimensions (H x W x D) (in.(mm))	2-5/8 x 11-5/6 x 8-5/16 (67 x 288 x 211)
Weight (lbs.oz.(g))	3lbs. (1,500)

ACCESSORIES

External Switch Controller

UTY-TERX

Air conditioner switching can be controlled by connecting other sensor switches

- In combination with a field supply Card-Key Switch or other sensor, the External Switch Controller allows control of the ON / OFF, Room temperature, Fan speed and Master control functions. This makes this product suitable for installations such as hotel rooms.
- Card-key or other sensor switches are available as a field supplied parts.

SPECIFICATIONS

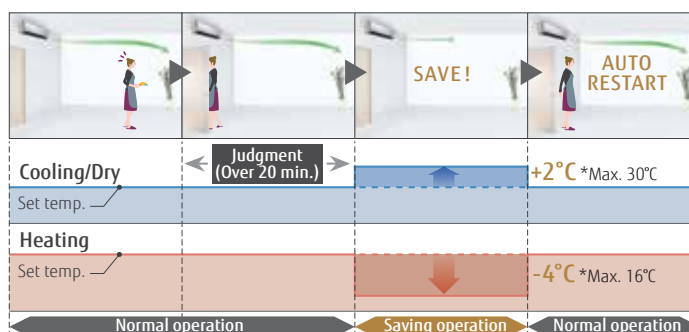
Model name	UTY-TERX
Power Supply	DC6.5 - 16V
Dimensions (H x W x D) (in.(mm))	1-11/16 x 5-1/2 x 4-5/8 (43 x 140 x 117)
Weight (lbs.oz.(g))	9 oz. (250)

DC12V is supplied by the indoor unit.



The set temperature can be specified for cooling and heating individually

Occupancy sensors can be used to setback temperature and fan speed when room is unoccupied. These setbacks are reverted when people come back to the room.

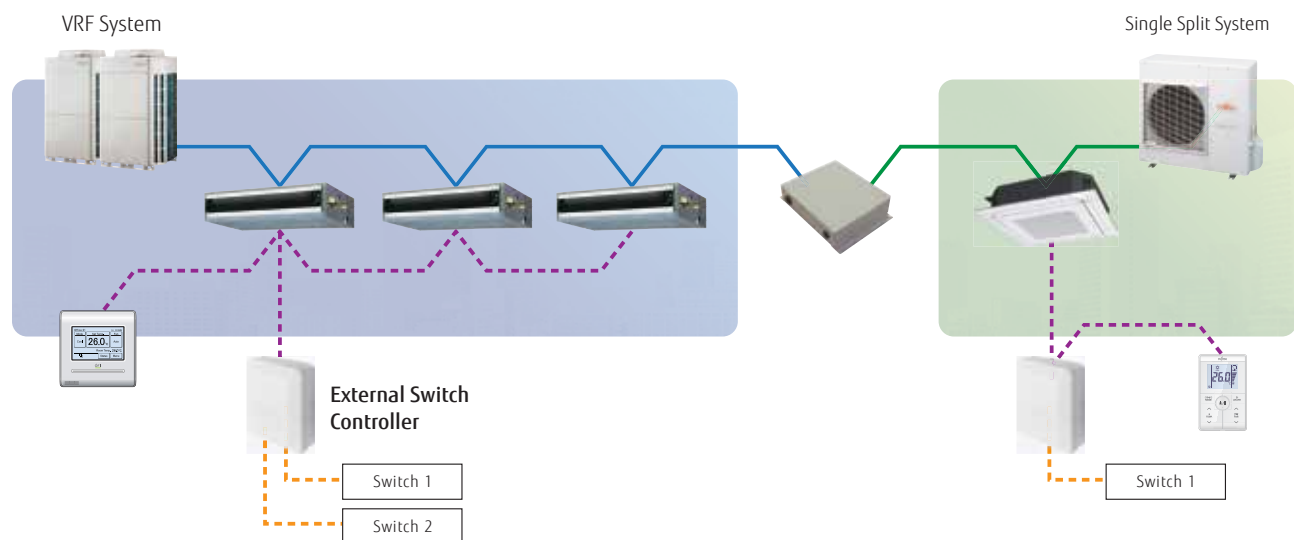


FUNCTIONS

On/Off	•
Off	•
Room temperature setting	•

Fan speed setting	•
Operation mode setting	•
Prohibition setting	•

SYSTEM OVERVIEW

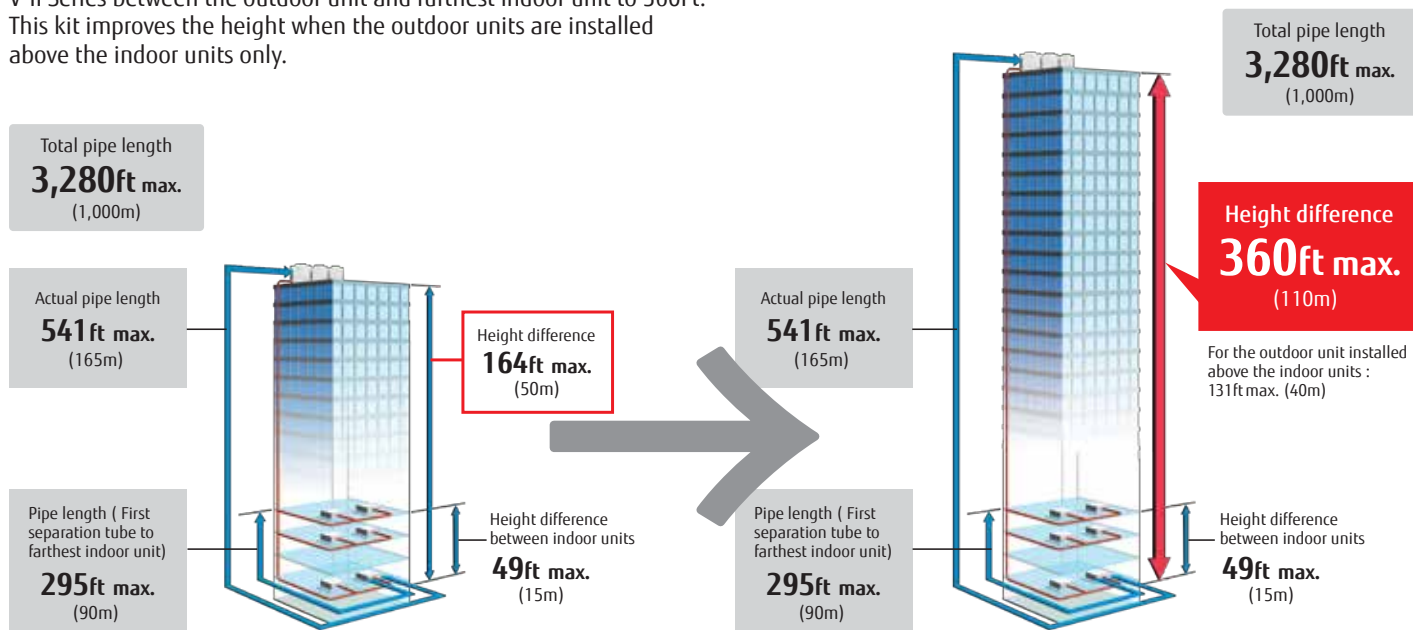


Highrise 360 Kit (for V-II Series*)

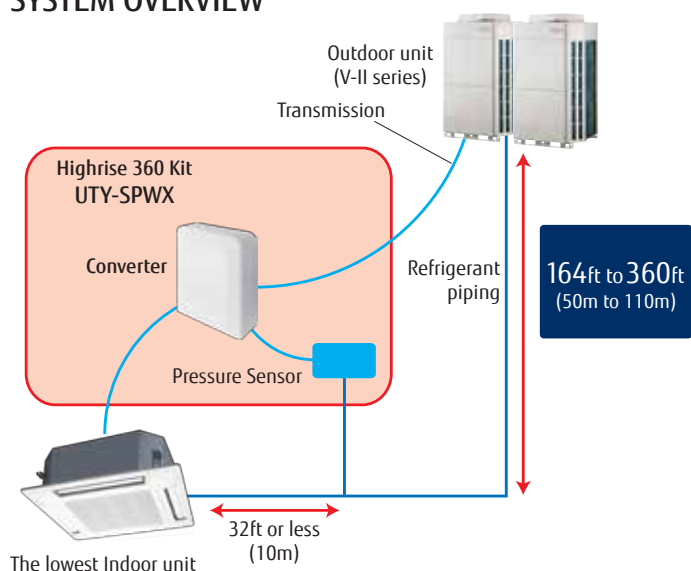
UTY-SPWX

DESIGN FLEXIBILITY

The Highrise 360 kit increases the 164ft height difference on V-II Series between the outdoor unit and furthest indoor unit to 360ft. This kit improves the height when the outdoor units are installed above the indoor units only.



SYSTEM OVERVIEW



HIGHRISE 360 KIT COMPONENTS

Pressure sensor kit (Converter)	
Refrigerant pressure sensor	
Joint pipe	

* NOTE: This product can be used on newer V-II series only. For outdoor units with manufacturing dates before January 2018, a software upgrade can be requested. Please contact Fujitsu technical support for details.

BMS COMMUNICATION OPTIONS

BACnet® Gateway (Hardware)

UTY-VBGX

- BACnet® Gateway connects a VRF system to a BMS via BACnet® IP.
- A maximum of 128 indoor units and 32 refrigerant systems can be connected to a single BACnet® Gateway.
- Compatible with BACnet® (ANSI / ASHRAE-135-2012) application specific controller (B-ASC).
- Compatible with BACnet®/IP over Ethernet.

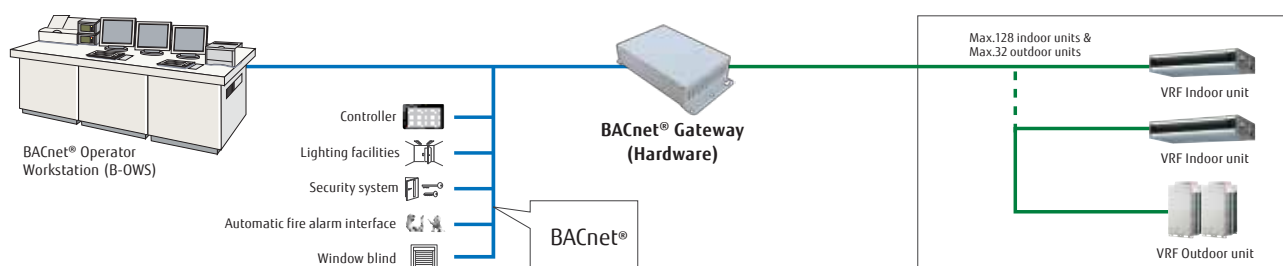


Max. controllable
1
VRF network systems

Max. controllable
32
outdoor units

Max. controllable
128
indoor units

INSTALLATION EXAMPLE



SPECIFICATIONS

Model name	UTY-VBGX
Number of controllable indoor units	128
Number of controllable refrigerant system	32
Number of controllable VRF network	1
Number of connectable Gateways / one VRF network	4

Model name	UTY-VBGX
Power supply	208-240V 50/60Hz, single phase
Input power (W)	4
Dimensions (H x W x D) (in.(mm))	10-1/4 x 2-5/16 x 5-11/16 (260 x 59 x 145)
Weight (lbs.oz.(g))	39oz (6100)

BACnet® Gateway

UTY-ABGXZ1 Software

- Connect VRF network system to BMS via BACnet IP, a global standard for open networks.
- A maximum of 1600 indoor units with 4 VRF network systems (a maximum of 400 indoor units & 100 outdoor units for one network system) can be connected to one BACnet® Gateway.
- Compatible with BACnet® (ANSI / ASHRAE-135-2012) application specific controller (B-ASC).
- Compatible with BACnet®/IP over Ethernet.
- Scheduling function, Alarm & Event functions as well as Electricity Change Apportionment function are provided in BACnet® Gateway.
- Connection between VRF network system to personal computer is possible via small U10 USB interface. However, both U10 USB interface & personal computer are field supplied items.
- Corresponds to 7 different languages, English, Chinese, French, German, Spanish, Russian, Polish.



Max. controllable
4
VRF network systems

Max. controllable
400
outdoor units

Max. controllable
1,600
indoor units

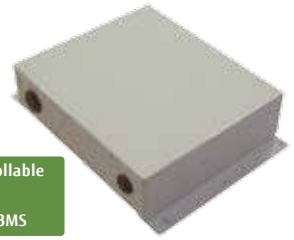
PERSONAL COMPUTER SYSTEM REQUIREMENTS

Model name	UTY-ABGXZ1
Operating system	<ul style="list-style-type: none"> • Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit) Supported languages: English, Chinese, French, German, Russian, Spanish, and Polish
CPU	Intel® Core™ i3 2 GHz or higher
Memory	<ul style="list-style-type: none"> • 2 GB or more (for Windows® 7 [32-bit]) • 4 GB or more (for Windows® 7 [64-bit], Windows® 8.1 and Windows® 10)
HDD	40 GB or more of free space
Display	1024 x 768 or higher resolution
Interface	<ul style="list-style-type: none"> • Ethernet port (for getting access to the Internet using LAN) • USB ports (Maximum of 5 ports) <ul style="list-style-type: none"> - 1 USB port is required for WHITE-USB-KEY connection - Maximum of 4 USB ports are required for Echelon® U10 USB Network Interface * Maximum number of required USB ports depends on the applicable system configurations.
Software	Adobe® Reader® 9.0 or later
Optical drive	DVD-ROM drive

Network Convertor for LONWORKS®

UTY-VLGX

- Connects VRF network system to a BMS network via LONWORKS® open network.
- The UTY-VLGX permits central monitoring and control of a VRF network system from a BMS through a LONWORKS® interface.
- Up to 128 Indoor units can be connected to one Network Convertor for LONWORKS®

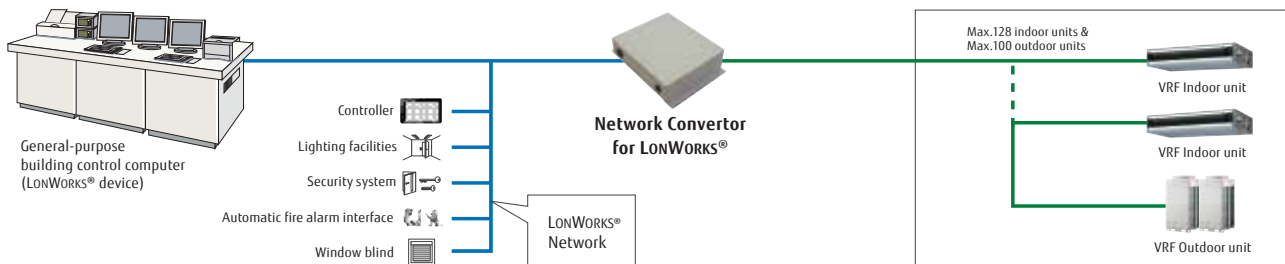


Max. controllable
4
Units to BMS

Max. controllable
100
outdoor units

Max. controllable
128
indoor units

INSTALLATION EXAMPLE



SPECIFICATIONS

Model name	UTY-VLGX
Power Supply	208-240V 50/60Hz, Single phase
Input power (W)	4.5
Dimensions (H x W x D) (in.(mm))	2-5/8 x 11-5/16 x 8-5/16 (67 x 288 x 211)
Weight (lbs.oz.(g))	3lbs. (1,500)

TRANSMISSION SPECIFICATIONS (BMS SIDE)

Transmission speed	78 kbps
Transceiver	FT-X1 (Echelon® Corporation)
Transmission way form	Free topology
Terminal resistor	None (It attaches at the terminal of a network.)

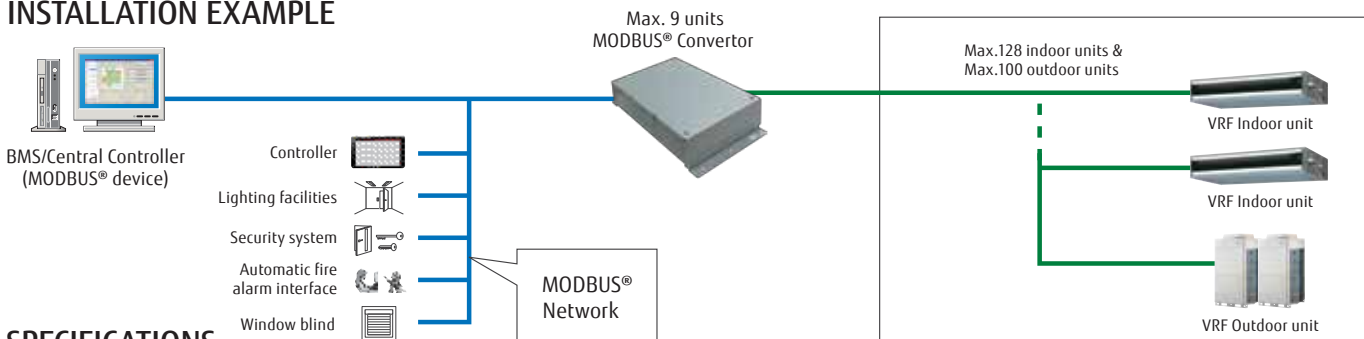
MODBUS® Convertor

UTY-VMGX

UTY-VMGU-KIT

VRF System can be integrated with the Building management system supported by MODBUS® RTU.

INSTALLATION EXAMPLE



Max. controllable
9
units to one BMS

Max. controllable
100
outdoor units

Max. controllable
128
indoor units



SPECIFICATIONS

Power Supply	AC220/240V 50/60Hz AC208/230V 60Hz
Input power (W)	Max. 3
Dimensions (H x W x D) (in.(mm))	9-1/4 x 4-3/4 x 1-3/4 (235 x 120 x 45)
Weight (lbs.oz.(g))	39 oz. (1,100)

UTY-VMGX-KIT
Required when using
SBC100.



SERVICE & MONITORING

Service Tool

UTY-ASGXZ1 Software

Extensive monitoring and analysis functions for installation and maintenance

- Operation status can be checked and analyzed to detect even the smallest abnormalities
- Offer secure remote monitoring and control
- Storage of data on system operation status on a PC allows access even from off site.
- Up to 400 indoor units (a single VRF network system) can be controlled and monitored for large scale buildings or hotels
- This software can be connected to any point of transmission line with USB adaptor (Locally purchased).

Max. Monitor and control
400
indoor units

Max. Monitor and control
100
outdoor units



* The saved data can be displayed offline. However, the data saved by the following model cannot be displayed.

- UTR-YSTB/UTR-YSTC (Service Tool)
- UTR-YMSA (Web Monitoring Tool)

AUTOMATIC OPERATION CHECK FOR REFRIGERATION CYCLE

After product installation, operation check can be performed automatically. Self-diagnosis function automatically judges whether each sensor value is normal, so the operation check work can be reduced. The diagnosis can also be output as a report.



[Note] Use only as a guide and judge for yourself finally.

Whether each sensor value is normal is judged automatically.

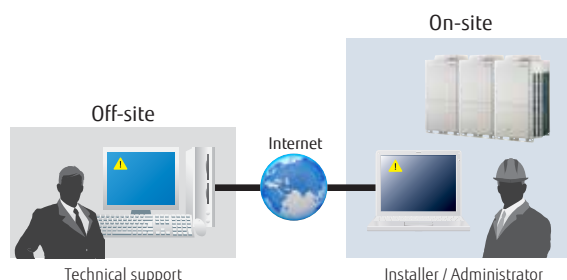
- ☒ Discharge temperature normal value **OK**
 - ☒ Super heat volume normal value **OK**
 - ☒ High pressure pipe normal value **OK**
 - ☒ Low pressure pipe normal value **OK**
- ...etc.



REMOTE TECHNICAL SUPPORT & MAINTENANCE

On-site check screen can be shared remotely. When visiting for troubleshooting on-site, operation status can be shared in real time.

Online chat function helps to support on-site staff.



MULTIPLE TREND GRAPH DISPLAY AND COMPARISON

- Multiple graphs can be displayed in Service Tool depending on the situation.
- Up to two offline data files can be viewed and compared simultaneously



PERSONAL COMPUTER SYSTEM REQUIREMENTS

Operating system	<ul style="list-style-type: none"> • Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Pro (32-bit or 64-bit) 	
CPU	1 GHz or higher	
Memory	<ul style="list-style-type: none"> • 1 GB or more (for Windows Vista®, Windows® 7 [32-bit], Windows® 8.1 [32-bit], and Windows® 10 [32-bit]) • 2 GB or more (for Windows® 7 [64-bit], Windows® 8.1 [64-bit], and Windows® 10 [64-bit]) 	
HDD	40 GB or more of free space	
Display	1366 x 768 or higher resolution	
Interface	<ul style="list-style-type: none"> • 2 USB ports - 1 USB port is required for software protection key connection - 1 USB port is required for Echelon® U10 USB Network Interface 	
Software	Internet Explorer® 11 or Microsoft Edge / Adobe® Reader® 9.0 or later	
Packing List	Quantity	Application
WHITE-USB-KEY (Software protection key)	1	Software protection key to be connected to USB port on the Service Tool-installed PC. These products runs only on a PC with WibuKey.

*Personal computer that satisfies the following system requirements

*Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

FUNCTIONS

1) System List

Displays the overall operation status of all or specified units in the system in a list form.

2) Equipment Detail (Diagram)

Displays the detail information for sensor values, electrical components etc. for the specified units in schematic. The information here can be used along with the detail information in list form, to check the operation status of units and make detail analysis on the cause, in case an error occurs.

3) Equipment Detail (List)

Displays the detail information for sensor values, electrical components etc. of units in a specified refrigerant system in list form. The information here can be used along with the detail information in diagram form, to check the operation status of units and make detail analysis on the cause, in case an error occurs.

4) Operation History

The indoor units or outdoor unit operation history can be recorded. The displayed operation history can be printed out and saved to a CSV file.

5) Error History

Displays the error information for each unit. The error information can sequentially be displayed up to 50 items as they occur starting with the latest error.

6) Remote File Download

Operation and error history can be downloaded. User can choose which data download by specifying the system, unit and time frame.

7) Commissioning Tool

During a test run, the outdoor unit/indoor unit sensor data can be saved for completing the commissioning report. When test concludes, this data can be exported in CSV file format.

8) Network Topology Analyzer

A list of units connected to the VRF system network is displayed in network segments in tree form.

9) Remote Setting

Setting of the indoor unit can be performed remotely.

Ref	Unit	Room	Mount	Type	Capacity (RTT)	Power	Operation	Mode	Set Temp (°C)	Room Temp (°C)	H.E.1 In (°C)	H.E.1 Out (°C)	ERV (°C)	Status	Signal	Operation
00	00		Out	Heat Pump	-	1B	ON	Idle	-	-	-	-	-	Normal	-	Ac
	01		In	Wall Mounted	7000	11A	ON	Cool	26	13.5	16	16	1600	Normal	-	Ac
	02	11A 1a1	In	Wall Mounted	7000	11A	ON	Cool	26	13.5	16	16	1600	Normal	-	Ac
	03	11A 1a2	In	Wall Mounted	7000	11A	ON	Cool	26	13.5	16	16	1600	Normal	-	Ac
	04	11A 1a3	In	Wall Mounted	7000	11A	ON	Cool	26	13.5	16	16	1600	Normal	-	Ac
	05	11A 1a4	In	Wall Mounted	7000	11A	ON	Cool	26	13.5	16	16	1600	Normal	-	Ac
	06		Out	Heat Pump	-	1A	ON	Idle	-	-	-	-	1600	Normal	-	Lev
	07		In	Universal	7000	11A	ON	Cool	26	13.5	16	16	1600	Normal	-	Ac
	08	11A Cooling #07	Out	Cooling Only	-	1A	ON	Idle	-	-	-	-	1600	Normal	-	St
	09	11A 1a3	In	Wall Mounted	7000	11A	ON	Cool	26	13.5	16	16	1600	Normal	-	Ac
	10	11A Cooling22	Out	Cooling Only	-	1A	ON	Idle	-	-	-	-	0	Normal	-	Lev
	11	11A 1a4	In	Wall Mounted	7000	11A	ON	Cool	26	13.5	16	16	1600	Normal	-	Ac
	12	1B Heat Pump M14	Out	Heat Pump	-	-	ON	Idle	-	-	-	-	-	Normal	-	-
	13		Out	-	-	-	ON	Idle	-	-	-	-	-	Normal	-	-
	14	1B 1a1	In	Universal	7000	11A	ON	Cool	26	-25	16	16	1600	Normal	-	Hi

10) System Time Setting

Time of day setting, for all controllers in a system, can be performed simultaneously.

11) Software Version

The software version of units are acquired and displayed.

12) Central Release

Limitations on individual indoor units can be released from the central controller (remote controller limit, temperature limit).

13) Model Name Writer

A custom model name can be given for an indoor unit.

14) Error Memory Reader

When an error occurs in an indoor unit, the system records the operation data before the error and saves to a CSV file.

Note: To perform "Error Memory Reading", the Service Tool must be connected directly to the corresponding outdoor unit. Refer to the Operation Manual of the Service Tool for detail.

15) Time Guard Information

Data for determining maintenance schedule (integrated time for compressor, fan, etc.) for the indoor and outdoor units can be output to a CSV file.

SERVICE & MONITORING

Web Monitoring Tool

UTY-AMGXZ1 Software

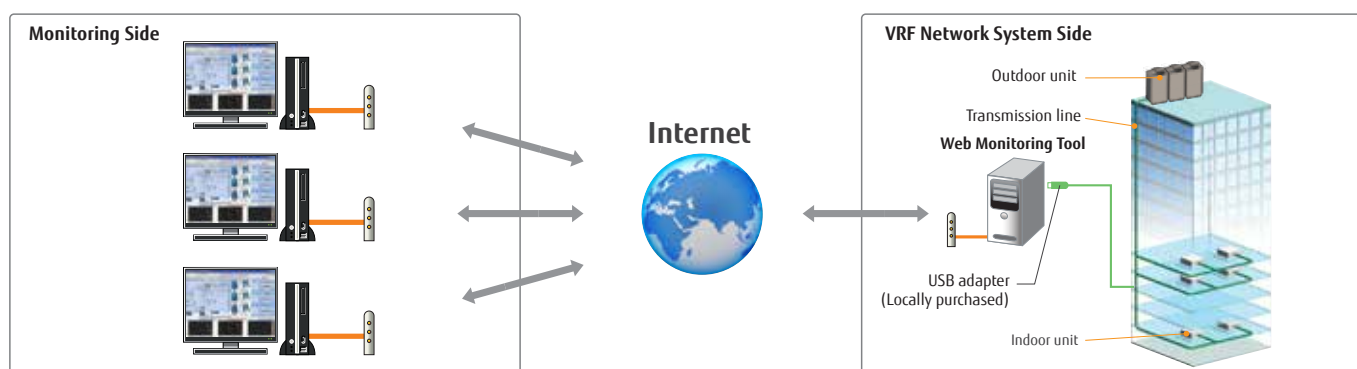
 VRF network system can
be supported indoor units

4

1,600

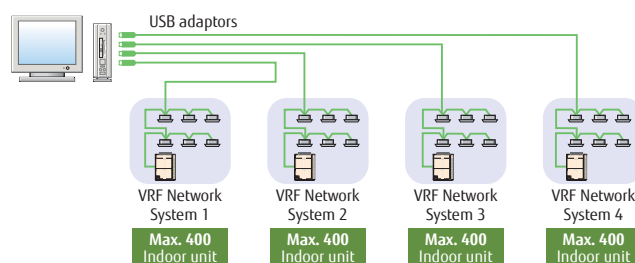
1,600 indoor units
can be supported
Product features

- Troubleshooting is performed by monitoring each air conditioning unit remotely during periodical system checks.
- Error notification can be automatically transmitted to several locations using the internet.
- Requires a dedicated internet connection.
- Determination of an error occurrence can be made through error warnings and equipment status information obtained from a remote location.
- The monitoring data can be downloaded and displayed offline in the service tool.
- No special software needed to view data remotely, requires only general web browser.

WEB MONITORING SYSTEM

SUPPORT 4 VRF NETWORK SYSTEMS

USB adaptor (max. 4 adaptors per PC) permit, monitoring of up to 1,600 indoor units.

Suitable for large-scale buildings or hotels.


PERSONAL COMPUTER SYSTEM REQUIREMENTS

Operating system	<ul style="list-style-type: none"> • Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Pro (32-bit or 64-bit) 	
CPU	1 GHz or higher	
Memory	<ul style="list-style-type: none"> • 1 GB or more (for Windows Vista®, Windows® 7 [32-bit], Windows® 8.1 [32-bit], and Windows® 10 [32-bit]) • 2 GB or more (for Windows® 7 [64-bit], Windows® 8.1 [64-bit], and Windows® 10 [64-bit]) 	
HDD	40 GB or more of free space	
Display	1366 x 768 or higher resolution	
Interface	<ul style="list-style-type: none"> • USB port (for 10 USB Network Interface Max.4, Software protection key) • Either of the following interface is required for remote connection: <ul style="list-style-type: none"> - Internet using LAN: Ethernet port is required 	
Software	Internet Explorer® 11 or Microsoft Edge / Adobe® Reader® 9.0 or later	
Packing list	Quantity	Application
WHITE-USB-KEY (Software protection key)	1	Software protection key to be connected to USB port on the Service Tool-installed PC. These products runs only on a PC with WibuKey.

•Personal computer that satisfies the following system requirements

•Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

Design Simulator

EASY EQUIPMENT SELECTION, COMPLETE SELECTION OUTPUT, RELIABLE PROJECT MANAGEMENT

Design Simulator makes it easy to design and select equipment for complex building HVAC systems. The software output contains all important design data including: Equipment Schedule, Piping and Wiring Layout, etc. (all of the documentation needed to estimate a project.) Design Simulator simplifies the design process. To design a system, just select the indoor unit types for each system, and the software will automatically select the outdoor unit and create the piping and wiring diagram. Design Simulator also checks all of the equipment information to ensure proper installation.



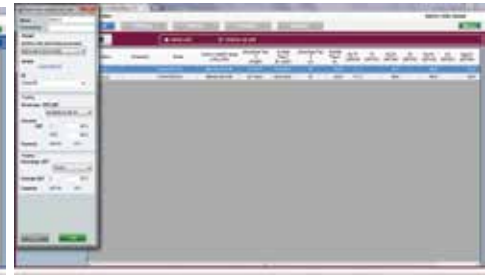
Step 1 Select the model

Choose the model for each system.



Step 2 Select the Indoor Unit

Choose the unit types and the conditions and the software will select the correct indoor unit. Indoor unit can also be selected manually.



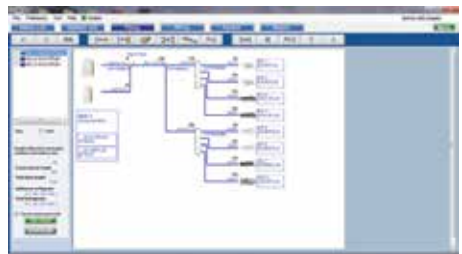
Step 2b Select the Outdoor Air Unit

If desired, choose the "Outside Air Unit" option. Outside Air Units are selected based on required airflow.



Step 3 Select the Outdoor Unit

Using the Drag & Drop function, connect the indoor unit to the appropriate outdoor unit.



Step 4 Piping Length / Piping Diagram

Piping diagram is created automatically. As piping lengths are entered, system automatically calculates refrigerant charge.



Step 5 Wiring / Remote Control Diagram

Automatically creates the wiring diagram. Simple grouping functions create a custom wiring diagram for the project.



Step 6 Select BMS Gateways and Central Controllers

Choose additional devices to meet the needs of the project.



Step 7 Report Output

Design Simulator creates a project output with all of the project schedules and schematic drawings.

Setting

Software can be customized for any geographic location.

- Units (US conventional / Metric)
- Language Setting
- Custom Database Function
- Output Settings

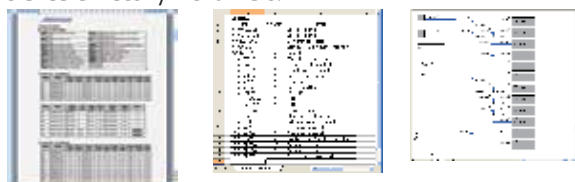
DESIGN TOOLS

SOFTWARE REQUIREMENTS

Software	Design Simulator	
Operating System	Microsoft Windows Vista / 7 / 8	
System Requirements		CPU: Intel® Core™ i3 Processor 2GHz or higher
	Hardware	Memory: 2GB or more (Windows® XP, Windows Vista®, Windows® 7 32-bit)
		4GB or more (Windows® 7 64-bit), HDD: 10GB or more of free space
	Display	1024 x 768 dots or more
		Internet Explorer 7.0 or later
	Software	Acrobat Reader 9.0 or later
		Microsoft Word 2003 / 2007 / 2010

Output

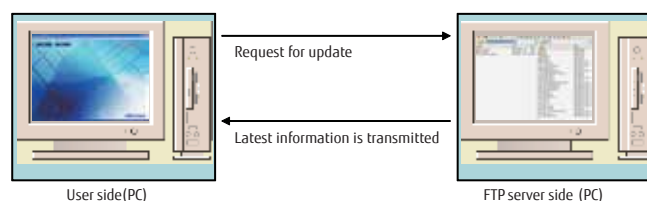
Equipment selections and schedules can be output in standard industry file formats.



- Word format
- Excel format
- Auto CAD format
- 2D Data
- 3D Data (RevitMep data)
- Wiring and piping schematic drawings

Auto Update

Software updates automatically with the latest product data.



- Maintains software integrity
- Maintains software history
- Updates product information

Building Information Modeling (BIM)

Fujitsu provides the Building Information Modeling (BIM) object models and contents for our VRF system to the architect, designer and contractor using Autodesk® Revit® technology.

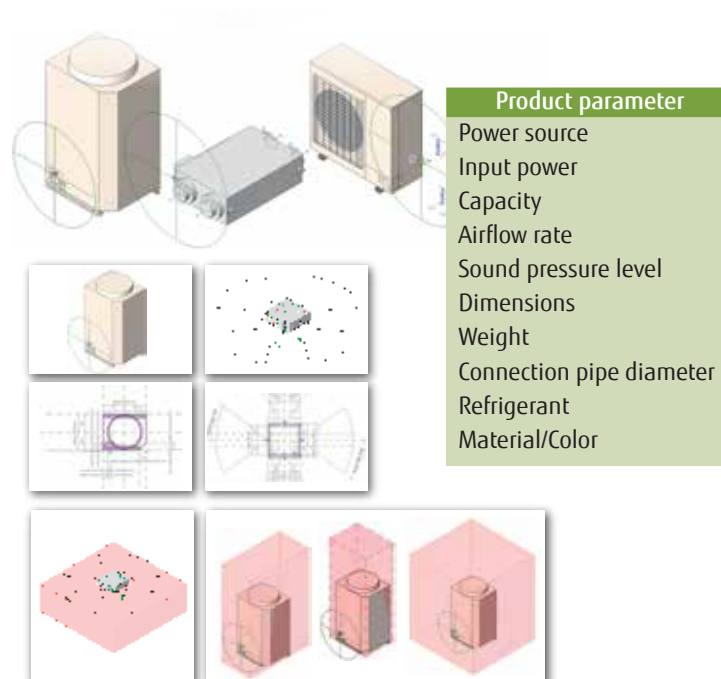
REQUIRED SOFTWARE

Autodesk® Revit® series software

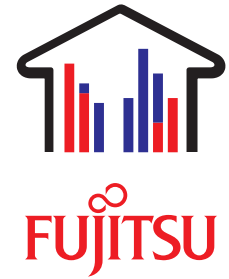
- Autodesk® Revit® Architecture
- Autodesk® Revit® MEP
- Autodesk® Revit® Structure

Data format

- RFA



Cypetherm Fujitsu with EnergyPlus™



Intuitive Airstage Energy Modeling

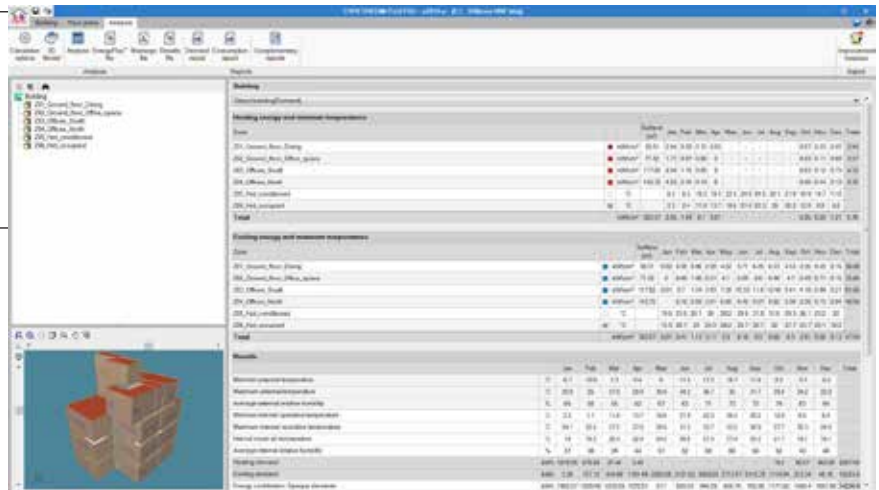
This software allows you to model and simulate HVAC energy demand and consumption in the building with Airstage and compare with other commonly used HVAC equipment. Estimate potential energy savings and ROI values.

EASY MODELING

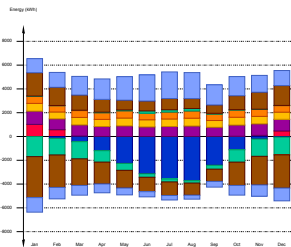
- Easy Wizard for Modeling
- 200 plus US cities included for weather data
- Default values selected based on building types

SIMPLE REPORTS

- Simple Energy Demand/Consumption reports
- Comparison with existing HVAC system
- ROI, NCV number



Energy demand



The following table displays the numerical values of the preceding bar chart, the energy balance of the whole building, as the sum of the energy involved in the energy balance of each thermal zone of the building calculation model.

The sign criteria adopted consists of using positive values for energy contributed to the zone and negative values for energy that is extracted.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
	Annual energy balance of the building.												(kWh/year)
Q ₁	1960.1	1529.6	1272.7	1075.7	817.9	526.7	366.3	238.4	160.1	117.9	126.7	168.0	-9053.67
Q ₂	-3446.6	-2729.0	-2235.1	-1852.9	-1489.3	-1222.3	-1022.3	-1052.7	-1056.4	-1056.4	-1056.4	-1056.4	-30.53
Q ₃	1884.1	1207.7	1183.1	1019.9	757.9	495.3	328.1	208.2	140.2	100.3	111.7	150.7	11520.46
Q ₄	-1222.3	-650.8	-418.1	-284.9	-178.4	-108.4	-68.4	-40.4	-24.4	-14.4	-8.4	-4.4	26.12
Q ₅	18.6	22.1	26.6	36.5	50.5	65.7	88.6	107.5	83.0	38.8	27.0	15.4	-23.12
Q ₆	-3446.6	-2729.0	-2235.1	-1852.9	-1489.3	-1222.3	-1022.3	-1052.7	-1056.4	-1056.4	-1056.4	-1056.4	-1056.4
Q ₇	604.6	575.9	576.3	553.0	604.6	553.0	526.7	604.6	526.6	604.6	526.3	553.0	6861.10

For Distributors and Reps

- Central Project Host for Sales Team
- Track all project status
- Upload project files and equipment list
- Automated quotes and Submittal packages creation
- Get price support and place orders
- Upload Commissioning documents
- Print Extended Warranty

- Project users can generate Engineering Submittal Packages using only a few mouse clicks.
- Users can use this integration to create numerous customizable quotes.
- Purchasing can be easily managed through the quoting system.



Project Name: ABC Building
Management Number: 10000
Building: 123 Any Street, NY, NY 10000
Date: June 1, 2017

Created by: Jane Smith
Company: XYZ Contracting
Address: 123 Jones St. Fairfield, NJ 07004

[illegible]
















Figs. 10(a)-(f)							
	1.0	3.3	1.2	5.5	1.4	1.8	+1.9
Time	0	0	0	0	0	0	0

Refrigerant	kg
R-134a	10.4

[illegible]

Piping Accessories

SEPARATION TUBES

<p>Gas Pipe</p>  <p>Liquid Pipe</p>  <p>UTP-AX090A</p>	<p>Gas Pipe</p>  <p>Liquid Pipe</p>  <p>UTP-AX180A</p>	<p>Gas Pipe</p>  <p>Liquid Pipe</p>  <p>UTP-AX567A</p>
<p>Suction Gas Pipe</p>  <p>Discharge Gas Pipe</p>  <p>Liquid Pipe</p>  <p>UTP-BX090A</p>	<p>Suction Gas Pipe</p>  <p>Discharge Gas Pipe</p>  <p>Liquid Pipe</p>  <p>UTP-BX180A</p>	<p>Suction Gas Pipe</p>  <p>Discharge Gas Pipe</p>  <p>Liquid Pipe</p>  <p>UTP-BX567A</p>





SPECIFICATIONS

Separation Tube

Model name	UTP-AX054A	UTP-AX090A	UTP-AX180A	UTP-AX567A
Total cooling capacity of indoor unit (X)(kBTUh)	$X < 66.0$	$X < 96.5$	$96.5 \leq X < 193$	$193 \leq X$

Model name	—	UTP-BX090A	UTP-BX180A	UTP-BX567A
Total cooling capacity of indoor unit (X)(kBTUh)	—	$X < 96.5$	$96.5 \leq X < 193$	$193 \leq X$

Outdoor Unit Branch Kit











<p>Gas Pipe</p>  <p>UTP-CX567A</p>	<p>Suction Gas Pipe</p>  <p>Discharge Gas Pipe</p>  <p>Liquid Pipe</p>  <p>UTP-DX567A</p>
---	--

SPECIFICATIONS

Outdoor Unit Branch kit

Model name	UTP-CX567A (for V-II)	UTP-DX567A (for VR-II)
Number of Outdoor unit	2 outdoor units	1
	3 outdoor units	2

Header




8 Branch		6 Branch	
Gas Pipe		Gas Pipe	
Liquid Pipe		Liquid Pipe	
UTR-H0908L / UTR-H1808L		UTR-H0906L / UTR-H1806L	
Suction Gas Pipe		Suction Gas Pipe	
Discharge Gas Pipe		Discharge Gas Pipe	
Liquid Pipe		Liquid Pipe	
UTP-J0908A / UTP-J1808A		UTP-BX090A	

SPECIFICATIONS

Header

Model name	3-6 Branches	UTR-H0906L	UTR-H1806L
	3-8 Branches	UTR-H0908L	UTR-H1808L
Total cooling capacity of indoor unit (X)(kBTUh)		$X < 96.5$	$96.5 \leq X < 193$
Model name	3-6 Branches	UTP-J0906A	UTP-J1806A
	3-8 Branches	UTP-J0908A	UTP-J1808A
Total cooling capacity of indoor unit (X)(kBTUh)		$X < 96.5$	$96.5 \leq X < 193$

RB UNIT

Single type	Multi type	2 Connected Multi-RBU
		
UTP-RX01AH / UTP-RX01BH / UTP-RX01CH	UTP-RX04BH	

SPECIFICATIONS

RB Unit

Type		Single type			Multi type
Model name		RU01AH	RU01BH	RU01CH	RU04BH
Power source		Single phase 230V, 50Hz			
Input power	W	28	28	41	110
Number of branches		1	1	1	4
Maximum capacity of connectable indoor units (Q)	kBTUh	$Q \leq 28$	$Q \leq 60$	$Q \leq 96$	$Q \leq 191^{*1}$
Maximum capacity of connectable indoor units per branch (Q)	kBTUh	$Q \leq 27$	$Q \leq 60$	$Q \leq 96$	$Q \leq 96$
Maximum number of connectable indoor units per branch		3	8	8	8
Dimensions (H×W×D)	in.(mm)	7-13/16 × 11-3/4 × 10-9/16 (198 × 298 × 268)			10-1/4 × 25-7/8 × 16-7/8 (260 × 658 × 428)

*1: In case of two RB units connected in series (total 8-branches), maximum capacity of connectable indoor units is up to 191kBTUh

Optional Parts Overview

Optional Parts For Cassette

UTY-SHZXC



Human Sensor Kit

The room temperature can be controlled by detecting the temperature accurately from the built-in sensor

UTG-CCGVG
For Compact
Cassette

UTG-CCGV
For Cassette

UTG-LCGV

UTG-LCGVCW

UTG-LCGVCB

Cassette Grille

Cassette grille lineup matching the various interior is available. In addition, grid ceiling type cassette grille is also added to the lineup.

For Circular
Flow Cassette

UTZ-VXAA

For Compact
Cassette

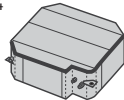
UTZ-VXRA

For Cassette

Fresh Air Intake Kit

Fresh air can be taken in by a fan which can be connected using external control unit.

UTZ-KXGA for Cassette AUUB30,36
UTZ-KXGB for Cassette AUUB18,24
UTZ-KXGC for Compact Cassette
AUUA7 thur AUUA24



Insulation for High Humidity

Insulation for High Humidity is used when the installation location is in the high humidity environment.



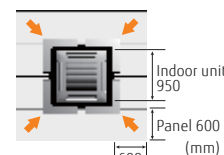
For Compact
Cassette

UTR-YDZC

UTR-YDZB For Cassette

Air Outlet Shutter Plate

According to the installation site, the number of outlet directions can be changed to 3 directions by Air Outlet Shutter Plate.

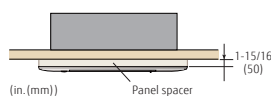


UTG-AGYA-W

Wide Panel

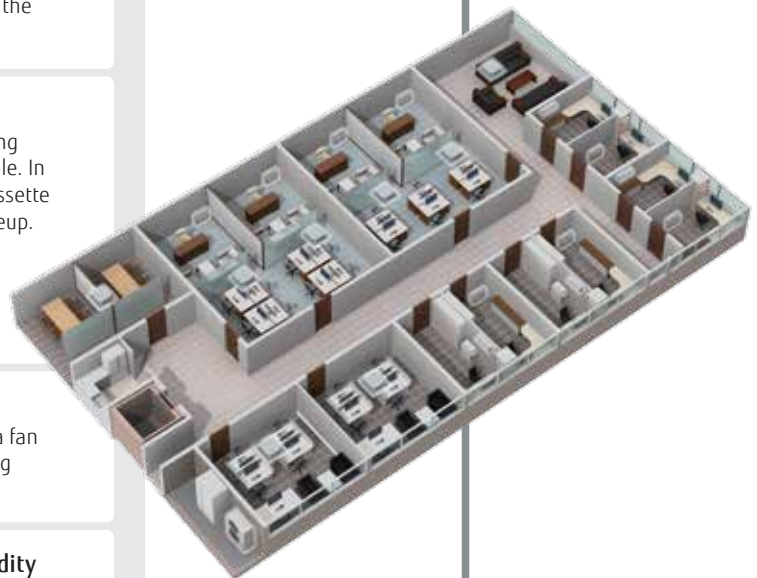
When the cassette type is installed at the narrow space above ceiling, the space can be filled in by Wide Panel.

UTG-BGYA-W



Panel Spacer

When the space above the ceiling is low and the main body is projected out of the ceiling surface, Panel Spacer can be used as decoration



Optional Parts For Floor

UTR-STA



Half Concealed Kit

This kit is used to half conceal floor type indoor unit into the wall.



Optional Parts For Duct & Ceiling



UTD-GXSA-W / UTD-GXTA-W
UTD-GXTB-W
(see pg 96 for details)

Auto Louver Grille Kit

Simple flat Auto louver will provide comfort airflow and harmonize with luxury Interior



UTY-XSZX

Remote Sensor Unit

New amenity space can be offered by installing the Remote sensor.



UTD-LF25NA
UTD-LF60KA

Long Life Filter

Grit and dust can be caught sufficiently. In consideration of running cost, long-life design is achieved.

UTD-SF045T



UTD-RF204

Flange

Flange is used for Medium Static Pressure Duct type and Ceiling type to connect between pipes.

UTZ-PX1NBA
UTR-DPB24T



Drain Pump Unit

This device can drain the collected water during operation.



External Connect Kit & Set

These wires can connect between the product PCB and external device.



Connection Units

Connection units are provided to separate the pipes at the connection of multiple indoor units in Multi type or VRF system.

VRF COMMUNICATION CABLE

For VRF Communication

LonWorks® Cable

K00250LW

K00500LW



Auto Louver Grille Kit (Option)

Models

UTD-GXSA-W / UTD-GXTA-W

UTD-GXSB-W

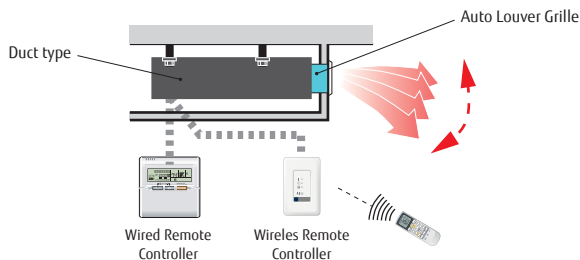
Available for Mini and Slim Ducted Indoor Units (page 34)



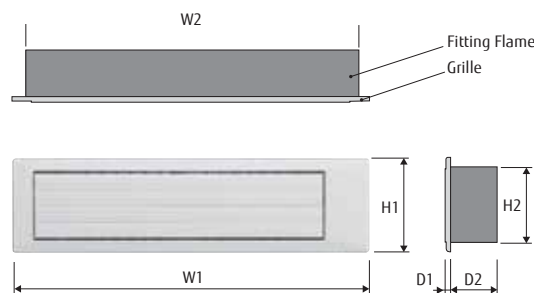
Feature

Flexible Control

- Operation with indoor unit
Auto Louver can be controlled by remote controller of indoor unit.
- UP and Down auto swing
 - Fixed airflow or auto swing
 - 4 angle settings
- Auto-closing louver
When operation of indoor unit is stopped, the louver will automatically close.



Dimensions



Unit: In.

Model Name	W1	W2	H1	H2	D1	D2
UTD-GXSA-W / UTD-GXTA-W	26-7/8	25-3/8	7-1/16	5-13/16	3/8	3-5/16
UTD-GXSB-W	34-3/4	33-1/4				

Specifications

Model name			UTD-GXSA-W / UTD-GXTA-W		UTD-GXSB-W	
Applicable Indoor Unit			UTD-GXSA-W: ARUL7/9/12/14TLAV UTD-GXTA-W: ARUL4TLAV1		ARUL18TLAV	
Power Supply			Connecting with Control box of indoor unit			
Fixing of Auto Louver Grille			Screw fixing to Flange or Square Duct			
Extension Square Duct Limit			39-3/8" (Max. duct length between indoor unit and grille)			
Net Dimension (H x W x D)		inch (mm)	7-1/16x26-7/8x(3-5/16+3/8) [180x683x(84+9)]		7-1/16x34-3/4x(3-5/16+3/8) [180x883x(84+9)]	
Weight	Net	lb. (kg)	4.4 (2.0)		5.6 (2.5)	
	Gross	(kg)	6.7 (3.0)		7.8 (3.5)	
Color			White			
Louver Motor			Stepping Motor			
Accessories			Fitting Flame, etc.			
Operation range	Cooling	°F (°C)	64 to 90 (18 to 32)			
		% RH	80% or less			
	Heating	°F (°C)	50 to 86 (10 to 30)			

AIRSTAGE® Resources

AIRSTAGE WEBSITE (for building owners) www.fujitsugeneral.com

A place to learn the basics

Go to the Commercial portion of our web site to learn more about Fujitsu's Airstage VRF products and programs such as:

- Basic Product Overview
- Specifications & Downloads
- Service & Support
- Locate a Contractor or Distributor
- Contact Us
- Case Studies



AIRSTAGE PROJECT MANAGER (APM) on the Fujitsu Portal (for Reps and Distributors)

- Manage your Fujitsu Airstage projects large and small.
- Create a project and track its progress from the design stage, to quote generation, order processing and delivery tracking to submittal and commissioning.
- Import equipment schedules from the Fujitsu Design Simulator as well as piping and wiring diagrams.
- Request and manage job pricing.



AIRSTAGE PORTAL (for Engineers and Contractors)

<https://portal.fujitsugeneral.com>

A central place for project stakeholders to coordinate

The Airstage Portal provides a single source for all information for Fujitsu Airstage VRF Systems. From the Airstage Portal, all registered users have access to a wealth of information including manuals, technical information, diagrams, online training and more.

Who has access to the Portal?

- Engineers
- Contractors
- Fujitsu Distributors/Personnel
- Independent Airstage Sales Reps
- To create a Portal account, go to: <http://portal.fujitsugeneral.com> and click on "Register Now".



WHAT'S ON THE PORTAL?

TOOLS FOR ENGINEERS AND CONTRACTORS



INFORMATION & DOWNLOADS

- Access to literature online
- Access to all manuals
- Download Design Simulator



TECHNICAL INFORMATION

- Troubleshooting Guides
- Instructional Videos
- Frequently Asked Questions



TRAINING

- Designing Airstage Systems
- Reinforce Information covered in on-site training classes
- Learn about new and advanced Airstage features



PARTS

- Parts Identification Diagrams

TOOLS FOR FUJITSU PARTNERS



MAINTAIN PROJECTS

- Upload Design Simulator files
- Track project status



SUBMITTALS & CLOSEOUT DOCUMENTATION

- Automatically generate submittals & closeout documents
- Commissioning Report and closeout documents are archived for future reference



WARRANTY & COMMISSIONING

- Process warranty claims
- Submit Commissioning Report
- Print Extended Warranty Certificate



Applications

There are many applications for Airstage VRF systems including such markets as education, healthcare, hospitality, utilities, office buildings, apartment buildings, condominiums, and restaurants.

Note: VRF Heat Recovery system provides simultaneous Heating and Cooling.

MEDICAL AND HEALTHCARE FACILITIES

VRF gives each patient individual control of their room temperature. Central control ensures that air conditioning is only delivered to rooms that are occupied.

INDIVIDUAL CONTROL

VRF systems give each patient or each room individual control of their room temperature.

MAINTENANCE

Since each refrigerant circuit has the ability to operate independently, a properly designed VRF system can add a layer of security to a HVAC system. If an individual unit needs to be shut down for repairs, the rest of the system can operate normally.



CENTRAL CONTROL

Powerful central control ensures that heating and cooling are delivered to rooms that are occupied. This provides enormous savings for facilities with revolving occupancy.

CLEAN AIR

VRF systems can use ductless indoor units reducing the time and expense of maintaining a HVAC system and eliminating the risk of duct-borne molds and bacteria.

HEALTHIER FACILITY

VRF systems can be integrated with fresh air systems to ensure that air quality meets the needs of the occupants. VRF provides the most comfortable environment for all occupants.

OPTIONAL

Building Management System (BMS) using BACnet, LonWorks or Modbus.

See Airstage VRF case studies on our site at
<http://www.fujitsugeneral.com/us/commercial/benefits/app-and-solutions.html>

or on our **YouTube** channel FujitsuGeneral_USA

EDUCATIONAL AND RELIGIOUS FACILITIES

In a school, an investment in VRF is an investment in your community. VRF is more efficient than conventional systems, providing financial savings to the school for many years. Also, a quiet VRF system creates a much better learning environment for students.

HEALTHIER FACILITY

VRF systems can be integrated with fresh air systems to ensure that air quality meets the needs of the teachers and students.

CENTRAL CONTROL

Powerful central control can monitor and control individual schools, or an entire college campus, from a single location.



ZONING

Save energy by heating and cooling only the classrooms that are occupied. Set temperature can be pre-programmed to meet the energy budget for the school district.

COMFORT

VRF helps achieve a healthier, quieter, more comfortable and productive learning environment.

OPTIONAL

Build Management System (BMS) using BACnet, LonWorks or Modbus. Subtenant billing and Energy Charge apportionment.

See Airstage VRF case studies on our site at
<http://www.fujitsu-general.com/us/commercial/benefits/app-and-solutions.html>

or on our **YouTube** channel FujitsuGeneral_USA



OFFICE BUILDINGS AND RETAIL SPACES

VRF provides a comfortable work environment for all employees. Zoning ensures that energy is only used to cool/heat occupied offices. Quiet indoor units and precise temperature control creates the most comfortable and productive work environment.

FLEXIBLE

As tenants and office configurations change, VRF system configurations can also be modified (within original design constraints) to meet the needs of new tenants.

ZONING

Save energy by only heating and cooling occupied offices. No more hot/cold calls since each zone or tenant has individual control of the set temperature.



EASE OF INSTALLATION

Can be installed in occupied office spaces with minimal disruption to occupants. Can even be installed without disrupting the existing HVAC system.

QUIET

Indoor units and outdoor units creates a pleasant work environment and reduces noise complaints.

CONTROL

Powerful controls options can manage and monitor entire building from a single location.

COMFORT

VRF provides a comfortable work environment for all employees. Quiet indoor units and precise temperature control creates the most comfortable and productive work environment.

OPTIONAL

Building Management System (BMS) using BACnet, LonWorks or Modbus. Subtenant billing and Energy Charge apportionment.



See Airstage VRF case studies on our site at
[http://www.fujitsugeneral.com/us/commercial/benefits/
app-and-solutions.html](http://www.fujitsugeneral.com/us/commercial/benefits/app-and-solutions.html)

or on our **YouTube** channel FujitsuGeneral_USA

MULTI-TENANT DWELLINGS

VRF improves the quality of multi-tenant buildings while reducing tenant complaints. High quality VRF systems let owners save on energy costs and reduced maintenance costs. With VRF, each tenant has individual control over the temperature setting for the comfort of their home.

QUALITY

By delivering quiet, efficient heating and cooling, VRF improves the quality of multitenant buildings and reduces tenant complaints.

ENERGY SAVINGS

Efficient VRF systems reduce the total energy costs for buildings over most other options. High quality systems reduce maintenance and service costs.



INDIVIDUAL BILLING

Using the Energy Charge Apportionment feature, landlords can easily bill each tenant for the percentage of total energy the individual tenant consumes.

INDIVIDUAL COMFORT

With VRF, each tenant can have their own controller to set their room temperature for their maximum comfort.

CONVENIENT CENTRAL CONTROL

Landlord can monitor and control all indoor units from a central location. Landlord can even troubleshoot or solve tenant complaints remotely.

QUIET

Indoor units ensures a quiet, comfortable living environment for all tenants.

OPTIONAL

Subtenant billing and Energy Charge apportionment.



See Airstage VRF case studies on our site at
<http://www.fujitsugeneral.com/us/commercial/benefits/app-and-solutions.html>

or on our **YouTube** channel FujitsuGeneral_USA

FUJITSU COMMERCIAL FINANCING

For any commercial HVAC installation, you can turn to Fujitsu with confidence for equipment that's not only readily available, but also thoughtfully engineered to install with ease and save energy on utility bills.

THE FUJITSU COMMERCIAL FINANCING PROGRAM IS JUST AS EFFICIENT AND SMART:

QUICK, EFFICIENT APPROVAL PROCESS


- No cost, recourse or credit check for contractors
- End user credit approvals in 2 – 6 hours
- Contractor paid within 24 – 48 hours of install
- Single point of contact, from beginning to end

SOLUTIONS AVAILABLE FOR MOST PROJECTS

- Commercial units eligible, as well as controls and installation
- Churches, nonprofits and non-building owners qualify

TAKE ADVANTAGE OF CONVENIENT QUOTE OPTIONS:

 FujitsuGeneralFinancing.com

 "Horizon Keystone Calculator" app for Android or iOS

 1-800-606-0049

FOR MORE INFORMATION:

Horizon Keystone Financial
800-606-0049
Fujitsu@horizonkeystone.com



For residential installations, please inquire with your Distributor or Fujitsu Sales Engineer about consumer financing options.



THINGS TO KNOW BEFORE YOU BUY A FUJITSU SYSTEM

COMPLETE SYSTEM WARRANTY

Standard warranties vary depending on model:



All Fujitsu Airstage systems come standard with a 2-Year Compressor/1-Year Parts warranty.



Fujitsu Airstage systems that have been properly commissioned have a warranty of 10-Year Parts/10-Year Compressor. For more details, see Airstage Warranty Statement.

For full details, see Airstage Warranty Statement.

TRADEMARKS

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NON-INTERNET RETAIL POLICY

Internet sales are strictly prohibited and unauthorized. Any HVAC systems purchased on the Internet, from an online retailer or any similar e-tailing website, OR where the original factory serial numbers of the display have been removed, defaced, or replaced in any way WILL NOT BE COVERED BY WARRANTY.

Note: Condensing units come pre-charged from factory. Additional refrigerant may be required, be sure to check installation manual for more details.

THINGS TO KNOW BEFORE YOU INSTALL A FUJITSU SYSTEM

WARNING

Always use a licensed installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion. Use only parts and accessories supplied or specified by Fujitsu. Ask a licensed contractor to install parts and accessories. Use of unauthorized or improper installation of parts and accessories can result in injury or property damage. Read the installation manual carefully before using this product. The installation manual provides important safety instructions and warnings which should be followed closely. For any questions or concerns, please contact Fujitsu General America, Inc. Proper sizing and installation of equipment is critical to achieve optimal performance.

HEAT PUMP DISCLAIMER

In most climates a heat pump will handle all of your heating needs. However, this system sometimes requires some other additional source of heat to satisfy heating requirements in the coldest environments. All of Fujitsu's heat pumps use inverter technology and as such offer a wider operating range and more heat capacity than

a standard heat pump but will not provide adequate heating if improperly sized or operated outside of its operating range. Specifications vary by model; please consult your contractor before choosing a heat pump as your only source of heat. Systems will maintain temperature up to +/-4 degrees relative to set temperature. To increase energy efficiency on multi-type systems, you should turn off the evaporators when heating or cooling is not needed.

DISCLAIMER

Fujitsu's products are subject to continuous improvements. Fujitsu reserves the right to modify product design, specifications and information in this brochure without notice and without incurring any obligations.

CERTIFICATIONS

ISO

ISO14001 is the standard defined by the International Organization for Standardization (ISO) related to environmental management systems. Fujitsu General America, Inc. has been acknowledged by an internationally accredited compliance organization as having an appropriate program of environmental protection procedures and activities to meet the requirements of ISO14001. The air conditioners manufactured by Fujitsu have received ISO9001 series certification for quality assurance.



- ISO9001
- ISO14001

ASTM

Our outdoor units shall withstand 1,000 hours of salt spray tested per procedure ASTM B117.

ROHS COMPLIANT

Fujitsu participates in the RoHS Directive, which is the Restriction of Hazardous Substances in electrical and electronic equipment. It is an EU directive intended to protect the environment by forcing manufacturers to eliminate or severely curtail the use of cadmium, hexavalent chromium, and lead in all products from automobiles to consumer electronics.

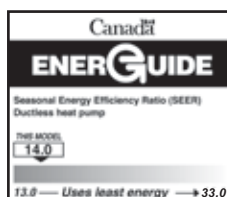


AHRI ENERGY GUIDE® PROGRAM (U.S.)

To view AHRI numbers or Energy Guide labels, please go to www.ahridirectory.org.



HRAI ENERGUE® PROGRAM (CANADA)



- Specifications and design are subject to change without notice for future improvement. For further details, please check with an authorized distributor.
- "AIRSTAGE" is a worldwide trademark of FUJITSU GENERAL LIMITED and is a registered trademark in Japan and other countries or areas.
- Other company and product names mentioned herein may be registered trademarks, trademarks or trade names of their respective owners.
- Actual product color may be different from the colors shown in this printed material.
- Internet sales are strictly prohibited and unauthorized. Any HVAC systems purchased on the Internet, from an online retailer or any similar e-tailing website, OR where the original factory serial numbers of the display have been removed, defaced, or replaced in any way WILL NOT BE COVERED BY WARRANTY.



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Fujitsu General America, Inc.
353 Route 46 West
Fairfield, NJ 07004
Toll Free: (888) 888-3424
Local: (973) 575-0380
Email: hvac@fujitsugeneral.com
www.fujitsugeneral.com
A subsidiary of
Fujitsu General Limited