Refrigerant R410A
INVERTER

AIRSTAGE™ V-II

Variable Refrigerant Flow System

Multi Air Conditioning System for Buildings

Large Capacity Multi VRF System
DC Inverter Control Compressor
Long Piping System Design
High Efficiency Refrigerant R410A

FUJITSU GENERAL LIMITED

All for Comfort

Smart and cutting edge design
Extensive lineup from 8HP to 48HP in 2HP increment
Connectable indoor unit capacity ratio up to 150%

High Efficiency Operating System

EER/COP has been significantly improved by unique inverter technology and refrigerant control technology.

Installation Flexibility

Total pipe length of 1,000m and 150m actual pipe length. From small to large buildings, any application can be supported.

Compact Design

The outdoor unit size has been significantly reduced by optimizing of equipment. This allows for a reduction in the required installation area floor space.

User Friendly Central Control

Diverse building air conditioning control functions can be controlled easily by central air conditioning control.

AIRSTAGE™ V-II

Variable Refrigerant Flow System

CONTENTS

Advanced system considers
high efficiency operation

High Efficiency Operation

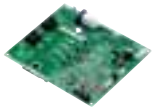
Energy saving technology that boosted operation efficiency

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

DC fan motor
Power consumption has been reduced by 25% compared to previous models by using a compact and high performance DC fan motor.

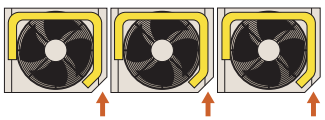
Subcool heat exchanger
High Heat Exchange efficiency is achieved by using an internal projection shape double pipe construction.



Sine-wave DC inverter control
High efficiency operation is realized by using a sine wave DC inverter control.

DC twin rotary compressor
Significantly greater efficiency is realized by use of a large capacity DC twin rotary compressor with substantially increased refrigerant intake and compression efficiency.

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.

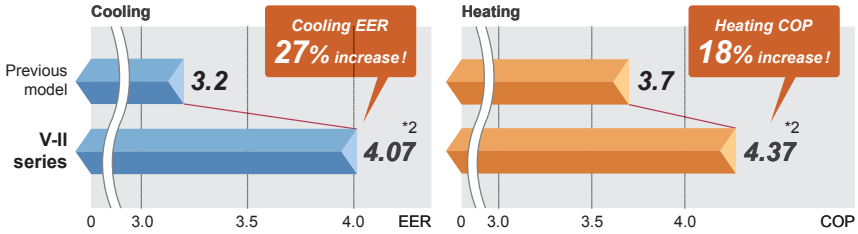


Front intake port
(corner cut air inhaling structure)
In multiple outdoor unit installations, the unique front intake design improves airflow into the Heat Exchanger.

Significantly improved EER/COP

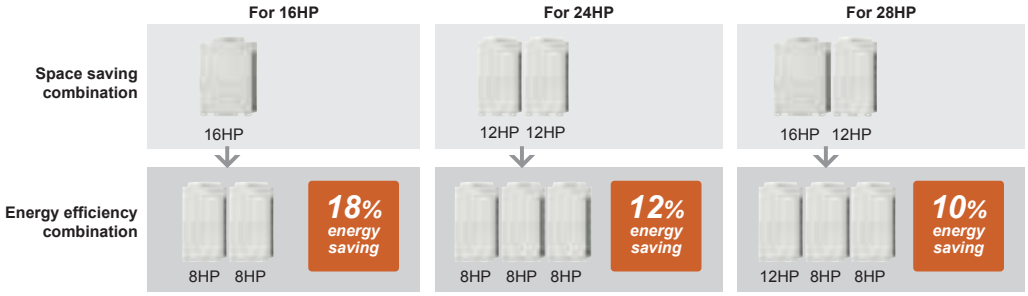
Significantly greater efficiency is realized by the use of a DC twin rotary compressor, inverter technology, and large heat exchanger.

* "EER/COP" is the coefficient of performance
  [= capacity (kW) ÷ input power (kW)].
*EER/COP values are based on our own testing method.
*2. The data refers to an 8HP outdoor unit.



Energy efficiency combination

Choice of space saving or energy efficiency combinations



(Comparison of Average COP)

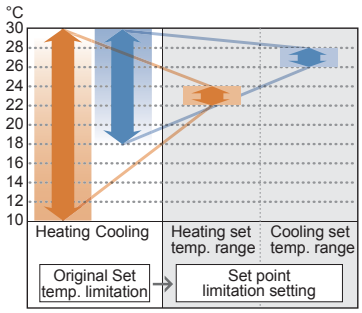
Various energy saving features

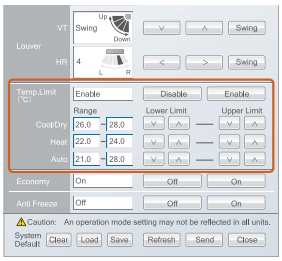
Room temperature set point limitation

The minimum and maximum temperature range can be set giving further energy saving while considering the comfort of the occupants.

Auto-off timer

Each remote controller is equipped with an OFF timer function that automatically stops operation when a fixed time has elapsed from the start of operation. This prevents waste of energy.
(Note : Except simple remote controller)

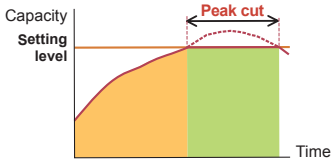


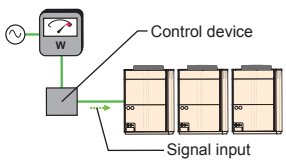


Operation setting (System Controller)

Peak cut operation

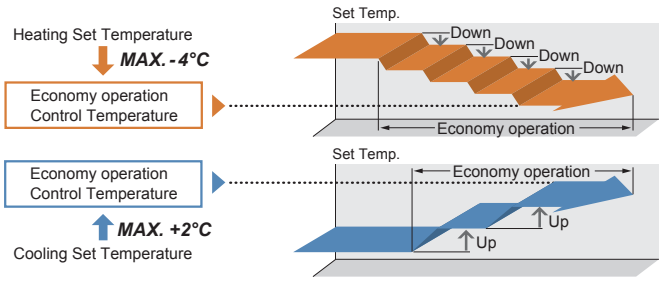
Operation capacity can be set in 4 steps for rated capability. The power consumption at peak is cut down and the maximum load is suppressed.





Economy operation

Economy operation can be set by remote controller. The temperature setting is offset automatically over a certain period of time.

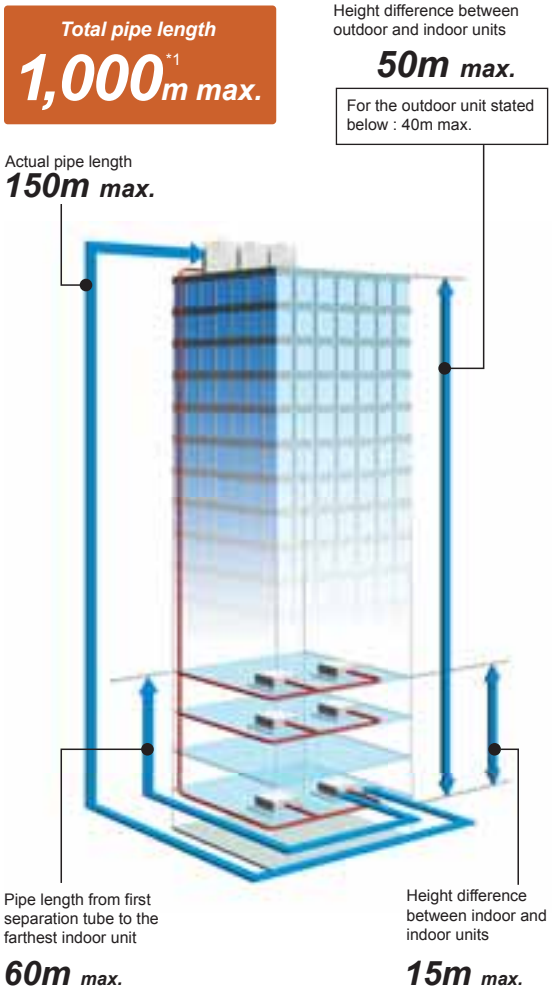


V-II systems can be applied to
a wide variety of Building applications due to
the reduced outdoor unit size and
piping length capabilities

Design Versatility

Overall piping length 1,000m

World's top class overall piping length of 1,000m allows for application in a wide variety buildings.



*1. Note : When there is 1 outdoor unit, the maximum is 700m.

High static pressure of 80Pa

The outdoor unit can have a condenser hood easily connected with a static pressure of 80Pa standard. This allows outdoor units to be installed within plant rooms in high rise buildings.

Powerful discharge with an external static pressure of 80Pa.

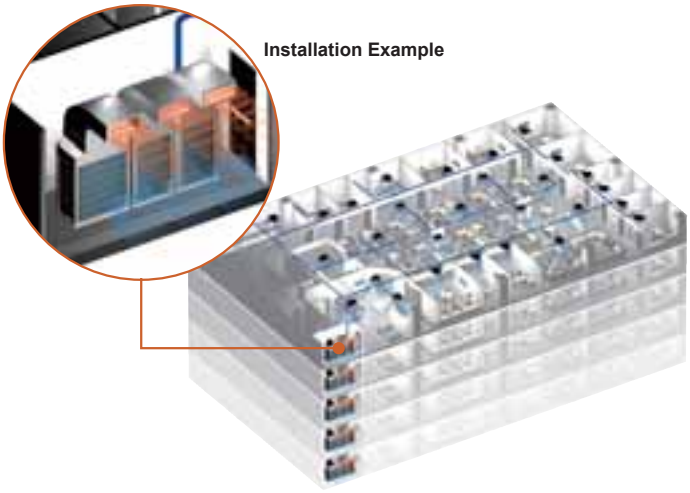
80Pa as standard

Previous model

V-II series

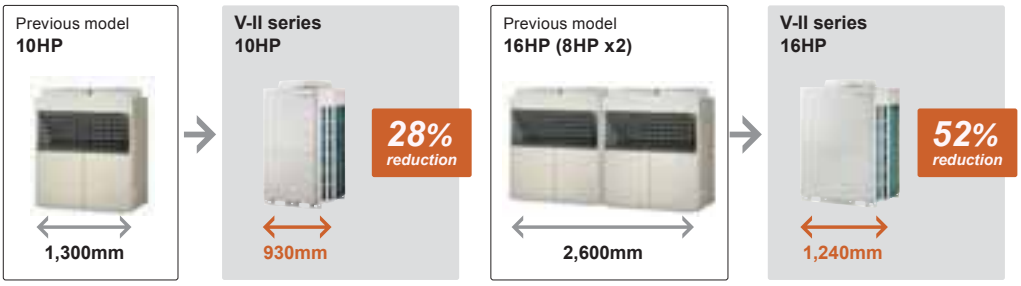
Large diameter fan and DC motor has been utilized allowing an external static pressure of 80Pa. This is approximately 2.6 times greater than the previous model.

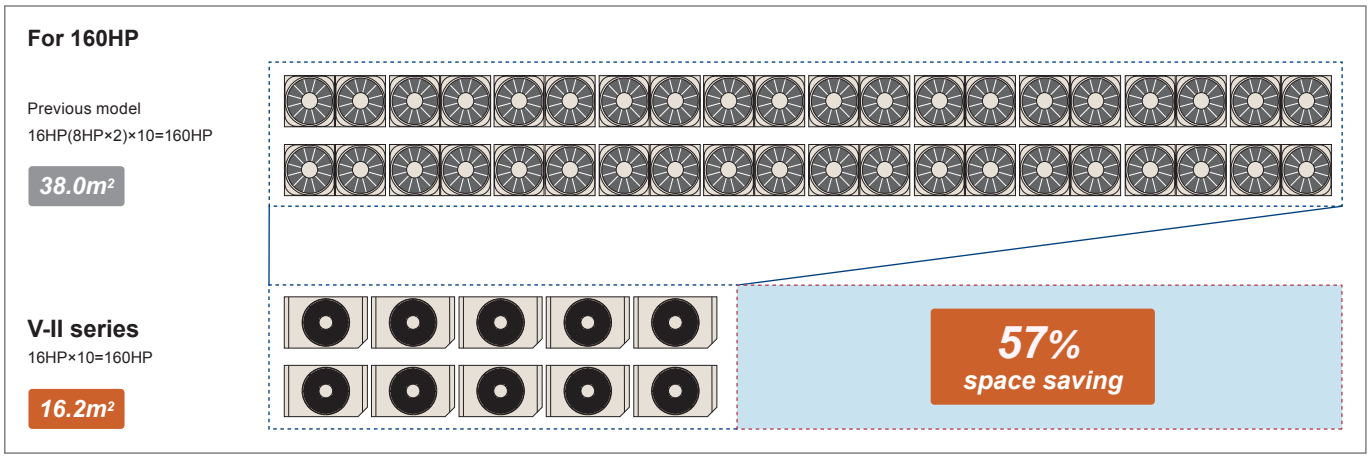
Installation Example



Space saving and compact size

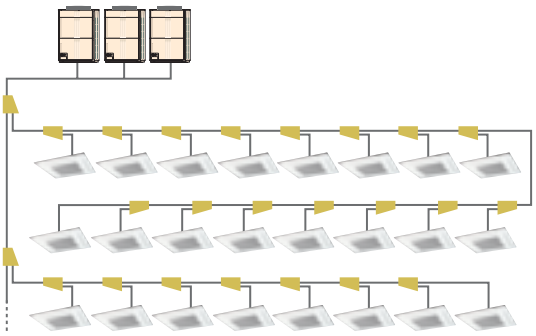
Compact size has been achieved by significantly reducing the width of the outdoor units compared to previous models.





High capacity connection

Various combinations from 8HP to 48HP with 2HP increments. 12 types, 55 models of indoor units can be selected ranging from 2.2kW to 25kW in capacity. A maximum of 150% indoor unit connectable capacity.

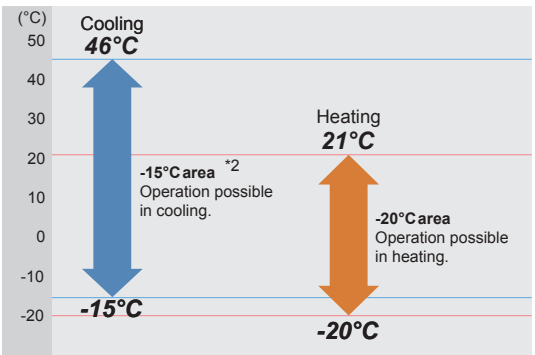


Note : When indoor unit connected capacity is greater than 100%, individual indoor units will operate at a slightly lower capacity when maximum capacity is required.

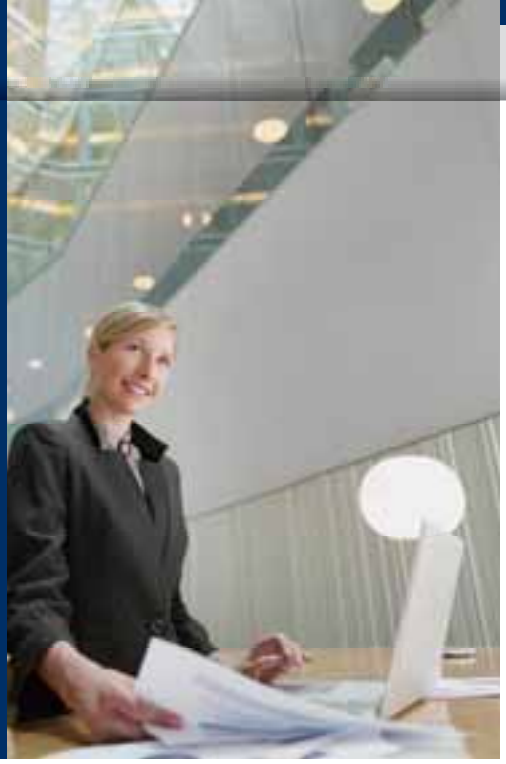
Wide operating range

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

Cooling : -15°C~46°C
Heating : -20°C~21°C



*2. Note : When a multiple outdoor unit connection is used, operating range is from -5°C to 46°C in cooling.

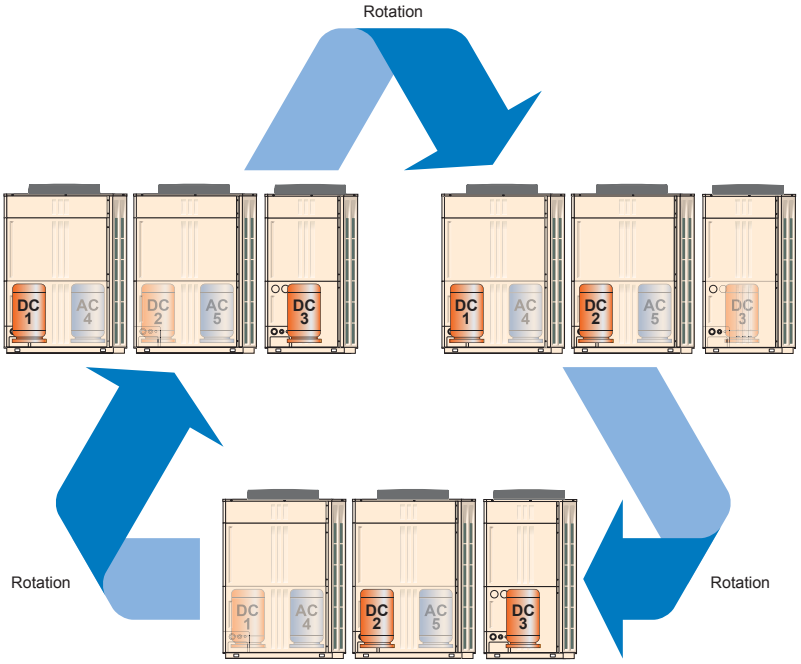


High reliability considering
long-term safety and confidence

High Reliability

Life-extending operation

Outdoor unit rotational operation
The compressor starting order is rotated so that the running time is shared.



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

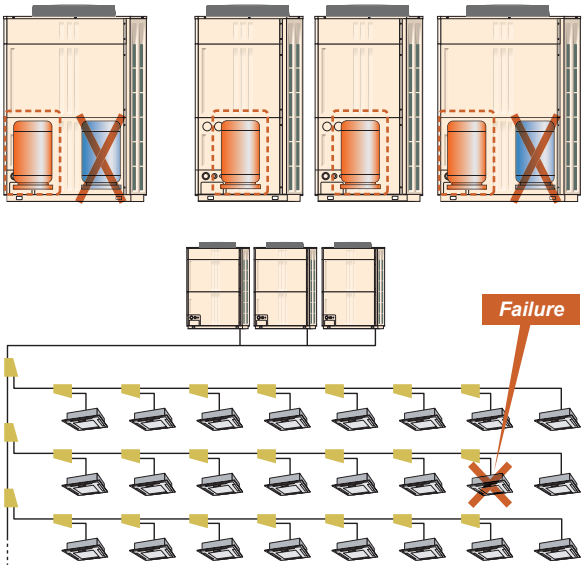
Backup operation

If one of two compressors malfunctions, it will not affect the operation of the remaining outdoor units.

Outdoor Units
If one of compressor fails, backup operation will be performed by the remaining compressors as emergency.*1

Indoor unit continuous operation
Each indoor unit is controlled individually on the system network. This allows all indoor units to continue to operate unaffected even if an error should occur at any indoor unit's on the VRF network system.

*1 Note: Backup operation may not be possible depending on the combination and trouble state.



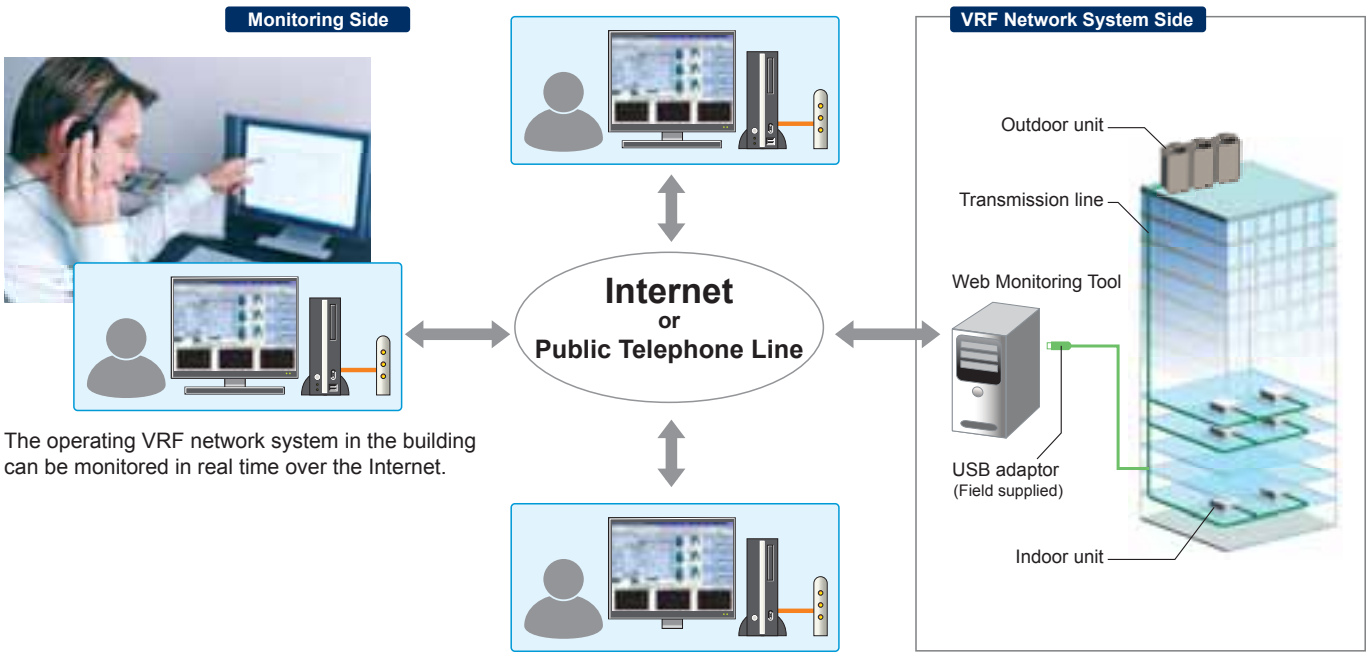
Adoption of blue fin heat exchanger

Corrosion resistant of the heat exchanger has been improved by the introduction of blue fin treatment to the outdoor unit's heat exchanger.

Blue fin heat exchanger

Remote monitoring

The Web Monitoring system allows you view system operation at all times over the internet ensuring trouble free operation.



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

From transportation of the product to address setting for commissioning, significant improvements have been made which reduce the cost of installation.

Easy Installation

Easily transported

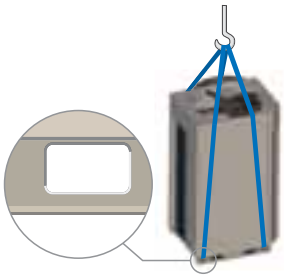
Light weight

20%
weight reduction
(Than Previous model)

Note: In the case of 14HP

Easily craned using lifting belt hooks

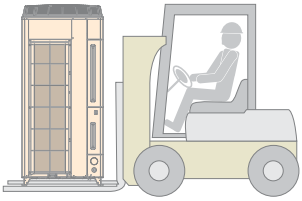
Design of outdoor unit allows for lifting straps to be used



Can be transported in a small elevator

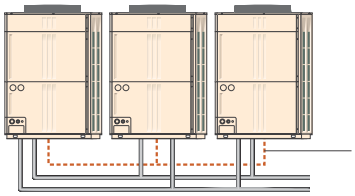
Transporting by forklift

Transport with forklift is possible.



Easy piping connection

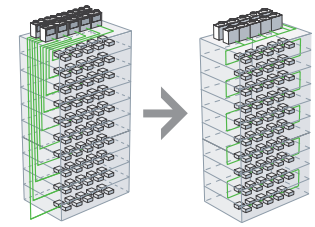
The need for an oil equalization pipe as required on the previous model has been removed.
The installation costs have been reduced by employing a simple 2 pipe connection



Eliminating oil equalization pipe

Simple signal line connection

Installation is made easier as the communication wiring can be connected continuously to any component.



Other wiring method

Simple wiring method

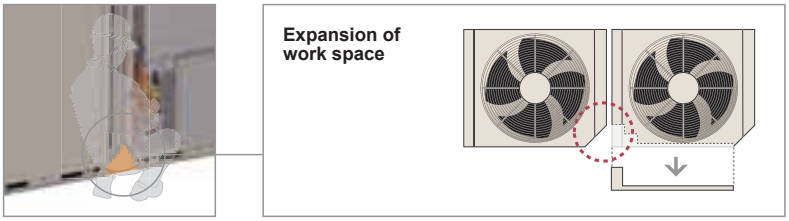
Up to maximum length 3,600m

V-II series

Note: In a multiple refrigerant system installation, Automatic addressing sequence cannot be initiated

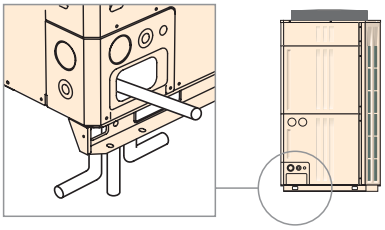
Easy access

By adopting a L-Shape front panel that can be removed, the work space for installation and service has been significantly expanded by this new design. For multiple installations, work is performed easily and efficiently even in a narrow space.



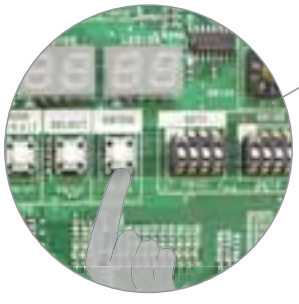
Four way piping connection

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

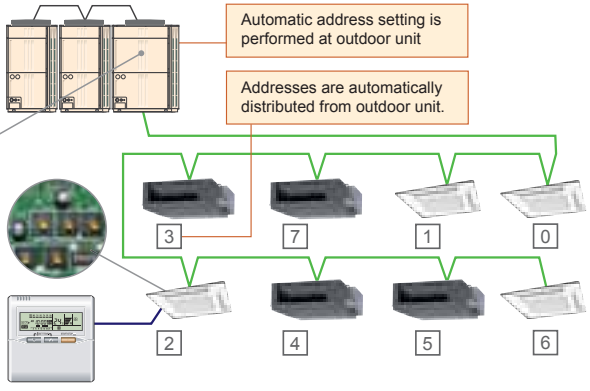


Automatic address setting

The address of each indoor unit can be automatically set by button switch of outdoor unit.



Press the pushbutton switch of outdoor unit.



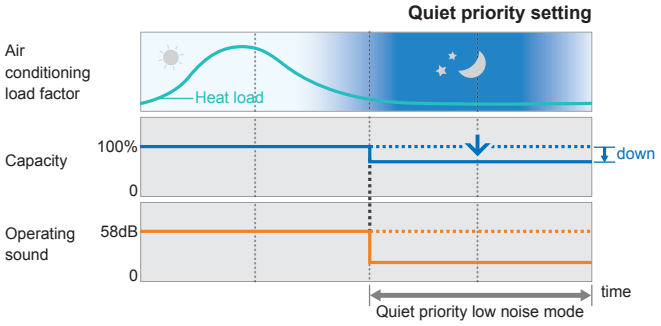
Manual address setting from indoor unit and remote controller is also possible.

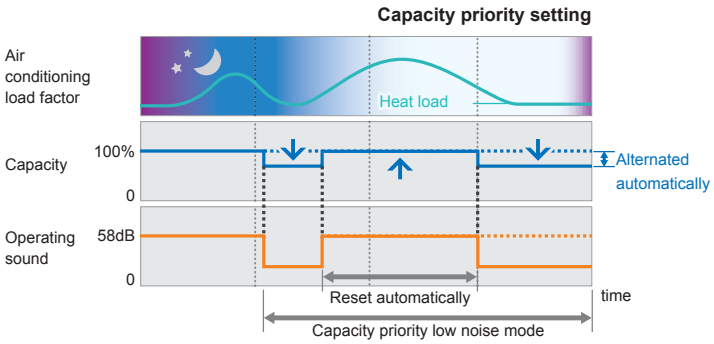
Low noise, easy operational settings, and comfortable temperature adjustment allows for V-II systems to be used in building air conditioning applications.

Comfort and Convenience

Quiet operation

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





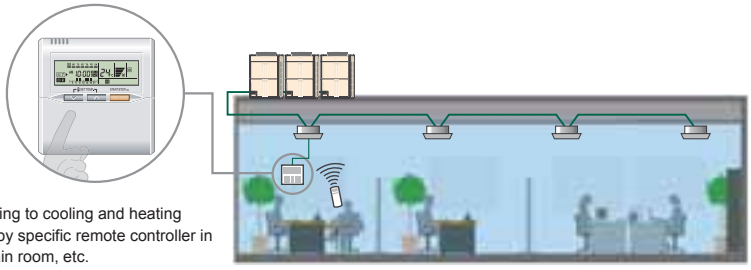
Low noise design
Compressor noise has been significantly reduced by shielding the compressor compartment.

Compressor compartment

Indoor unit
Low noise indoor unit lineup

Auto changeover function

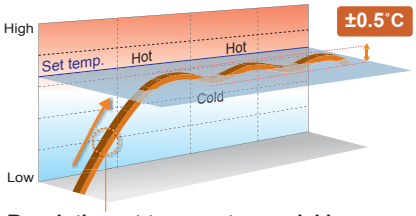
Auto changeover setting allows for the product to easily switch between cooling and heating modes regardless of the operation mode of other indoor units. This can be done via specific indoor unit with wired remote controller. This ensures comfortable operation all year round.



Switching to cooling and heating mode by specific remote controller in the main room, etc.

Precision refrigerant flow control

Precision and Smooth refrigerant flow control is achieved by using a DC Inverter control in conjunction with individual indoor unit electronic expansion valve control. This allows for a high precision comfortable temperature control of ±0.5°C.



Reach the set temperature quickly

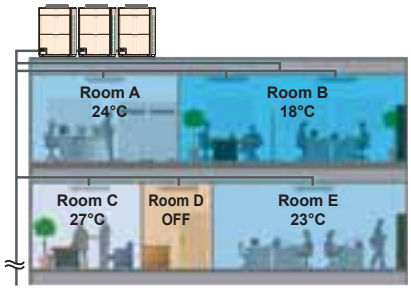
Thermal change of the room

*Simulation in heating operation.

Comfortable operation is achieved due to a small variation of room temperature

Individual air conditioning control

The desired temperature conditions of each room are met due to the Individual thermostat control of each indoor unit.



Simple central management function

7.5 inch large LCD Touch Panel Controller

Simple central control operation
Simple operation by icon display and color touch screen

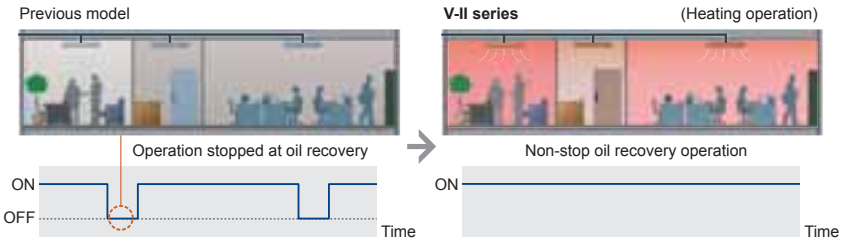
Yearly schedule function
Daily starting & stopping and temperature setting are managed.

Clock setting function
The clock of each individual controller is periodically corrected.

Schedule screen

Non-stop oil recovery operation

A comfortable room condition is maintained during oil recovery mode because the product continues to operate without stopping the cooling or heating operation.



Designed for Quick Service response,
Easy maintenance and Troubleshooting

Easy Service & Maintenance

Design for easy service and maintenance

Inspection and replacement of main parts are easier due to innovative construction and an LED operational display.

Consolidated electrical components make maintenance easy
Movable PCB panel that allows for easier maintenance work behind the PCB

Easy-to-read 7-segment LED display which explains operational and trouble status

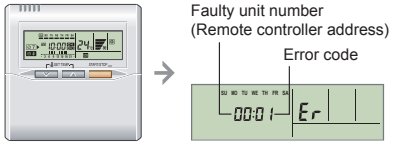
Maintenance of electrical components, valves, and compressor parts from the front is possible.

Split front panel
Split front panel allows for maintenance from top or bottom of the outdoor unit

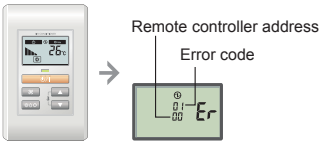
Error status can be checked easily via the indoor unit wired controller

An error code is displayed on a liquid crystal screen.

Wired Remote Controller



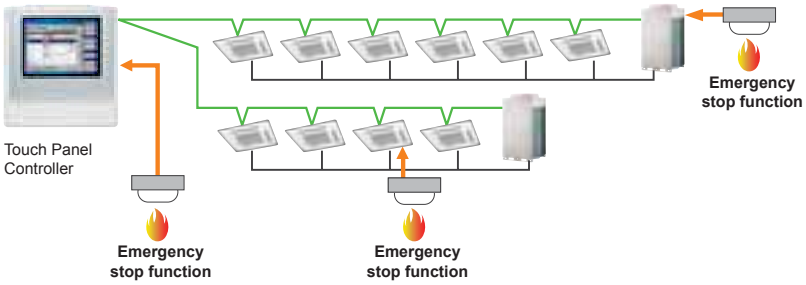
Simple Remote Controller



Emergency stop function

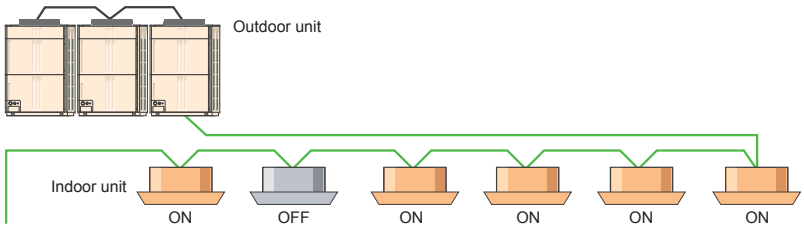
Emergency alarm can be received by indoor, outdoor units or Touch Panel Controller when they received it, all units will be stopped.

Note: In case of received Emergency alarm by
Indoor / outdoor unit : All units connected within same refrigerant system will be stopped.
Touch Panel Controller : all unit connected within VRF network system with Touch Panel Controller will be stopped.



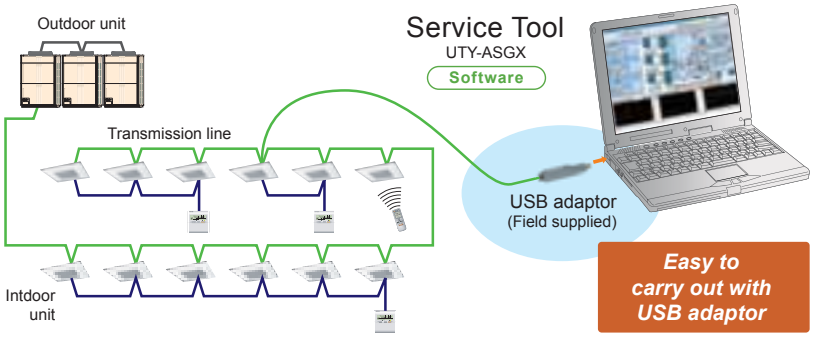
Continuous operation during maintenance

Non-stop operation
When servicing a specific indoor unit, maintenance can be performed even without turning off the other indoor units.



Trouble diagnosis by Service Tool

Suitable maintenance is possible by analysis of the operation data. Connection anywhere in the VRF network is easy.



Equipment Detail (Diagram)

Equipment Detail (List)

Outdoor Units Lineup

Space saving combination

22.4kW (8HP)

AJ*A72LALH
UNIT : AJ*A72LALH

28.0kW (10HP)

AJ*A90LALH
UNIT : AJ*A90LALH

33.5kW (12HP)

AJ*108LALH
UNIT : AJ*108LALH

55.9kW (20HP)

AJ*180LALH
UNIT : AJ*108/A72LALH

61.5kW (22HP)

AJ*198LALH
UNIT : AJ*108/A90LALH

67.0kW (24HP)

AJ*216LALH
UNIT : AJ*108/108LALH

90.0kW (32HP)

AJ*288LALH
UNIT : AJ*144/144LALH

95.0kW (34HP)

AJ*306LALH
UNIT : AJ*108/108/A90LALH

100.5kW (36HP)

AJ*324LALH
UNIT : AJ*108/108/108LALH

123.5kW (44HP)

AJ*396LALH
UNIT : AJ*144/144/108LALH

130.0kW (46HP)

AJ*414LALH
UNIT : AJ*144/144/126LALH

135.0kW (48HP)

AJ*432LALH
UNIT : AJ*144/144/144LALH

Energy efficiency combination

44.8kW (16HP)

AJ*144LALHH
UNIT : AJ*A72/A72LALH

62.4kW (22HP)

AJ*198LALHH
UNIT : AJ*126/A72LALH

67.2kW (24HP)

AJ*216LALHH
UNIT : AJ*A72/A72/A72LALH

89.8kW (32HP)

AJ*288LALHH
UNIT : AJ*108/108/A72LALH

95.9kW (34HP)

AJ*306LALHH
UNIT : AJ*126/108/A72LALH

102.4kW (36HP)

AJ*324LALHH
UNIT : AJ*126/126/A72LALH

- Extensive line up from 8HP to 48HP in 2HP increments
- Space saving combination and Energy efficiency combination available, which can be selected to suit any air conditioning needs
- Combinations other than the followings are not recommended.

40.0kW (14HP)

AJ*126LALH
UNIT : AJ*126LALH

45.0kW (16HP)

AJ*144LALH
UNIT : AJ*144LALH

50.4kW (18HP)

AJ*162LALH
UNIT : AJ*A90/A72LALH

73.5kW (26HP)

AJ*234LALH
UNIT : AJ*126/108LALH

78.5kW (28HP)

AJ*252LALH
UNIT : AJ*144/108LALH

85.0kW (30HP)

AJ*270LALH
UNIT : AJ*144/126LALH

107.0kW (38HP)

AJ*342LALH
UNIT : AJ*126/108/108LALH

112.0kW (40HP)

AJ*360LALH
UNIT : AJ*144/108/108LALH

118.5kW (42HP)

AJ*378LALH
UNIT : AJ*144/126/108LALH

72.8kW (26HP)

AJ*234LALHH
UNIT : AJ*A90/A72/A72LALH

78.3kW (28HP)

AJ*252LALHH
UNIT : AJ*108/A72/A72LALH

84.8kW (30HP)

AJ*270LALHH
UNIT : AJ*126/A72/A72LALH

113.5kW (40HP)

AJ*360LALHH
UNIT : AJ*126/126/108LALH

120.0kW (42HP)

AJ*378LALHH
UNIT : AJ*126/126/126LALH

125.0kW (44HP)

AJ*396LALHH
UNIT : AJ*144/126/126LALH

AJ* : AJY(FUJITSU), AJH(GENERAL)

Specifications

Space saving combination

Rating Capacity range	HP		8	10	12	14	16	18	20	22	24
											
Model name			AJ*A72LALH	AJ*A90LALH	AJ*108LALH	AJ*126LALH	AJ*144LALH	AJ*162LALH	AJ*180LALH	AJ*198LALH	AJ*216LALH
Unit 1 Unit 2 Unit 3			AJ*A72LALH	AJ*A90LALH	AJ*108LALH	AJ*126LALH	AJ*144LALH	AJ*A90LALH AJ*A72LALH	AJ*108LALH AJ*A72LALH	AJ*108LALH AJ*A90LALH	AJ*108LALH AJ*108LALH
Maximum Connectable Indoor Unit*1			15	16	17	21	24	32	32	32	35
Indoor unit connectable capacity	Cooling	kW	11.2-33.6	14.0-42.0	16.8-50.2	20.0-60.0	22.4-67.2	25.2-75.6	28.0-83.9	30.8-92.3	33.5-100.5
Power source			3-phase 4 wire, 400 V, 50Hz								
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.4	55.9	61.5	67.0
	Heating		25.0	31.5	37.5	45.0	50.0	56.5	62.5	69.0	75.0
Input power	Cooling	kW	5.51	7.73	9.62	11.53	14.17	13.24	15.13	17.35	19.24
	Heating		5.72	7.83	9.28	11.45	12.60	13.55	15.00	17.11	18.56
EER	Cooling	W/W	4.07	3.62	3.48	3.47	3.18	3.81	3.69	3.54	3.48
COP	Heating		4.37	4.02	4.04	3.93	3.97	4.17	4.17	4.03	4.04
Air flow rate	High	m^3/h	11,100	11,100	11,100	13,000	13,000	11,100 x 2	11,100 x 2	11,100 x 2	11,100 x 2
Sound pressure level*2	Cooling	dB (A)	56	58	58	60	61	60	60	61	61
	Heating		58	59	60	61	61	62	62	63	63
Maximum external static pressure	Pa		80	80	80	80	80	80	80	80	80
Compressor motor output	kW		3.9	3.9	3.9 + 4.5	3.9 + 4.5	3.9 + 4.5	3.9 x 2	3.9 x 2 + 4.5	3.9 x 2 + 4.5	3.9 x 2 + 4.5 x 2
Heat exchanger fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
Dimensions	Height	mm	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	Width	mm	930	930	930	1,240	1,240	930 x 2	930 x 2	930 x 2	930 x 2
	Depth	mm	765	765	765	765	765	765	765	765	765
Weight	kg		220	220	275	296	296	220 + 220	275 + 220	275 + 220	275 + 275
Refrigerant charge	kg		11.2	11.2	11.8	11.8	11.8	11.2 x 2	11.8 + 11.2	11.8 + 11.2	11.8 x 2
Connection pipe diameter	Liquid	mm	12.70	12.70	12.70	12.70	12.70	15.88	15.88	15.88	15.88
	Gas		22.20	22.20	28.58	28.58	28.58	28.58	28.58	34.92	34.92
Operation range	Cooling	˚C	-15 to 46	-15 to 46	-15 to 46	-15 to 46	-15 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
	Heating		-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

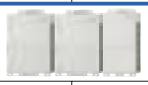
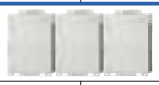
Energy efficiency combination

Rating Capacity range	HP		16	22	24	26	28	30
								
Model name			AJ*144LALHH	AJ*198LALHH	AJ*216LALHH	AJ*234LALHH	AJ*252LALHH	AJ*270LALHH
Unit 1 Unit 2 Unit 3			AJ*A72LALH AJ*A72LALH	AJ*126LALH AJ*A72LALH	AJ*A72LALH AJ*A72LALH AJ*A72LALH	AJ*A90LALH AJ*A72LALH AJ*A72LALH	AJ*108LALH AJ*A72LALH AJ*A72LALH	AJ*126LALH AJ*A72LALH AJ*A72LALH
Maximum Connectable Indoor Unit*1			30	33	36	39	42	45
Indoor unit connectable capacity	Cooling	kW	22.4-67.2	31.2-93.6	33.6-100.8	36.4-109.2	39.2-117.4	42.4-127.2
Power source			3-phase 4 wire, 400 V, 50Hz					
Capacity	Cooling	kW	44.8	62.4	67.2	72.8	78.3	84.8
	Heating		50.0	70.0	75.0	81.5	87.5	95.0
Input power	Cooling	kW	11.02	17.04	16.53	18.75	20.64	22.55
	Heating		11.44	17.17	17.16	19.27	20.72	22.89
EER	Cooling	W/W	4.07	3.66	4.07	3.88	3.79	3.76
COP	Heating		4.37	4.08	4.37	4.23	4.22	4.15
Air flow rate	High	m^3/h	11,100 x 2	13,000 + 11,100	11,100 x 3	11,100 x 3	11,100 x 3	13,000 + 11,000 x 2
Sound pressure level*2	Cooling	dB (A)	59	61	61	62	62	63
	Heating		59	62	61	62	63	63
Maximum external static pressure	Pa		80	80	80	80	80	80
Compressor motor output	kW		3.9 x 2	3.9 x 2 + 4.5	3.9 x 3	3.9 x 3	3.9 x 3 + 4.5	3.9 x 3 + 4.5
Heat exchanger fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
Dimensions	Height	mm	1,690	1,690	1,690	1,690	1,690	1,690
	Width	mm	930 x 2	930 + 1,240	930 x 3	930 x 3	930 x 3	930 x 2 + 1,240
	Depth	mm	765	765	765	765	765	765
Weight	kg		220 + 220	296 + 220	220 + 220 + 220	220 + 220 + 220	275 + 220 + 220	296 + 220 + 220
Refrigerant charge	kg		11.2 x 2	11.8 + 11.2	11.2 x 3	11.2 x 3	11.8 + 11.2 x 2	11.8 + 11.2 x 2
Connection pipe diameter	Liquid	mm	12.70	15.88	15.88	15.88	15.88	19.05
	Gas		28.58	34.92	34.92	34.92	34.92	34.92
Operation range	Cooling	˚C	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
	Heating		-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

AJ* : AJY(FUJITSU), AJH(GENERAL)

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.
When cooling operation will be conducted at outdoor air temperature below -5°C,
the outdoor unit must be installed in a position that is higher than or equal to those of indoor units.

26	28	30	32	34	36	38	40	42	44	46	48
											
AJ*234LALH	**AJ*252LALH**	**AJ*270LALH**	**AJ*288LALH**	**AJ*306LALH**	**AJ*324LALH**	**AJ*342LALH**	**AJ*360LALH**	**AJ*378LALH**	**AJ*396LALH**	**AJ*414LALH**	**AJ*432LALH**
AJ*126LALH AJ*108LALH	AJ*144LALH AJ*108LALH	AJ*144LALH AJ*126LALH	AJ*144LALH AJ*144LALH	AJ*108LALH AJ*108LALH AJ*A90LALH	AJ*108LALH AJ*108LALH AJ*108LALH	AJ*126LALH AJ*108LALH AJ*108LALH	AJ*144LALH AJ*108LALH AJ*108LALH	AJ*144LALH AJ*126LALH AJ*108LALH	AJ*144LALH AJ*144LALH AJ*108LALH	AJ*144LALH AJ*144LALH AJ*126LALH	AJ*144LALH AJ*144LALH AJ*144LALH
39	42	45	48	48	48	48	48	48	48	48	48
36.8-110.3	39.3-117.8	42.5-127.5	45.0-135.0	47.5-142.5	50.3-150.8	53.5-160.5	56.0-168.0	59.3-177.8	61.8-185.3	65.0-195.0	67.5-202.5
3-phase 4 wire, 400 V, 50Hz											
73.5	78.5	85.0	90.0	95.0	100.5	107.0	112.0	118.5	123.5	130.0	135.0
82.5	87.5	95.0	100.0	106.5	112.5	120.0	125.0	132.5	137.5	145.0	150.0
21.15	23.79	25.70	28.34	26.97	28.86	30.77	33.41	35.32	37.96	39.87	42.51
20.73	21.88	24.05	25.20	26.39	27.84	30.01	31.16	33.33	34.48	36.65	37.80
3.48	3.30	3.31	3.18	3.52	3.48	3.48	3.35	3.36	3.25	3.26	3.18
3.98	4.00	3.95	3.97	4.04	4.04	4.00	4.01	3.98	3.99	3.96	3.97
13,000 + 11,100	13,000 + 11,100	13,000 x 2	13,000 x 2	11,100 x 3	11,100 x 3	13,000 + 11,100 × 2	13,000 + 11,100 × 2	13,000 × 2 + 11,100	13,000 × 2 + 11,100	13,000 x 3	13,000 x 3
62	63	64	64	63	63	64	64	65	65	65	66
64	64	64	64	64	65	65	65	65	65	66	66
80	80	80	80	80	80	80	80	80	80	80	80
3.9 x 2 + 4.5 x 2	3.9 x 2 + 4.5 x 2	3.9 x 2 + 4.5 x 2	3.9 x 2 + 4.5 x 2	3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3
Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
930 + 1,240	930 + 1,240	1,240 x 2	1,240 x 2	930 x 3	930 x 3	930 x 2 + 1,240	930 x 2 + 1,240	930 + 1,240 x 2	930 + 1,240 x 2	1,240 x 3	1,240 x 3
765	765	765	765	765	765	765	765	765	765	765	765
296 + 275	296 + 275	296 + 296	296 + 296	275 + 275 + 220	275 + 275 + 275	296 + 275 + 275	296 + 275 + 275	296 + 296 + 275	296 + 296 + 275	296 + 296 + 296	296 + 296 + 296
11.8 x 2	11.8 x 2	11.8 x 2	11.8 x 2	11.8 x 2 + 11.2	11.8 x 3	11.8 x 3	11.8 x 3	11.8 x 3	11.8 x 3	11.8 x 3	11.8 x 3
15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
34.92	34.92	34.92	34.92	34.92	41.27	41.27	41.27	41.27	41.27	41.27	41.27
-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

32	34	36	40	42	44
					
AJ*288LALHH	**AJ*306LALHH**	**AJ*324LALHH**	**AJ*360LALHH**	**AJ*378LALHH**	**AJ*396LALHH**
AJ*108LALH AJ*108LALH AJ*A72LALH	AJ*126LALH AJ*108LALH AJ*A72LALH	AJ*126LALH AJ*126LALH AJ*A72LALH	AJ*126LALH AJ*126LALH AJ*108LALH	AJ*126LALH AJ*126LALH AJ*126LALH	AJ*144LALH AJ*126LALH AJ*126LALH
48	48	48	48	48	48
44.7-134.1	48.0-143.8	51.2-153.6	56.8-170.2	60.0-180.0	62.5-187.5
3-phase 4 wire, 400 V, 50Hz					
89.4	95.9	102.4	113.5	120.0	125.0
100.0	107.5	115.0	127.5	135.0	140.0
24.75	26.66	28.57	32.68	34.59	37.23
24.28	26.45	28.62	32.18	34.35	35.50
3.61	3.60	3.58	3.47	3.47	3.36
4.12	4.06	4.02	3.96	3.93	3.94
11,100 x 3	13,000 + 11,100 x 2	13,000 x 2 + 11,100	13,000 x 2 + 11,100	13,000 x 3	13,000 x 3
62	63	64	64	65	65
64	64	65	65	66	66
80	80	80	80	80	80
3.9 × 3 + 4.5 × 2	3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3
Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
1,690	1,690	1,690	1,690	1,690	1,690
930 × 3	930 x 2 + 1,240	930 + 1,240 x 2	930 + 1,240 x 2	1,240 x 3	1,240 x 3
765	765	765	765	765	765
275 + 275 + 220	296 + 275 + 220	296 + 296 + 220	296 + 296 + 275	296 + 296 + 296	296 + 296 + 296
11.8 × 2 + 11.2	11.8 x 2 + 11.2	11.8 x 2 + 11.2	11.8 x 3	11.8 x 3	11.8 x 3
19.05	19.05	19.05	19.05	19.05	19.05
34.92	34.92	41.27	41.27	41.27	41.27
-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

*1 Minimum connectable indoor unit number is 2.
However ARXC72 and ARXC90 can be used signal connection.

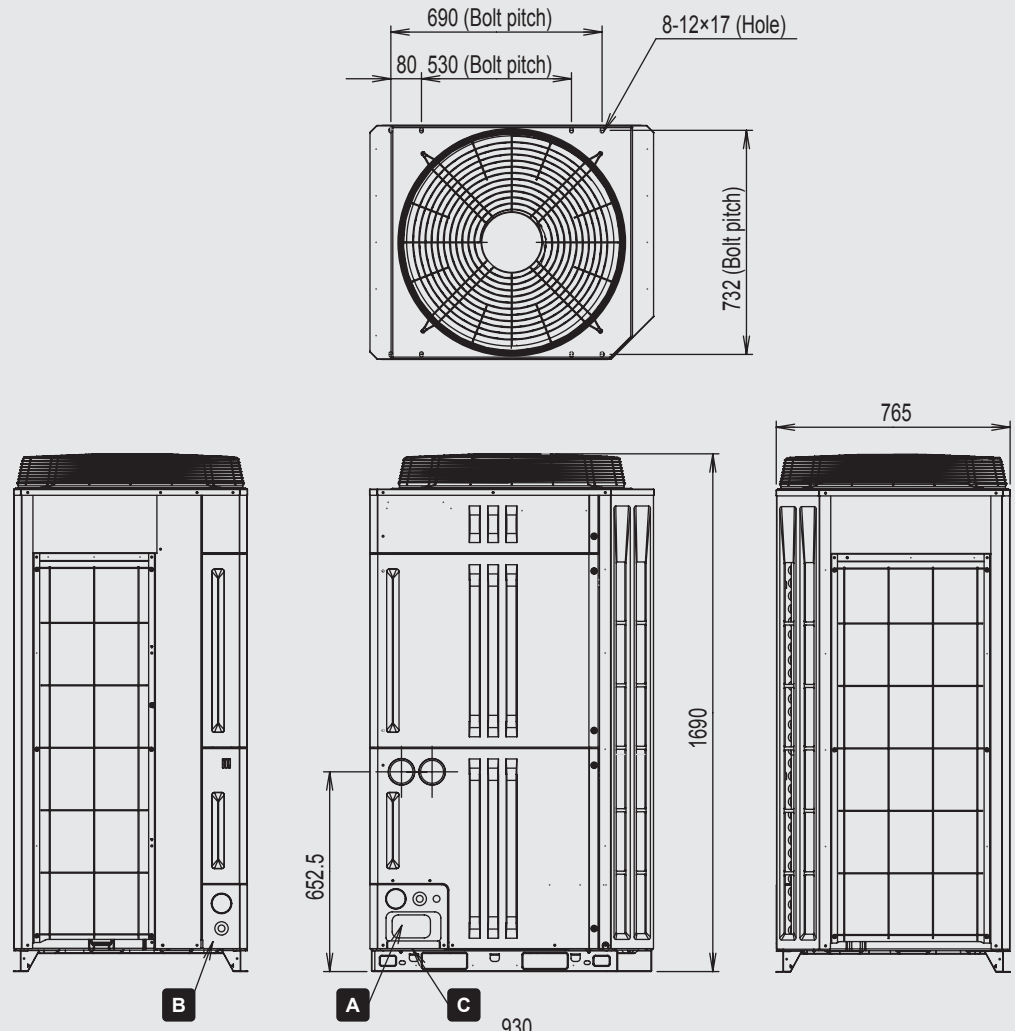
*2 The noise value is the value when measured in an anechoic room.
When measured in the actual installed state, surrounding noise and reflections are received and the measured value is usually larger than the indicated value.

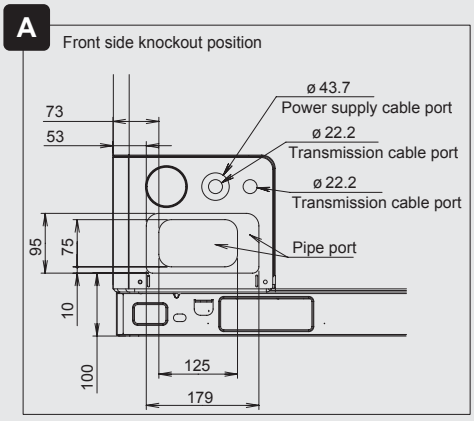
Dimensions

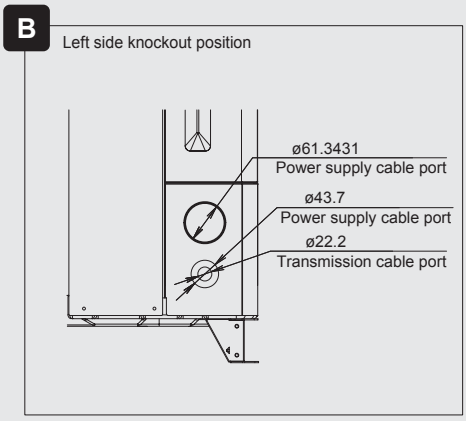
8, 10, 12HP

AJ*A72LALH / AJ*A90LALH / AJ*108LALH

(Unit : mm)





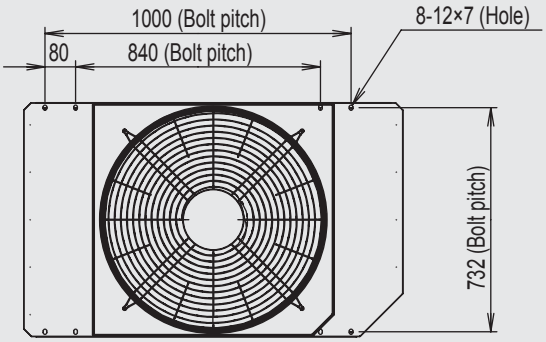


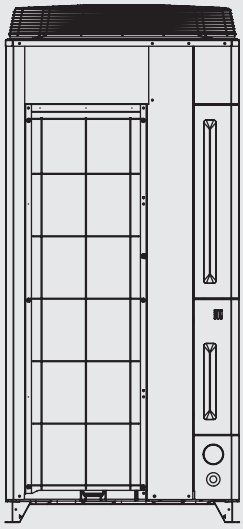
AJ* : AJY(FUJITSU), AJH(GENERAL)

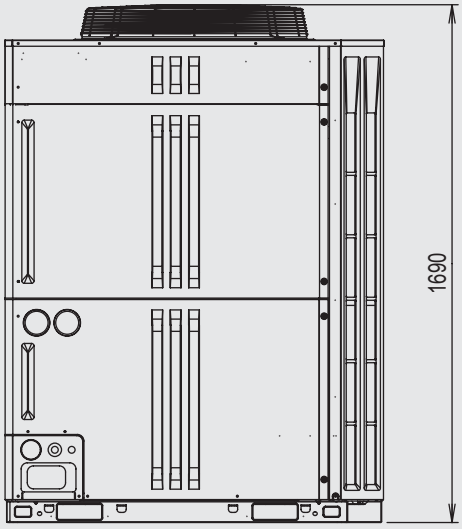
14, 16HP

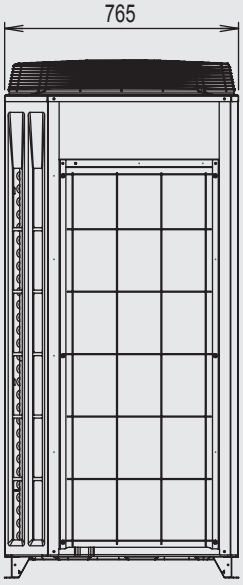
AJ*126LALH / AJ*144LALH

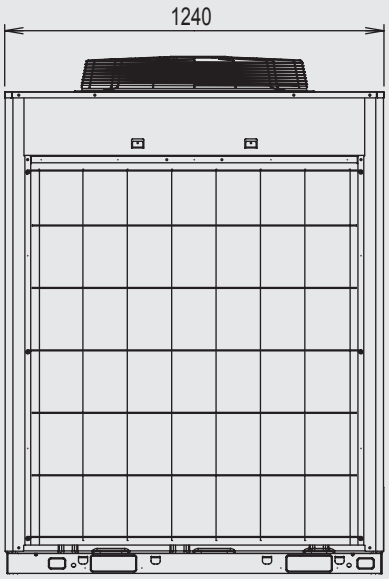
(Unit : mm)



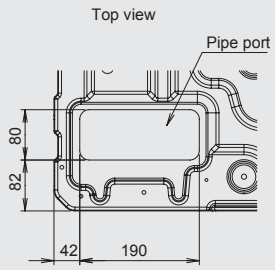








C Bottom side knockout position



Indoor Unit Lineup

12 Types, 55 Models, Capacity range from 2.2kW to 25.0kW

Capacity range (kW)	2.2	2.8	3.6	4.5	5.6
Model code	7	9	12	14	18
Compact Cassette	 AUXB07LALH	 AUXB09LALH	 AUXB12LALH	 AUXB14LALH	 AUXB18LALH
Cassette					 AUXD18LALH
Compact Duct	 ARXB07LALH	 ARXB09LALH	 ARXB12LALH	 ARXB14LALH	 ARXB18LALH
Slim Duct NEW **(Drain pump internal)**	NEW  ARXD07LATH	NEW  ARXD09LATH	NEW  ARXD12LATH	NEW  ARXD14LATH	NEW  ARXD18LATH
Low Static Pressure Duct					
Duct					
High Static Pressure Duct					
Floor / Ceiling			NEW  AB*A12LBTH	NEW  AB*A14LBTH	NEW  AB*A18LBTH
Ceiling					
Compact Wall Mounted (EEV internal)	 AS*A07LACH	 AS*A09LACH	 AS*A12LACH	 AS*A14LACH	
Compact Wall Mounted (EEV external)	 AS*E07LACH	 AS*E09LACH	 AS*E12LACH	 AS*E14LACH	
	With this model, connection of EV kit is necessary.				
Wall Mounted					NEW  AS*A18LACH

AB* : ABY(FUJITSU), ABH(GENERAL) AS* : ASY(FUJITSU), ASH(GENERAL)

Comprehensive range of indoor units of variety design and capacity ranges available which can be selected to suit any air conditioning needs.

7.1	9.0	11.2	12.5	14.0	18.0	22.4	25.0
24	30	36	45	54	60	72	90
 AUXB24LALH							
 AUXD24LALH	 AUXA30LALH	 AUXA36LALH	 AUXA45LALH	 AUXA54LALH			
NEW  ARXD24LATH							
 ARXB24LATH	 ARXB30LATH	 ARXB36LATH	 ARXB45LATH				
 ARXA24LATH	 ARXA30LATH	 ARXA36LATH	 ARXA45LATH				
		 ARXC36LATH	 ARXC45LATH		 ARXC60LATH	 ARXC72LATH	 ARXC90LATH
NEW  AB*A24LBTH							
	NEW  AB*A30LBTH	NEW  AB*A36LBTH	NEW  AB*A45LBTH	NEW  AB*A54LBTH			
NEW  AS*A24LACH	NEW  AS*A30LACH						

Compact Cassette

Models

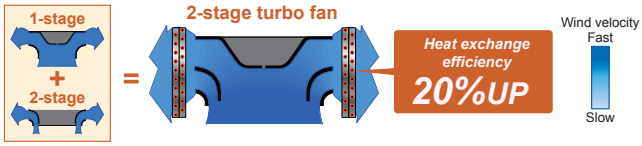
AUXB07LALH
AUXB09LALH
AUXB12LALH
AUXB14LALH
AUXB18LALH
AUXB24LALH

Compact size panel design
that fits standard ceiling panel (600x600mm)

2-stage turbo fan

High efficiency design by 2 stage structure

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



Previous turbo fan

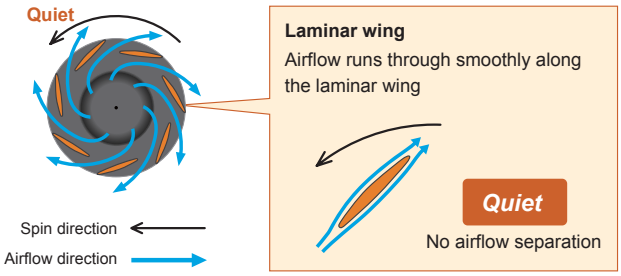
In the case of a previous fan, the air outlet range was narrow as the airflow moved to the motor side which meant the velocity of air passing through the heat exchanger was uneven.

Quiet quality

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

Designed by CFD-analysis (fluid) simulations

Adoption of laminar wing



Specifications

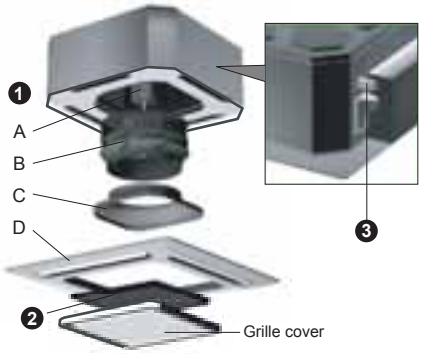
Model name			AUXB07LALH	AUXB09LALH	AUXB12LALH	AUXB14LALH	AUXB18LALH	AUXB24LALH
Power source			230V ~, 50Hz					
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		2.8	3.2	4.1	5.0	6.3	8.0
Input power		W	25	25	29	35	36	84
Airflow rate	High	m³/h	540	550	600	680	710	1,030
	Med		450	450	530	590	580	830
	Low		350	350	390	390	400	450
Sound pressure level	High	dB(A)	34	35	37	38	41	50
	Med		30	30	34	34	35	44
	Low		25	25	27	27	27	30
Dimensions (H x W x D)		mm	245 x 570 x 570					
Weight		kg	15				17	
Connection pipe diameter	Liquid (Flare)	mm	ø6.35				ø9.52	
	Gas (Flare)		ø12.70				ø15.88	
	Drain		ø25 (I.D) ; ø32 (O.D.)					
Grille(option)	Model name		UTG-UF*C-W					
	Dimensions (H x W x D)	mm	50 x 700 x 700					
	Weight	kg	2.6					

F* : FY (FUJITSU) ; FG(GENERAL)

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating : Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

Improvement of the airflow distribution



❶ Maintenance of fan motor and fan

Maintenance of the fan motor and fan can be done easily after taking off the panel as the bell mouth of the fan can be removed easily.

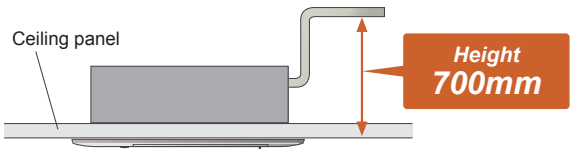
A : Fan motor B : 2-stage turbo fan
C : Bell-mouth D : Panel

❷ Long life filter : standard equipment

❸ Adaptation of transparent drainage parts

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

High lift drain pump



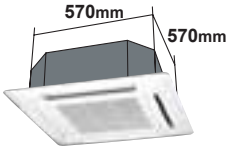
High ceiling mode

The compact cassette can be installed up to a height of 3.0m (12/14/18/24).

Model code	The maximum height from floor to ceiling (m)	
	Standard mode	**High ceiling mode**
07	2.7	—
09	2.7	—
12	2.7	3.0
14	2.7	3.0
18	2.7	3.0
24	2.7	3.0

Compact design

Worlds first 24,000Btu model in the compact cassette category
(Easy installation by taking off ceiling panel of 600 x 600 size)

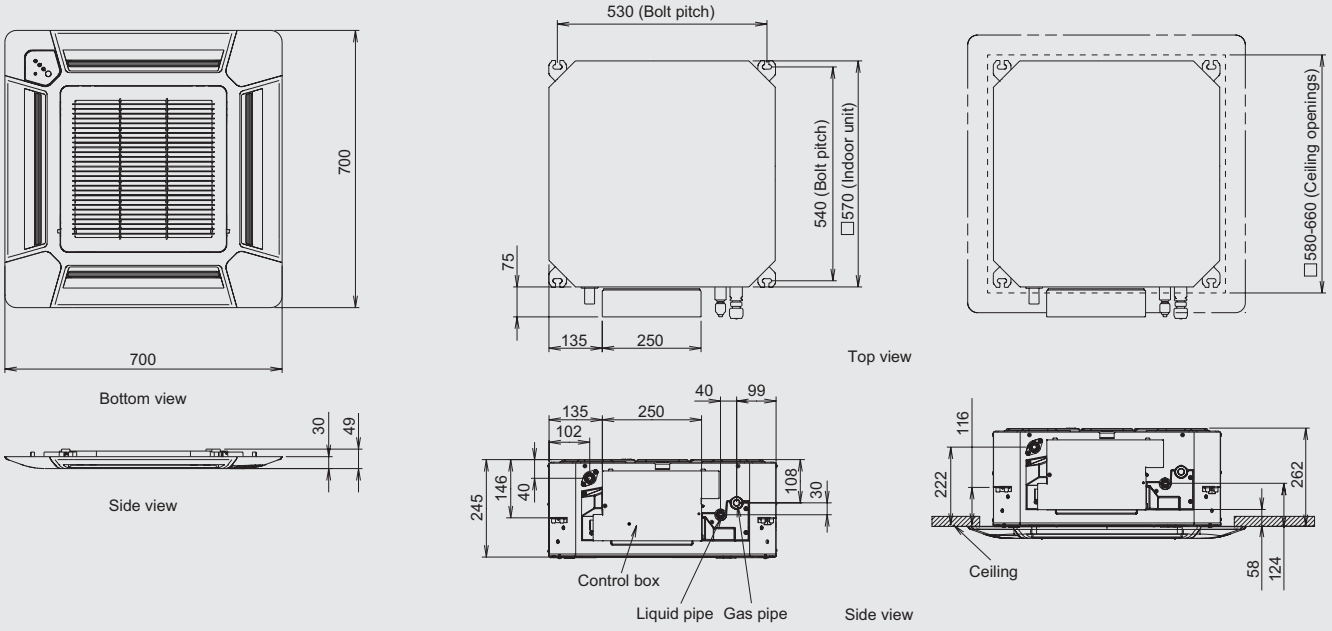


Optional parts

Air Outlet Shutter Plate : UTR-YDZB
Insulation Kit for High Humidity : UTZ-KXGC
Fresh Air Intake Kit : UTZ-VXAA

Dimensions (Unit : mm)

Models: AUXB07 / AUXB09 / AUXB12 / AUXB14 / AUXB18 / AUXB24



Cassette

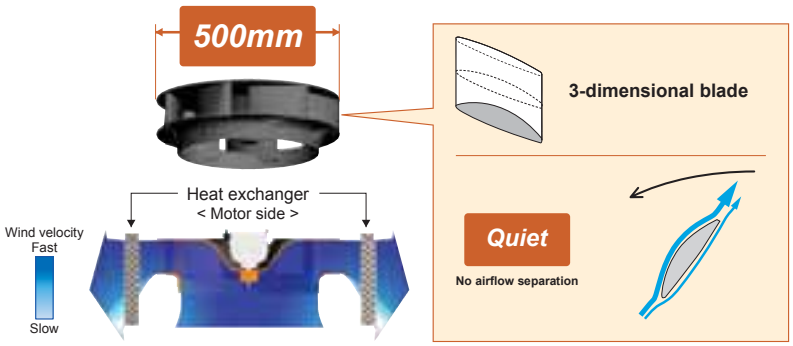
Models

AUXD18LALH
AUXD24LALH
AUXA30LALH
AUXA36LALH
AUXA45LALH
AUXA54LALH

Powerful, wide airflow and quiet operation

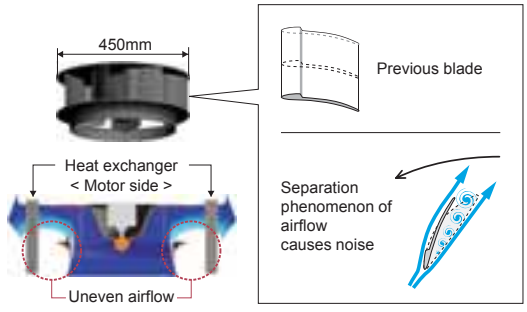
High efficiency turbo fan with 3-dimensional blade

High efficiency airflow distribution has been achieved by the introduction of a 3 dimensional blade which increases the air passing over the heat exchanger.



Previous turbo fan

Air passing through the heat exchanger was uneven and the air would only flow close to the ceiling.



: Spin direction : Airflow direction : Turbulent flow noise

Specifications

Model name			AUXD18LALH	AUXD24LALH	AUXA30LALH	AUXA36LALH	AUXA45LALH	AUXA54LALH
Power source			230V ~, 50Hz					
Capacity	Cooling	kW	5.6	7.1	9.0	11.2	12.5	14.0
	Heating		6.3	8.0	10.0	12.5	14.0	16.0
Input power		W	39	46	59	80	99	119
Airflow rate	High	m³/h	1,150	1,280	1,600	1,800	1,900	2,000
	Med		940	1,040	1,300	1,300	1,370	1,370
	Low		870	870	1,100	1,100	1,100	1,100
Sound pressure level	High	dB(A)	36	38	40	44	46	47
	Med		30	33	38	38	39	39
	Low		29	29	33	33	33	33
Dimensions (H x W x D)		mm	246 x 840 x 840		288 x 840 x 840			
Weight		kg	23		27			
Connection pipe diameter	Liquid (Flare)	mm	ø9.52					
	Gas (Flare)		ø15.88			ø19.05		
	Drain		ø25 (I.D.) ; ø32 (O.D.)					
Grille(option)	Model name		UTG-UG*A-W					
	Dimensions (H x W x D)	mm	50 x 950 x 950					
	Weight	kg	5.5					

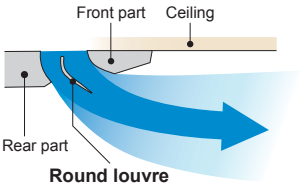
G* : GY(FUJITSU) ; GG(GENERAL)

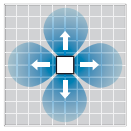
Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating : Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

Improvement of the airflow distribution

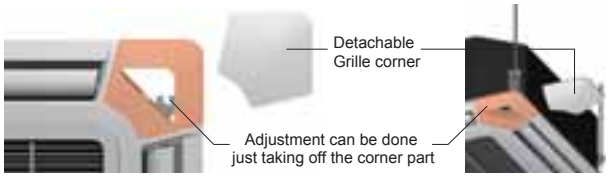
The louvre design distributes air leaving a space between the chassis and the ceiling allowing far and wide air flow distribution.



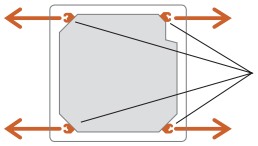

Bottom view


Much less temperature irregularity happens by spreading airflow widely

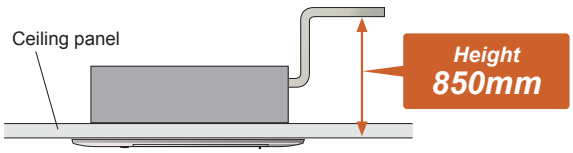
Adjustment of hanger position is possible after installation



One way aperture installation



High lift drain pump



High ceiling mode

This cassette can be installed up to a height of 4.2m (36/45/54).

Model code	The maximum height from floor to ceiling (m)	
	Standard mode	**High ceiling mode**
18	3.0	3.5
24	3.0	3.5
30	3.2	3.6
36	3.2	4.2
45	3.2	4.2
54	3.2	4.2

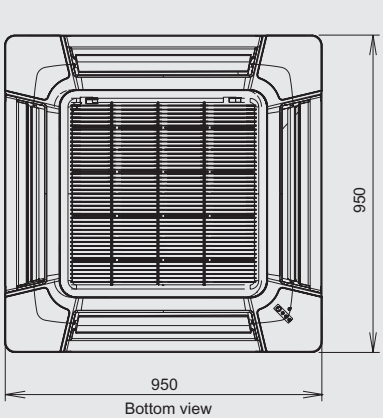
Optional parts

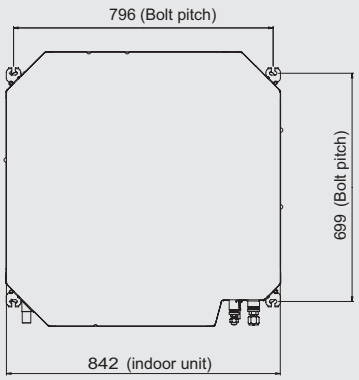
IR Receiver Kit :	UTY-LRH*B1
Air Outlet Shutter Plate :	UTR-YDZC
Panel Spacer :	UTG-BGYA-W
Insulation Kit for High Humidity :	UTZ-KXGA / UTZ-KXGB
Wide Panel :	UTG-AGYA-W
Fresh Air Intake Kit :	UTZ-VXGA

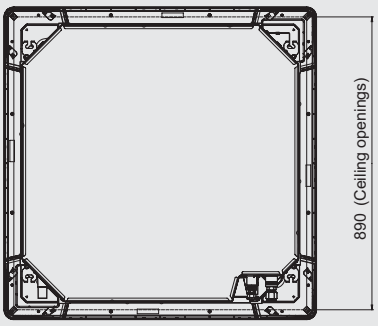
H*: HY(FUJITSU), HG(GENERAL)

Dimensions (Unit : mm) ( ) : AUXD18 / AUXD24

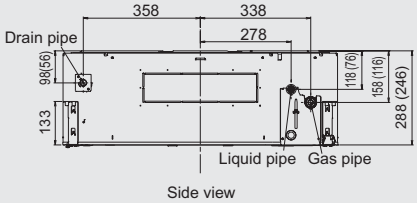
Models: AUXD18LALH / AUXD24LALH (Slim type)
AUXA30LALH / AUXA36LALH / AUXA45LALH / AUXA54LALH







Top view



Side view

Compact Duct

Models

ARXB07LALH
ARXB09LALH
ARXB12LALH
ARXB14LALH
ARXB18LALH

ARXB07LALH
ARXB09LALH

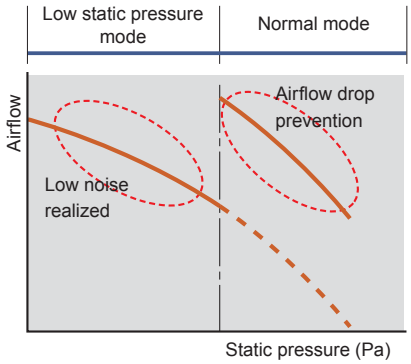
ARXB12LALH
ARXB14LALH
ARXB18LALH

Small and compact indoor unit suitable for many applications

Low noise level

A low noise level has been achieved for each capacity

Model		7	9	12	14	18
Static pressure range	Pa	0 to 50				
Noise level (Low speed)	dB(A)	24	27	25	30	30



Specifications

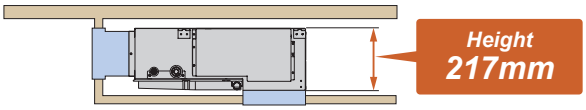
Model name			ARXB07LALH	ARXB09LALH	ARXB12LALH	ARXB14LALH	ARXB18LALH
Power source			230V ~, 50Hz				
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6
	Heating		2.8	3.2	4.0	5.0	6.3
Input power		W	46	55	63	90	96
Airflow rate	High	m³/h	370	440	590	800	890
	Med		310	370	500	750	810
	Low		280	340	450	700	730
Static pressure range		Pa	0 to 50	0 to 50	0 to 50	0 to 50	0 to 50
Standard static pressure			25	25	25	25	25
Sound pressure level	High	dB(A)	29	31	30	33	36
	Med		26	29	28	32	34
	Low		24	27	25	30	30
Dimensions (H x W x D)		mm	217 x 663 x 595		217 x 953 x 595		
Weight		kg	18		25		
Connection pipe diameter	Liquid (Flare)	mm	ø6.35				ø9.52
	Gas (Flare)		ø12.70				ø15.88
	Drain		ø25 (I.D.) ; ø32 (O.D.)				

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating : Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

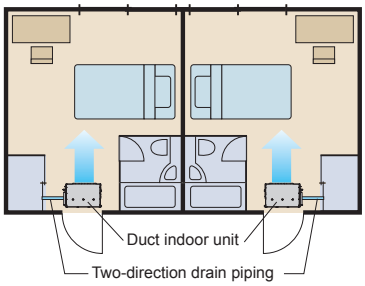
Compact design

Ultra-slim duct air conditioner for easy installation



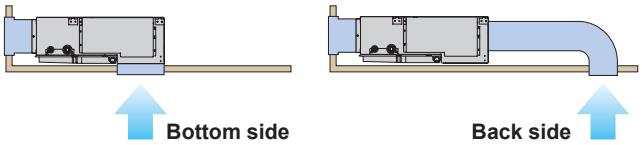
Slim size (217mm) allows installation even where the space behind the ceiling is narrow.

Two-direction drain piping



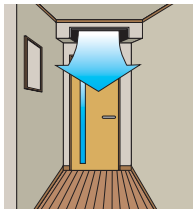
Air-intake

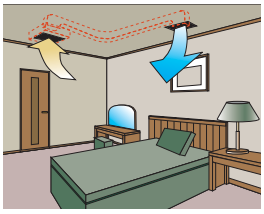
Air intake direction can be selected to match the installation site.



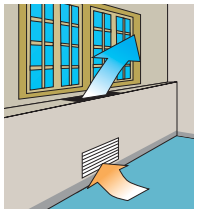
Flexible installation

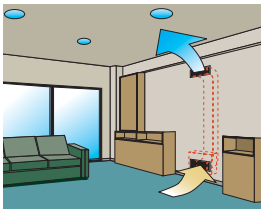
Ceiling concealed





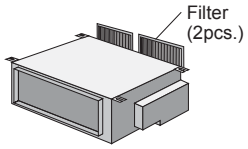
Floor concealed



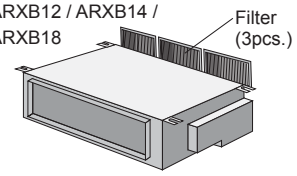


Filter (Accessory)

ARXB07 / ARXB09



ARXB12 / ARXB14 / ARXB18



Optional parts

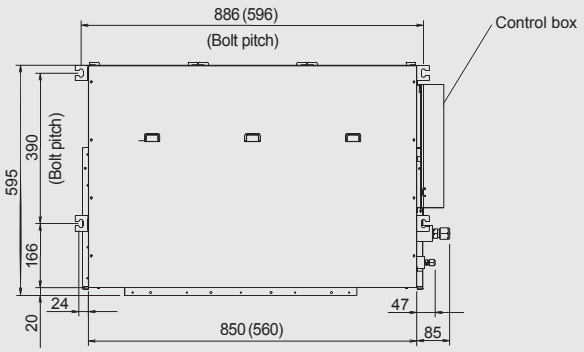
Remote Sensor Unit : UTD-RS100
IR Receiver Unit : UTB-*WB
Drain Pump Unit : UTZ-PX1BBA

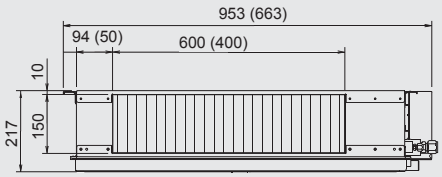
*WB : YWB, TWB

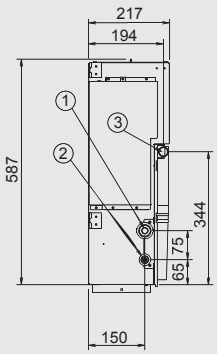
Dimensions (Unit : mm) ( ) : AR7 / AR9

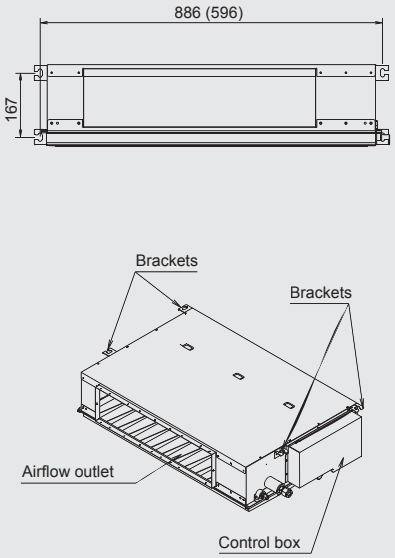
Models: ARXB07 / ARXB09 / ARXB12 / ARXB14 / ARXB18

*Service accessibility must be allowed for when installing the product.
Please consult the installation manual for the necessary service access size.









① Refrigerant piping flare connection (Gas)
② Refrigerant piping flare connection (Liquid)
③ Drain piping connection

Slim Duct

Models (Drain pump internal model)

ARXD07LATH
ARXD09LATH
ARXD12LATH
ARXD14LATH
ARXD18LATH
ARXD24LATH

Slim design and wide range of static pressure for flexible installation.

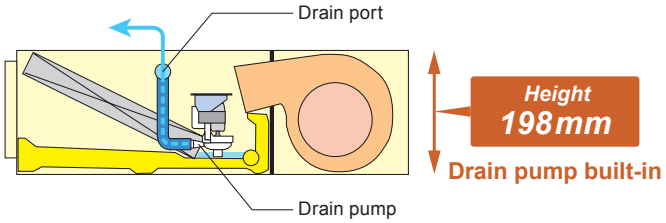
ARXD07LATH ARXD09LATH ARXD12LATH ARXD14LATH

ARXD18LATH

ARXD24LATH

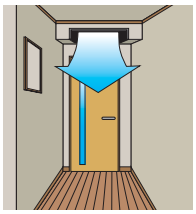
Slim design

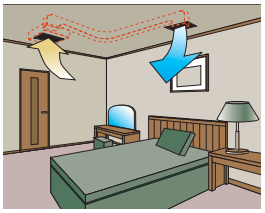
This model is slim design, it can install at the place where a ceiling is narrow.



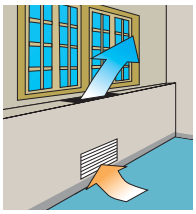
Flexible installation

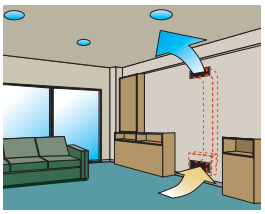
Ceiling concealed





Floor concealed





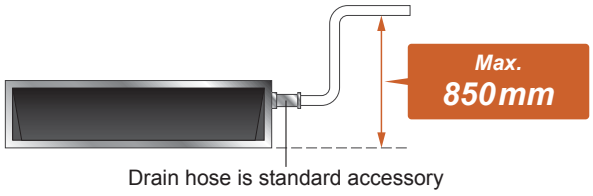
Specifications

Model name			ARXD07LATH	ARXD09LATH	ARXD12LATH	ARXD14LATH	ARXD18LATH	ARXD24LATH
Power source			230V ~, 50Hz					
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		2.8	3.2	4.0	5.0	6.3	8.0
Input power		W	44	50	54	92	83	122
Airflow rate	High	m³/h	550	600	600	800	940	1,330
	Med		490	550	510	710	840	1,240
	Low		440	480	450	610	750	1,100
Static pressure range		Pa	0 to 90	0 to 90	0 to 90	0 to 90	0 to 90	0 to 50
Standard static pressure			25	25	25	25	25	25
Sound pressure level	High	dB(A)	28	29	30	34	34	35
	Med		25	26	27	32	32	32
	Low		22	24	24	28	28	29
Dimensions (H x W x D)		mm	198 x 700 x 620				198 x 900 x 620	198 x 1,100 x 620
Weight		kg	18		19		23	27
Connection pipe diameter	Liquid (Flare)	mm	ø6.35				ø9.52	
	Gas (Flare)		ø12.70				ø15.88	
	Drain		ø22 (I.D.) ; ø26 (O.D.) : VP20					

Note : Specifications are based on the following conditions.

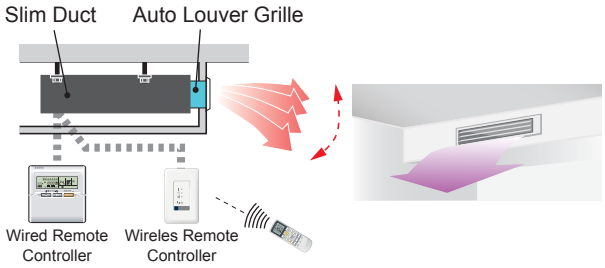
Cooling : Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating : Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

High lift drain pump



Auto Louver Grille Kit (Option)

Simple flat Auto Louver will provide comfort airflow and harmonize with luxury interior.



Selectable with a wide range of static pressure

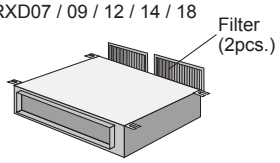
By using DC fan motor, it is possible to change of static pressure range 0 to 90Pa. The change of static pressure range is possible by remote controller.

Static pressure range
0 to 90 Pa

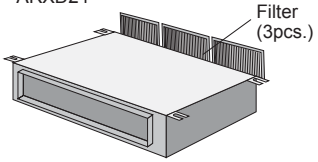
*24 model is 0 to 50Pa

Filter (Accessory)

ARXD07 / 09 / 12 / 14 / 18

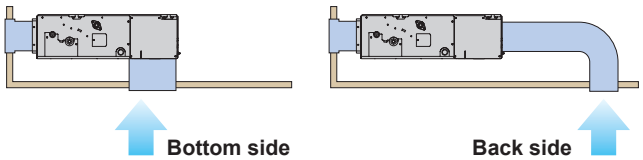


ARXD24



Air-intake

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



Optional parts

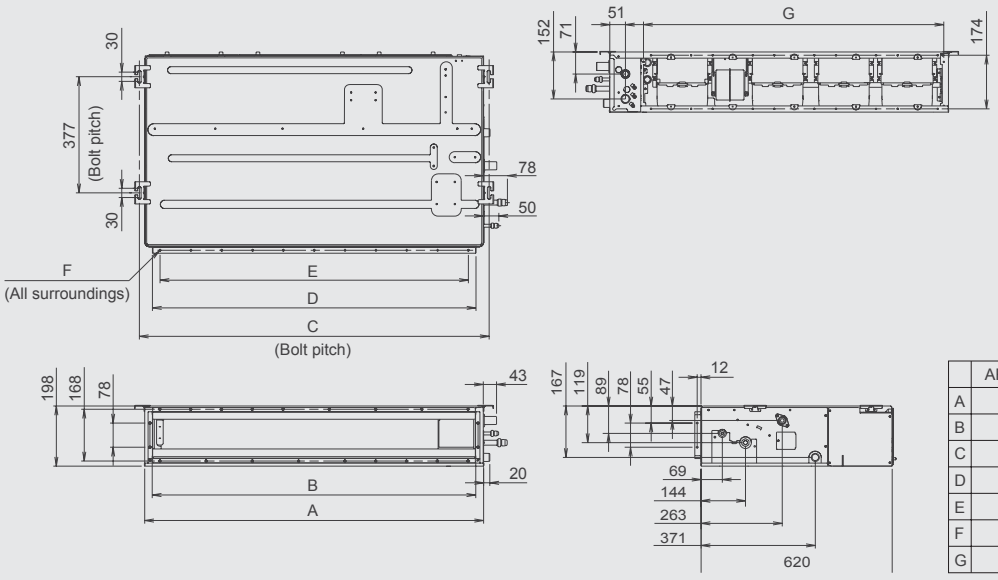
Remote Sensor Unit :	UTD-RS100
IR Receiver Unit :	UTB-*WB
Auto Louver Grille Kit :	UTD-GXSA-W (for ARXD07/09/12/14LATH)
	UTD-GXSB-W (for ARXD18LATH)
	UTD-GXSC-W (for ARXD24LATH)

*WB : YWB, TWB

Dimensions (Unit : mm)

Models: ARXD07LATH / ARXD09LATH / ARXD12LATH / ARXD14LATH / ARXD18LATH / ARXD24LATH

*Service accessibility must be allowed for when installing the product.
Please consult the installation manual for the necessary service access size.



	ARXD07-14LATH	ARXD18LATH	ARXD24LATH
A	700	900	1100
B	650	850	1050
C	734	934	1134
D	650	850	1050
E	P100x6=600	P100x8=800	P100x10=1000
F	18xØ5	22xØ5	26xØ5
G	574	774	974

Low Static Pressure Duct / Duct

Models [Low Static Pressure Duct]

ARXB24LATH
ARXB30LATH
ARXB36LATH
ARXB45LATH

Indoor units suitable for quiet rooms such as a hotel or a bedroom

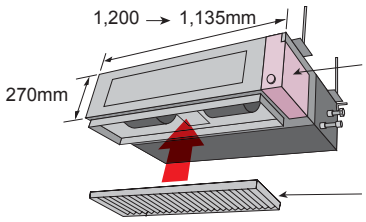
Models [Duct]

ARXA24LATH
ARXA30LATH
ARXA36LATH
ARXA45LATH

Slim Compact design allows for easy installation in narrow ceiling spaces up to 270mm

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 up to 270mm, Further space savings have been achieved by mounting the electrical control box internally inside the chassis.



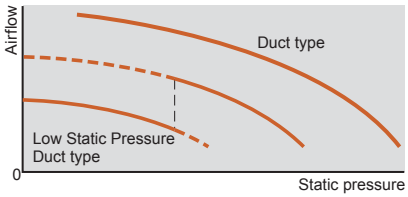
Specifications

Model name			ARXB24LATH	ARXB30LATH	ARXB36LATH	ARXB45LATH	ARXA24LATH	ARXA30LATH	ARXA36LATH	ARXA45LATH
Power source			230V ~, 50Hz				230V ~, 50Hz			
Capacity	Cooling	kW	7.1	9.0	11.2	12.5	7.1	9.0	11.2	12.5
	Heating		8.0	10.0	12.5	14.0	8.0	10.0	12.5	14.0
Input power		W	145	198	253	338	190	188	312	312
Airflow rate	High	m³/h	1,100	1,410	1,710	1,970	1,280	1,280	1,720	1,720
	Med		920	1,280	1,600	1,790	1,210	1,210	1,670	1,670
	Low		810	1,150	1,470	1,670	1,130	1,130	1,600	1,600
Static pressure range		Pa	0 to 80	0 to 80	0 to 80	0 to 80	30 to 150	30 to 150	30 to 150	30 to 150
Standard static pressure			40	50	50	60	100	100	100	100
Sound pressure level	High	dB(A)	31	34	37	41	38	40	43	43
	Med		27	32	35	38	36	38	41	41
	Low		25	29	33	36	34	36	39	39
Dimensions (H x W x D)		mm	270 x 1,135 x 700				270 x 1,135 x 700			
Weight		kg	43	45			43	45		
Connection pipe diameter	Liquid (Flare)	mm	ø9.52				ø9.52			
	Gas (Flare)		ø15.88		ø19.05		ø15.88		ø19.05	
	Drain		ø25 (I.D.) ; ø32 (O.D.)				ø25 (I.D.) ; ø32 (O.D.)			

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating : Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Line-up of low-noise and high-power models, compatible with a wide range of static pressure



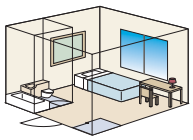
Low Static Pressure Duct type

Optimum model for hotels or bedrooms

An ultra low-noise model that achieves a quiet interior. Perfect for hotels or bedrooms with limited air duct installation space. Two different levels can be selected according to the static pressure range.

25dB

ARXB24
Low

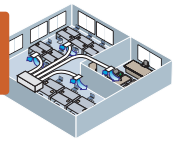


Duct type

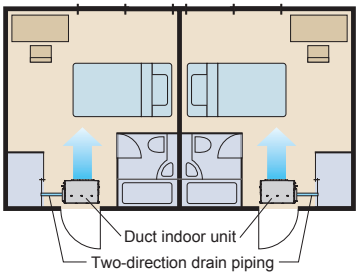
Powerful model with a flexible design

With a powerful motor, appropriate for a wide range of static pressure. Flexible air duct installation is possible in a large space such as an office.

Max. 150Pa



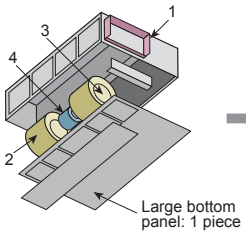
Two-direction drain piping



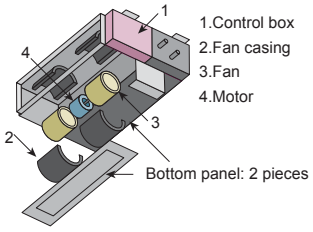
Easy maintenance

See below for the case of rear suction type

Previous model



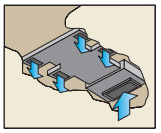
New model



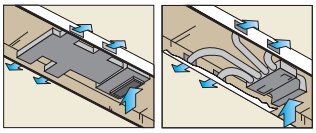
Structural improvement is attained by making the bottom panel two pieces, front and rear. The internal fan casing is also manufactured in two pieces, namely upper and lower. The maintenance of the motor and fan can be easily carried out by removing the rear panel and the lower part of the casing while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

Installation styles

Embedded in Ceiling



Hanging from Ceiling



Optional parts

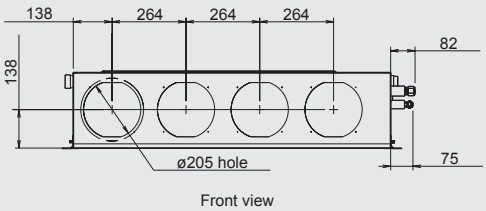
Remote Sensor Unit :	UTD-RS100	Flange (Round) :	UTD-RF204
Long Life Filter :	UTD-LF25NA	IR Receiver Unit :	UTB-*WB
Flange (Square) :	UTD-SF045T	Drain Pump Unit :	UTZ-PX1NBA

*WB : YWB, TWB

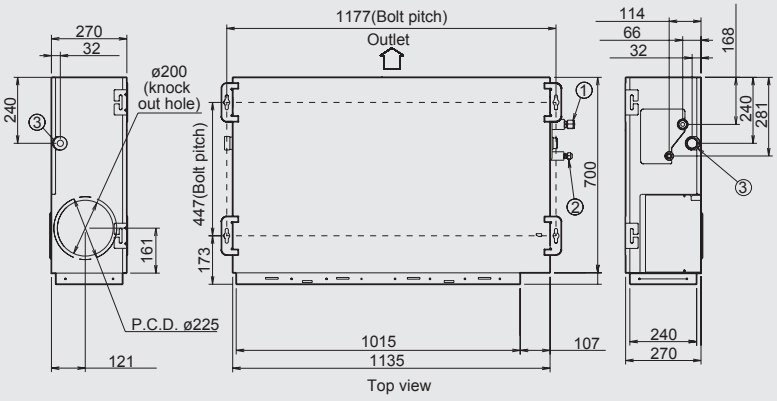
Dimensions (Unit : mm)

Models: ARXB24 / ARXB30 / ARXB36 / ARXB45
ARXA24 / ARXA30 / ARXA36 / ARXA45

*Service accessibility must be allowed for when installing the product.
Please consult the installation manual for the necessary service access size.



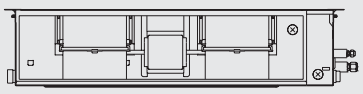
Front view



Side view (L)

Top view

Side view (R)



Rear view

① Refrigerant piping flare connection (Liquid) :
② Refrigerant piping flare connection (Gas) :
③ Drain piping connection (Drain pipe)

High Static Pressure Duct

Models

ARXC36LATH
ARXC45LATH
ARXC60LATH
ARXC72LATH
ARXC90LATH

These indoor units allow for high airflow quantities

ARXC36LATH
ARXC45LATH
ARXC60LATH

ARXC72LATH
ARXC90LATH

Specifications

Model name			ARXC36LATH	ARXC45LATH	ARXC60LATH	ARXC72LATH	ARXC90LATH
Power source			230V ~, 50Hz				
Capacity	Cooling	kW	11.2	12.5	18.0	22.4	25.0
	Heating		12.5	14.0	20.0	25.0	28.0
Input power		W	405	427	427	1,110	1,250
Airflow rate	High	m^3/h	2,600	3,500	3,500	3,900	4,300
	Med		1,950	3,000	3,000	3,300	4,000
	Low		1,450	2,460	2,460	3,000	3,500
Static pressure range		Pa	100 to 200	100 to 250	100 to 250	50 to 300	100 to 300
Standard static pressure			100	100	100	260	250
Sound pressure level	High	dB(A)	45	49	49	51	53
	Med		38	45	45	48	51
	Low		32	42	42	45	49
Dimensions (H x W x D)		mm	400 x 1,050 x 500			450 x 1,550 x 700	
Weight		kg	45	47		82	85
Connection pipe diameter	Liquid	mm	ø9.52 (Flare)			ø12.70 (Brazing)	
	Gas		ø19.05 (Flare)			ø22.22 (Brazing)	
	Drain		ø25 (I.D.) ; ø32 (O.D.)				

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating : Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

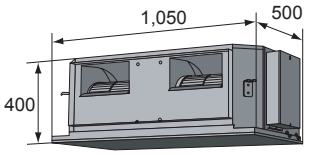
Easy installation (Compact size & Lightweight)

Models : ARXC36

A compact size and lightweight indoor unit has been developed by reducing the basic chassis and the overall material weight.

Volume 47.5% down

Weight 40% down

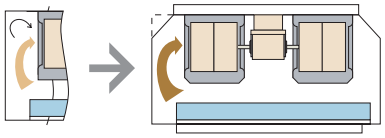


ARXC36LATH : 45kg (unit: mm)

Low noise

Models : ARXC36 / ARXC45 / ARXC60

Cutting off the corners of the conventional indoor unit front panel and fan casing, has enabled less turbulent air flow. Low noise is realized by adopting a plastic case and a plastic fan.

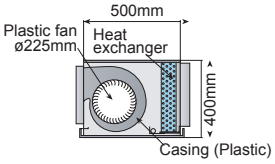


Previous model

New model (ARXC36LATH)

ARXC36LATH : Plastic fan [45dB(A)]

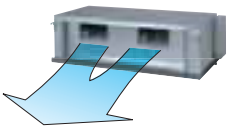
* Model : Material
(At 100Pa : Actual noise measurement value)



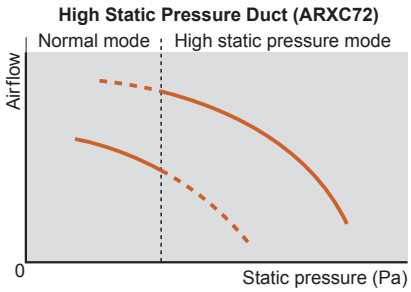
Static pressure selection

Models : ARXC72 / ARXC90

2 Types of static pressure mode are selectable.



Max. 300Pa



The adoption of a single phase fan motor allows
3 steps fan speed control

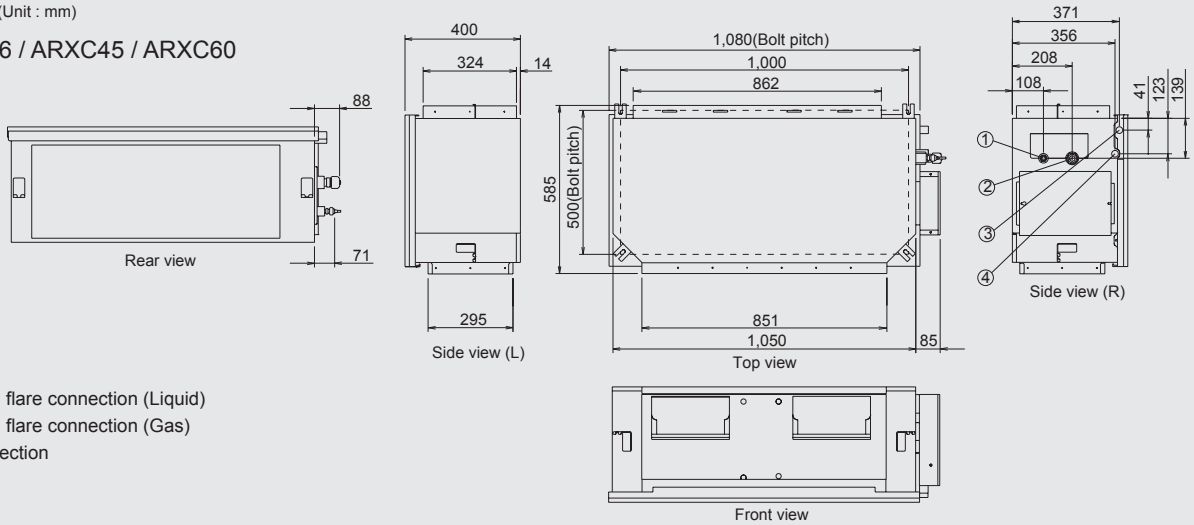
Optional parts

Long-Life Filter : UTD-LF60KA (For ARXC36 / 45 / 60)
IR Receiver Unit : UTB-*WB

*WB : YWB, TWB

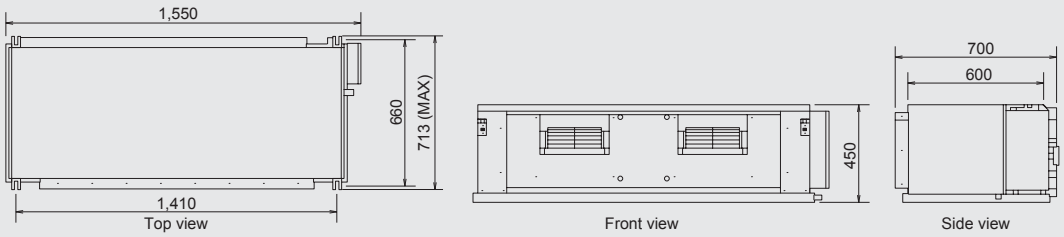
Dimensions (Unit : mm)

Models: ARXC36 / ARXC45 / ARXC60



① Refrigerant piping flare connection (Liquid)
② Refrigerant piping flare connection (Gas)
③ Drain piping connection

Models: ARXC72 / ARXC90



Floor / Ceiling

Models

AB*A12LBTH
AB*A14LBTH
AB*A18LBTH
AB*A24LBTH

The slim and lightweight design allow the unit to be suspended from the ceiling or installed on the floor.
This type suits many room designs

Flexible installation

Example for floor installation

Floor console

Example for ceiling installation

Under ceiling

Specifications

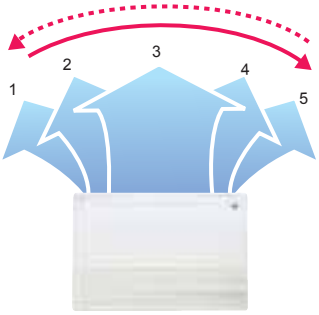
Model name			AB*A12LBTH	AB*A14LBTH	AB*A18LBTH	AB*A24LBTH
Power source			230V ~, 50Hz			
Capacity	Cooling	kW	3.6	4.5	5.6	7.1
	Heating		4.0	5.0	6.3	8.0
Input power		W	30	42	74	99
Airflow rate	High	m^3/h	660	780	1,000	1,000
	Med		570	640	720	820
	Low		490	550	580	680
Sound pressure level	High	dB(A)	36	40	46	47
	Med		32	36	39	42
	Low		28	34	35	37
Dimensions (H x W x D)		mm	199 x 990 x 655			
Weight		kg	25	27		
Connection pipe diameter	Liquid (Flare)	mm	ø6.35		ø9.52	
	Gas (Flare)		ø12.70		ø15.88	
	Drain		ø25 (I.D.) ; ø32 (O.D.)			

AB*: ABY(FUJITSU), ABH(GENERAL)
Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating : Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.
Voltage : 230 [V].

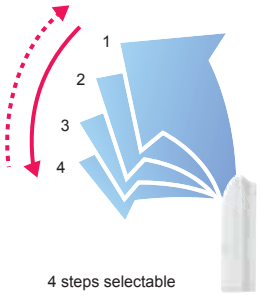
Double auto swing

A combination of up/down and right/left directional swing allows three-dimensional air direction control.

RIGHT and LEFT SWING



UP and DOWN SWING



4 steps selectable

Super vane

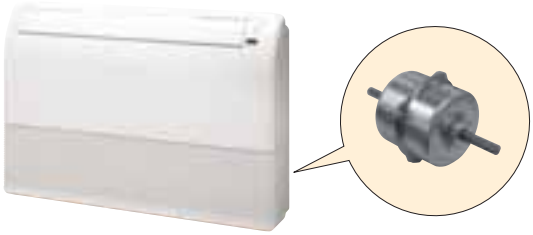
Double Louvre Super vane with newly developed special configuration boosts airflow sending cool air quickly to every corner of the room.

Auto-closing louvre

When operation is stopped, the louvres will automatically close. (This function is available on all non-ducted models.)

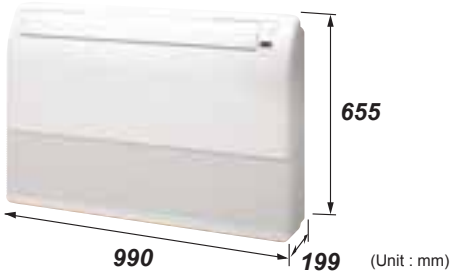
High power DC fan motor

- High power
- Wide rotation range
- High efficiency



Compact design

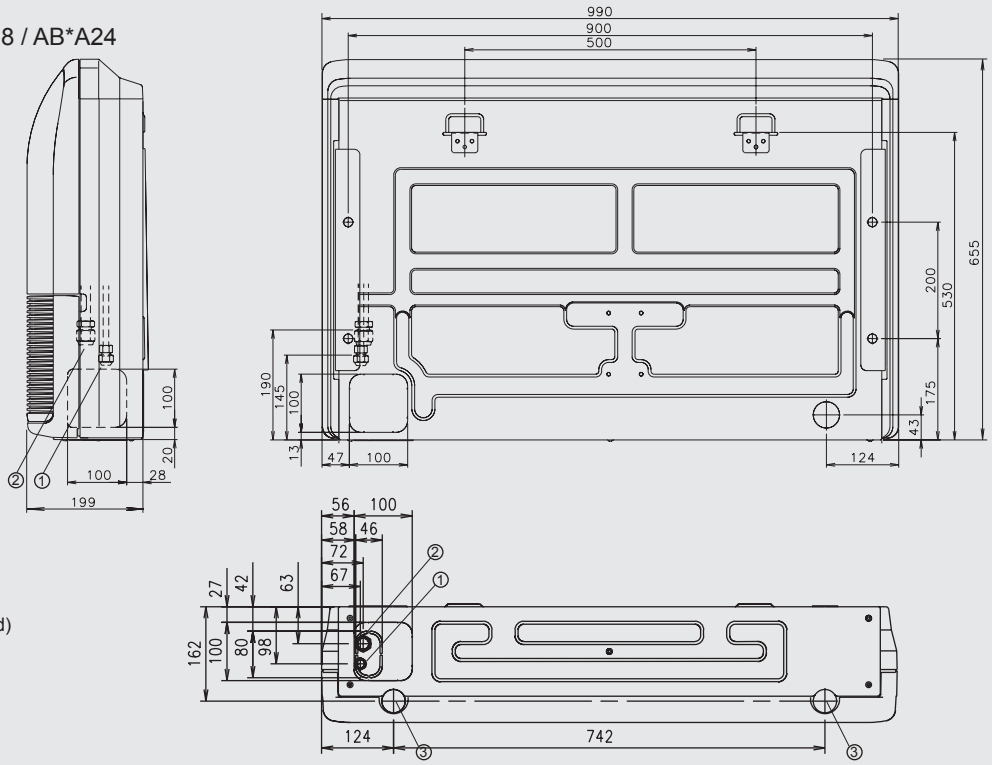
Symmetrical, slim and compact design.



(Unit : mm)

Dimensions (Unit : mm)

Models: AB*A12 / AB*A14 / AB*A18 / AB*A24



① Refrigerant piping flare connection (Liquid)
② Refrigerant piping flare connection (Gas)
③ Drain piping connection

Ceiling

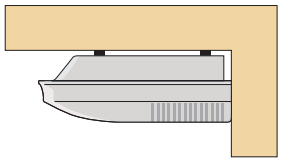
Models

AB*A30LBTH
AB*A36LBTH
AB*A45LBTH
AB*A54LBTH

Easily concealed in any installation

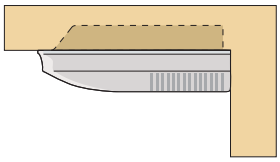
Installation

Open



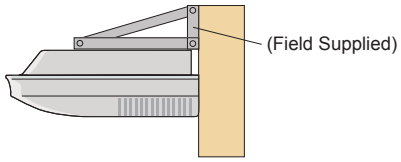
General installation pattern which suspends the indoor unit from the ceiling.

Concealed



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

Wall mounted



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.

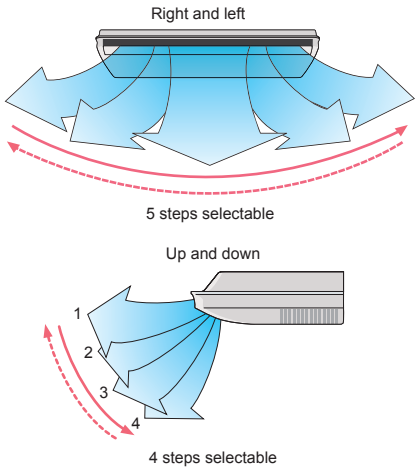
Specifications

Model name			AB*A30LBTH	AB*A36LBTH	AB*A45LBTH	AB*A54LBTH
Power source			230V ~, 50Hz			
Capacity	Cooling	kW	9.0	11.2	12.5	14.0
	Heating		10.0	12.5	14.0	16.0
Input power		W	66	85	131	180
Airflow rate	High	m^3/h	1,630	1,690	2,010	2,270
	Med		1,370	1,400	1,600	1,780
	Low		1,140	1,170	1,230	1,280
Sound pressure level	High	dB(A)	42	45	48	51
	Med		38	38	42	45
	Low		33	34	35	36
Dimensions (H x W x D)		mm	240 x 1,660 x 700			
Weight		kg	47	48		
Connection pipe diameter	Liquid (Flare)	mm	ø9.52	ø9.52		
	Gas (Flare)		ø15.88	ø19.05		
	Drain		ø25 (I.D.) ; ø32 (O.D.)			

AB*: ABY(FUJITSU), ABH(GENERAL)
Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating : Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.
Voltage : 230 [V].

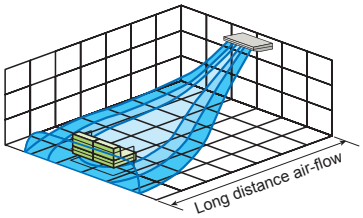
Double auto swing and wide airflow

Auto airflow direction and auto swing

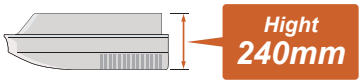


Long airflow

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

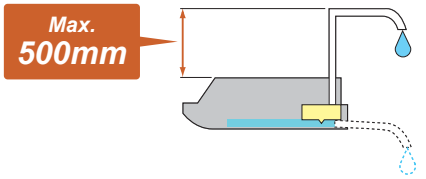


Slim & Compact design

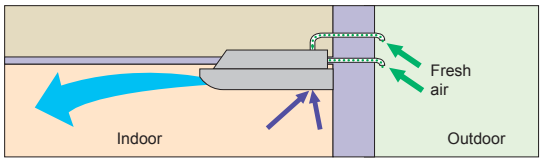


Condensate lift-up mechanism (Option)

Optional drain lift-up mechanism allows flexible installation.

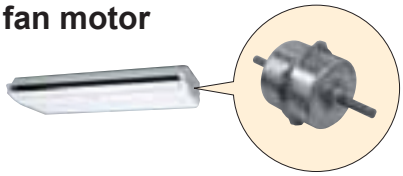


Fresh air intake



High power DC fan motor

- High power
- Wide rotation range
- High efficiency



Long-life filter

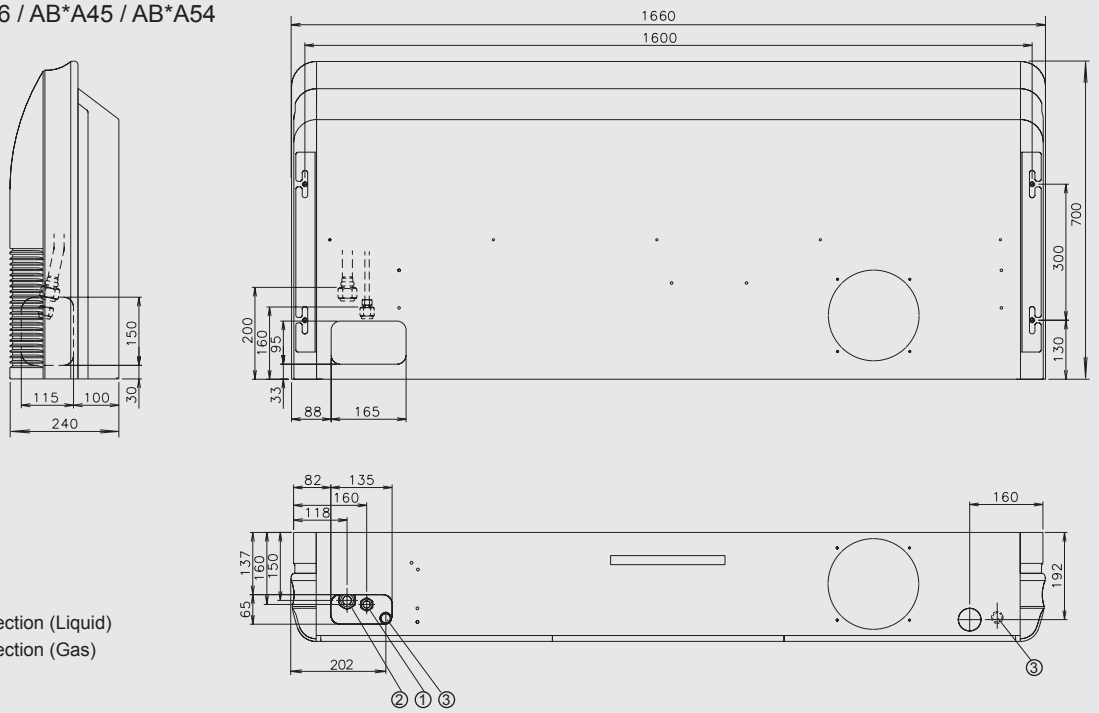
High Efficiency long-life filter doubles the life of the filter compared to standard filters.

Optional parts

Drain Pump Unit : UTR-DPB24T

Dimensions (Unit : mm)

Models: AB*A30 / AB*A36 / AB*A45 / AB*A54



① Refrigerant piping flare connection (Liquid)
② Refrigerant piping flare connection (Gas)
③ Drain piping connection

Compact Wall Mounted

Models (EEV internal model)
AS*A07LACH
AS*A09LACH
AS*A12LACH
AS*A14LACH

Models (EEV external model)
AS*E07LACH
AS*E09LACH
AS*E12LACH
AS*E14LACH

Compact and Stylish design indoor

Filter features

High quality air conditioning by incorporation of high performance filter.

Long-life* 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.

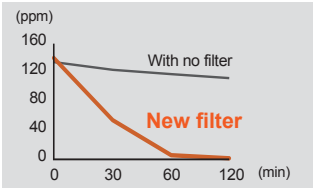
(*The filter can be used for approx. 3 years if it is washed under water to restore its surface action when it is dirty.)

Apple-catechin Filter

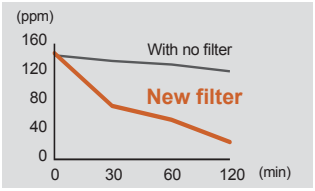
Fine dust, invisible mold spores, and harmful microorganisms are absorbed onto the filter by static electricity, and further growth is inhibited and deactivated by the polyphenol extracted from apples.

Deodorizing effect (Odor reduction rate)

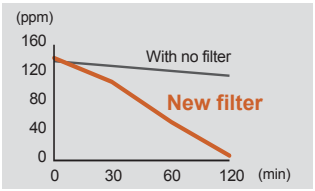
Ammonia



Trimethylamine



Hydrogen sulfate



Testing organization :
Environmental Sanitary Inspection Center
Test method :
Deodorization Test

Specifications

Model name			AS*A07LACH	AS*A09LACH	AS*A12LACH	AS*A14LACH	AS*E07LACH	AS*E09LACH	AS*E12LACH	AS*E14LACH
Power source			230V ~, 50Hz				230V ~, 50Hz			
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	2.2	2.8	3.6	4.5
	Heating		2.8	3.2	4.1	5.0	2.8	3.2	4.1	5.0
Input power		W	16	16	19	30	15	16	20	28
Airflow rate	High	m³/h	490	500	560	670	490	500	560	680
	Med		450	450	480	490	450	450	480	490
	Low		370	370	420	420	370	370	420	420
Sound pressure level	High	dB(A)	35	36	39	44	34	35	38	43
	Med		33	33	35	37	32	32	34	35
	Low		27	27	31	32	26	26	30	30
Dimensions (H x W x D)		mm	275 x 790 x 215				275 x 790 x 215			
Weight		kg	9				9			
Connection pipe diameter	Liquid (Flare)	mm	ø6.35				ø6.35			
	Gas (Flare)		ø12.70				ø12.70			
	Drain		ø13.8(I.D.) ; ø15.8-ø16.7(O.D.)				ø13.8(I.D.) ; ø15.8-ø16.7(O.D.)			
EV Kit (option)			—				UTR-EV09XB		UTR-EV14XB	

AS*: ASY(FUJITSU), ASH(GENERAL)
Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating : Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.
Voltage : 230 [V].

Low noise

Electronic Expansion valves are built-in allowing for easy installation.

For installation to places that require additional low noise, select the external electronic expansion valve type.

27dB
(AS07/09)

Compact size

Powerful output even compact design

Width 790mm

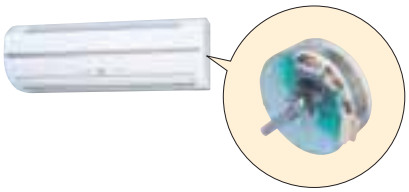
Though the indoor unit is compact, it features a large, high pressure cross fan (90mm diameter) in a centre mounted configuration and a Lambda type heat exchanger to provide plenty of power.

Symmetrical design

Symmetrical, clean design that suits all interiors.

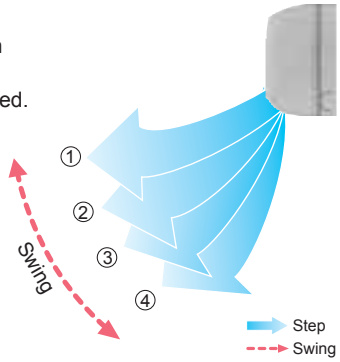
New style high power DC fan motor

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



Auto swing louvre

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



Easy maintenance

Easy maintenance has been realized as the front panel can removed for easy access.

Wired control compatible

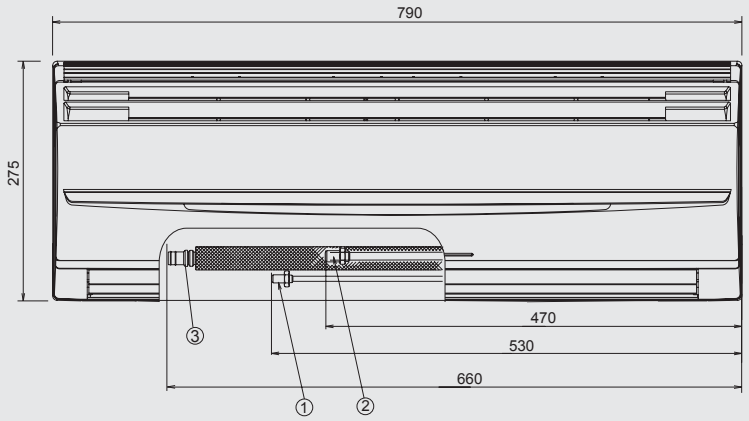
Wired and Wireless Remote Controller are acceptable.

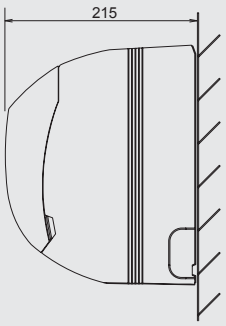
Wired Remote Controller

Simple Remote Controller

Dimensions (Unit : mm)

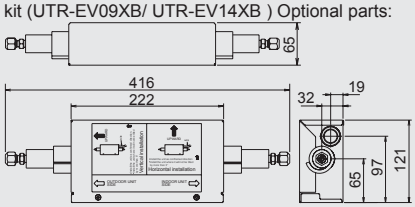
Models: AS*A07 / AS*A09 / AS*A12 / AS*A14
AS*E07 / AS*E09 / AS*E12 / AS*E14





① Refrigerant pipe flare connection (Liquid)
② Refrigerant pipe flare connection (Gas)
③ Drain piping connection

EV kit (UTR-EV09XB/ UTR-EV14XB) Optional parts:



Wall Mounted

Models

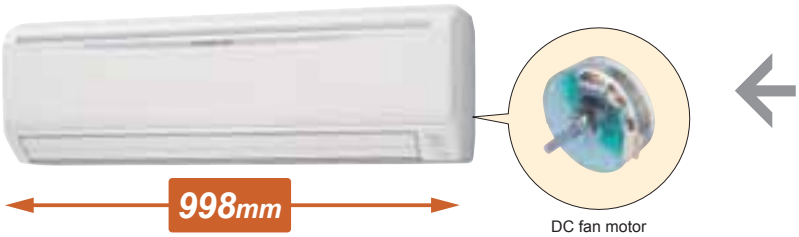
AS*A18LACH
AS*A24LACH
AS*A30LACH

Simple & Elegant Appearance Design

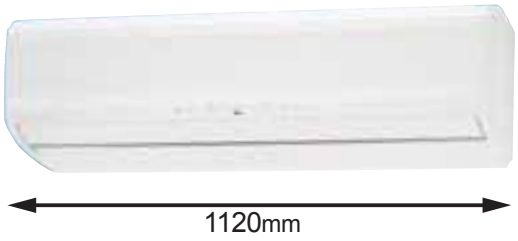
Compact & Slim design

By using DC fan motor, compact design is realized.

New model



Previous model

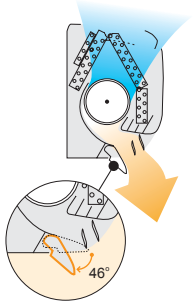


Specifications

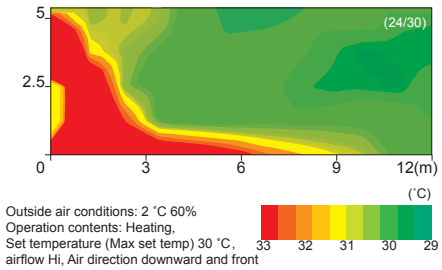
Model name			AS*A18LACH	AS*A24LACH	AS*A30LACH
Power source			230V ~, 50Hz		
Capacity	Cooling	kW	5.6	7.1	8.0
	Heating		6.3	8.0	9.0
Input power		W	35	64	91
Airflow rate	High	m^3/h	840	1,100	1,240
	Med		770	910	980
	Low		690	730	770
Sound pressure level	High	dB(A)	41	48	52
	Med		39	43	45
	Low		35	35	35
Dimensions (H x W x D)		mm	320 x 998 x 228		
Weight		kg	15		
Connection pipe diameter	Liquid (Flare)	mm	ø9.52		
	Gas (Flare)		ø15.88		
	Drain		ø12 (I.D.) ; ø16 (O.D.)		

AS*: ASY(FUJITSU), ASH(GENERAL)
Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating : Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.
Voltage : 230 [V].

“Vertical airflow” provides powerful floor level heating

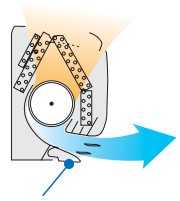


Power diffuser (full open)

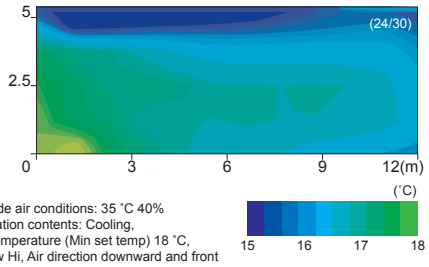


Outside air conditions: 2 ˚C 60%
Operation contents: Heating,
Set temperature (Max set temp) 30 ˚C,
airflow Hi, Air direction downward and front

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



Power diffuser

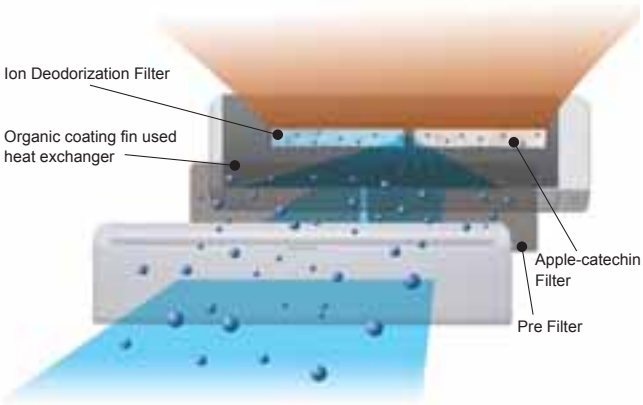


Outside air conditions: 35 ˚C 40%
Operation contents: Cooling,
Set temperature (Min set temp) 18 ˚C,
airflow Hi, Air direction downward and front

Easy maintenance

Simplification of drain pan cleaning improves maintenance-ability.

Air conditioner filter features



Antibacterial deodorizing pre-filter with special ceramic powder

Long-life* 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.

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

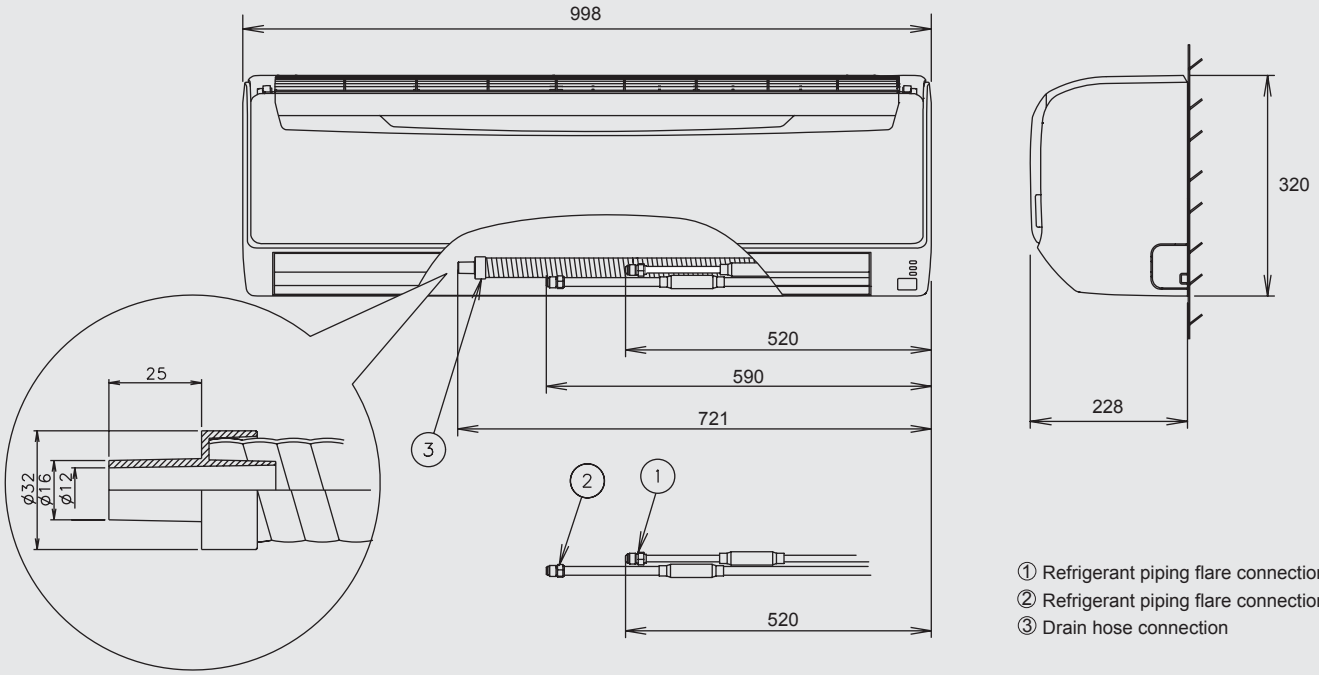
＋ Using different filters at both sides

Apple-catechin Filter

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.

Dimensions (Unit : mm)

Models: AS*A18 / AS*A24 / AS*A30



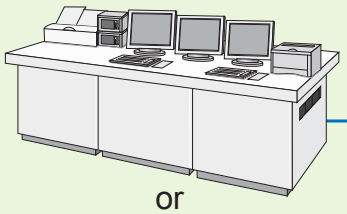
① Refrigerant piping flare connection (Liquid)
② Refrigerant piping flare connection (Gas)
③ Drain hose connection

Control System Diagram

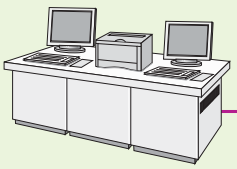
Building Management

General-purpose Building Control Computer

Connectable to various sized BMS / BAS*1



or



Air Conditioning Central Control

System Controller Software

UTY-APGX

Internet or Public Telephone Line

USB Adaptor *2

(Field supplied)

Remote / Monitoring side

Touch Panel Controller

UTY-DTG*

G*: GY(FUJITSU), GG(GENERAL)

Central Remote Controller

UTY-DCG*

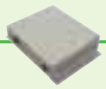
G*: GY(FUJITSU), GG(GENERAL)

Group Remote Controller

UTY-CGG*

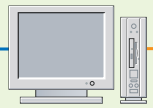
G*: GY(FUJITSU), GG(GENERAL)

Network Convertor
UTY-VGGX



BACnet® Gateway Software

UTY-ABGX

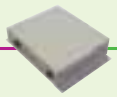


USB Adaptor *2

(Field supplied)

Network Convertor (BMS / LONWORKS®)

UTY-VLGX



The V-II system supports every user needs by offering a variety of control systems, including individual control, central control and building management control options.

Web Monitoring Tool Software

UTY-AMGX

Monitoring side

Internet or Public Telephone Line

VRF network system side

USB Adaptor *2

(Field supplied)

*1. BMS/BAS: Building Management System / Building Automation System *2. USB Adaptor is U10 USB Network Interface of Echelon® Corporation.

Air Conditioning Individual Control

Wired Remote Controller
UTY-RNK*

K*: KY(FUJITSU), KYT(FUJITSU), KG(GENERAL)

Simple Remote Controller
UTY-RSK*

K*: KY(FUJITSU), KYT(FUJITSU), KG(GENERAL)

Simple Remote Controller
UTY-RHK*

K*: KY(FUJITSU), KYT(FUJITSU), KG(GENERAL)

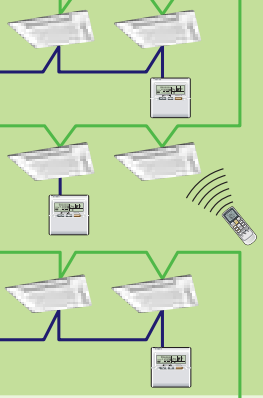
Wireless Remote Controller
UTY-LNH*

H*: HY(FUJITSU), HG(GENERAL)

System

Outdoor unit

Indoor unit



Signal Amplifier
UTY-VSGX

IR Receiver Unit
UTB-*WB

*WB: YWB, TWB

IR Receiver Kit
UTY-LRH*B1

*B: YB(FUJITSU), GB(GENERAL)

Card-key

(Field supplied)

External Switch Controller
UTY-TEKX

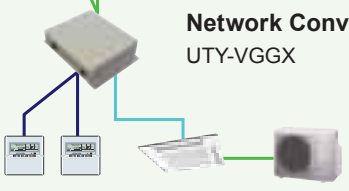
Service Tool Software
UTY-ASGX

USB Adaptor *2

(Field supplied)

For single split

Network Convertor
UTY-VGGX

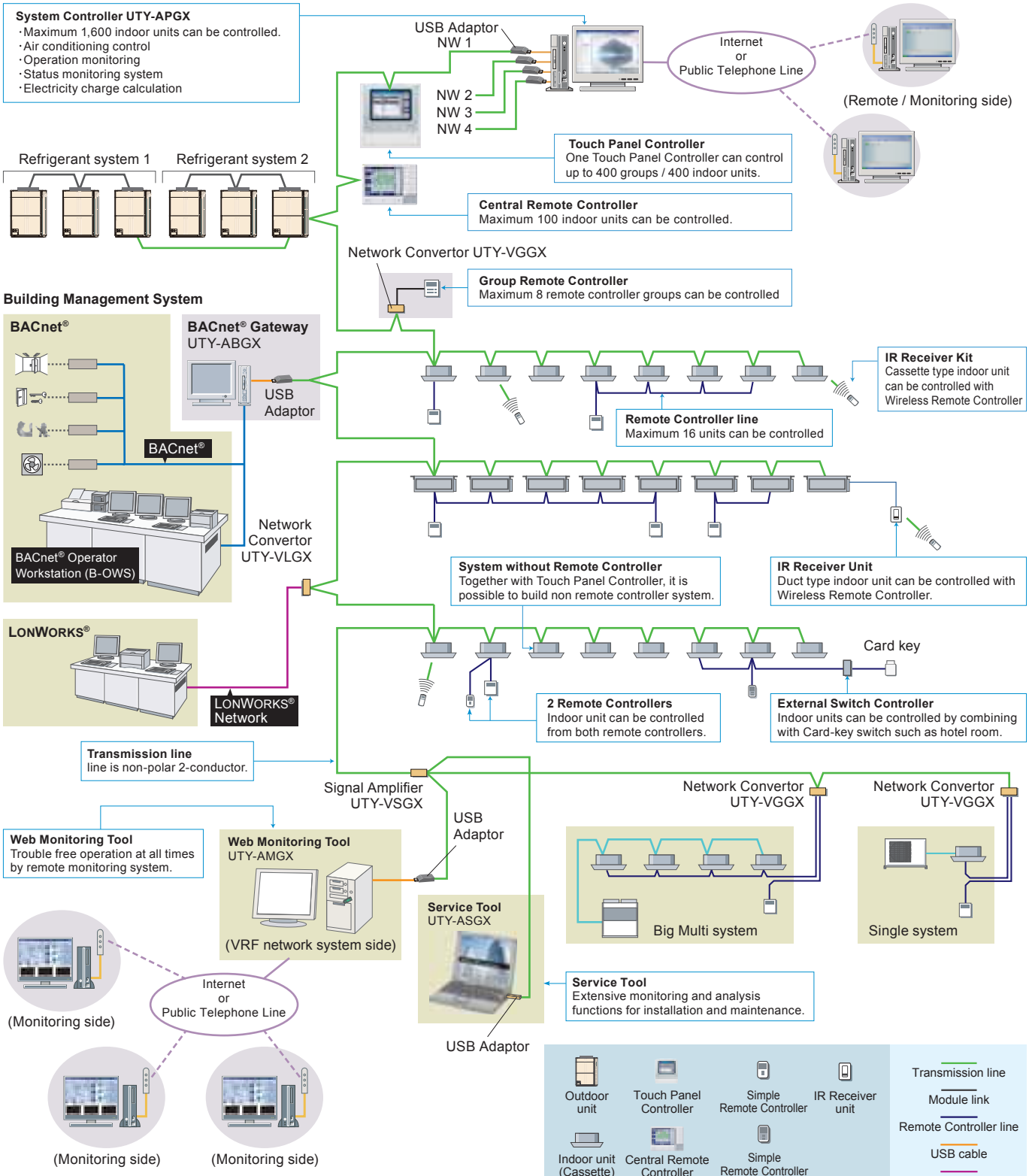


- Transmission line (VRF Network)
- Module link
- Remote controller line
- USB cable
- LONWORKS® Network
- Ethernet
- Signal line (Single split system)
- Group Remote Controller line

Wiring system

Max. transmission line length 3,600m

- Wiring construction of the control system is made of power source wiring, transmission wiring and remote controller wiring.
- Total wiring length (total length of transmission line) can be extended up to 3,600m (by using signal amplifiers).



Combination of individual remote controller

Wired, Simple and Wireless Remote Controllers can be used jointly.

Comparison table of Controllers

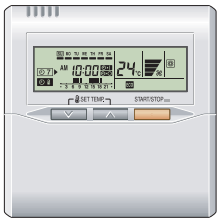
Item			 Wired Remote Controller	 Simple Remote Controller	 Simple Remote Controller*1	 Wireless Remote Controller	 Group Remote Controller	 Central Remote Controller	 Touch Panel Controller	 System Controller Software
Model name			UTY-RNKY UTY-RHKYT UTY-RNKG	UTY-RSKY UTY-RSKYT UTY-RSKG	UTY-RHKY UTY-RHKYT UTY-RHKG	UTY-LNHY UTY-LNHG	UTY-CGGY UTY-CGGG	UTY-DCGY UTY-DCGG	UTY-DTGY UTY-DTGG	UTY-APGX
Max. controllable remote controller groups			1	1	1	1	8	100	400	1600
Max. controllable indoor units			16	16	16	16	96	100	400	1600
Max. controllable groups			–	–	–	–	–	16	400	1600
Air conditioning control function	On / Off		●	●	●	●	●	●	●	●
	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		●	–	–	●	–	●	●	●
	Group setting		–	–	–	–	–	●	●	●
	RC prohibition		–	–	–	–	–	●	●	●
	Anti freeze setting		–	–	–	–	–	●	●	●
	Economy mode setting		●	–	–	●	–	●	●	●
Display	Failure		●	●	●	–	●	●	●	●
	Defrosting		●	●	●	–	–	●	●	●
	Current time		●	–	–	●	●	●	●	●
	Day of week		●	–	–	–	●	–	●	●
	R.C. prohibition		●	●	●	–	–	●	●	●
	Cooling/heating priority		●	●	●	–	●	●	●	●
	Address display		●	●	●	–	●	●	●	●
Timer	Schedule timer	Period	Week	–	–	–	Week	Week	Year	Year
		On/off per day	4	–	–	–	4	20	20	72
		On/off per week	28	–	–	–	28	140	140	504
	On/off timer		●	–	–	●	–	–	–	–
	Sleep timer		–	–	–	●	–	–	–	–
	Program timer		–	–	–	●	–	–	–	–
	Day off		●	–	–	–	–	●	●	●
	Min. unit of timer setting (Minutes)		30	–	–	5	10	10	10	10
Control	Status monitoring system		–	–	–	–	–	●	●	●
	Electricity charge calculation		–	–	–	–	–	–	–	●
	Error history		●	●	●	–	●	●	●	●
	Emergency stop		–	–	–	–	–	●*2	●*2	–
	Control via internet		–	–	–	–	–	–	–	●
	E-mail notification for malfunction		–	–	–	–	–	–	–	●

*1 "Operation mode" setting is not available for this model.
*2 This function is available only through external input. control.

Wired Remote Controller

UTY-RNK*

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 controllers can be connected to a single indoor unit.

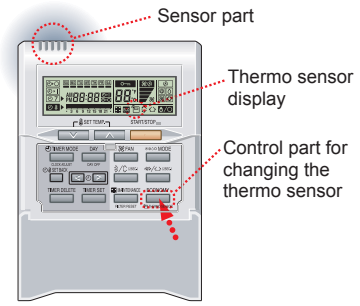
Functions

Powerful features and compact size

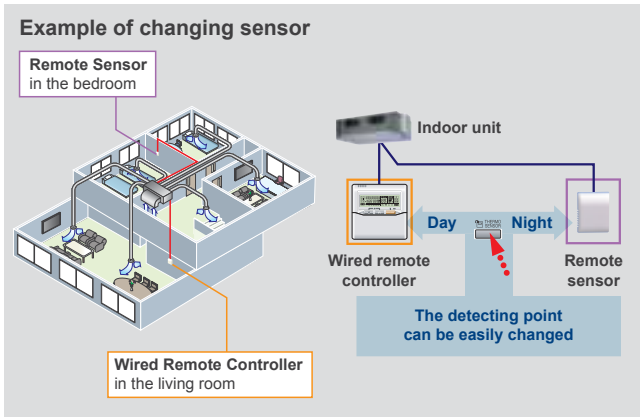
This Wired Remote Controller incorporates four primary functions into a single unit.

Accurate and comfortable

Indoor temperature can be detected accurately by the inclusion of a thermo sensor in the body of the wired controller.
This new wired remote controller and the optional remote sensor allows flexibility in sensor location, suitable for all requirements.



Example of changing sensor



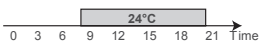
Displayed temperature is set temperature.

Built-in timers

Easy-to-understand time bar display

Weekly timer : Possible to set ON/OFF time to operate twice each day of the week.

Setup screen example
Set to Wednesday: 8:00 to 20:00.

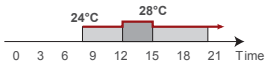


Screen after setup

Setback timer : Possible to set temperature for two times spans and for each day of the week.

Setup screen example
Set from Sunday to Saturday:
12:00 to 15:00, 28°C.

At "Weekly timer" + "Set back timer" setup



24°C ⟶28°C⟶ 24°C

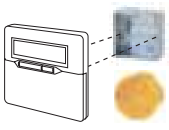
Diagnosis check function

Two methods are available for determining the cause of failure in the event of a malfunction occurs:

- **Malfunction diagnosis function**
- **Error history (Last 16 error codes can be accessed)**

Simple installation

Components are compatible with standard switch boxes.
Flat back surface allows to be installed wherever it is needed.



European mounting box

JIS built-in box

Specifications

Model name	UTY-RNK*
Power Supply	DC 12V
Dimensions (H x W x D) (mm)	120 x 120 x 17
Weight (g)	160

DC12V is supplied by the indoor unit. K* : KY(FUJITSU), KYT(FUJITSU), KG(GENERAL)

Simple Remote Controller

Max. controllable 16 indoor units

UTY-RSK*
UTY-RHK* (Without Operation mode)

Compact remote controller provides access to basic functions

- Up to 16 indoor units can be controlled with one remote controller.
- Suitable for hotels or offices as it is easily operated with no complex functions.

UTY-RSK*

UTY-RHK*
Without Operation mode

Functions

User-friendly operation

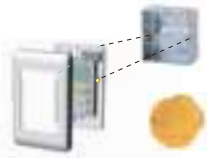
- Provides access to basic operations, such as Start / Stop, Fan control, Operation mode switching, and Room temperature setting.
- A large On / Off button is provided in the centre of the remote controller for easy operation.
- Can be used jointly with other individual control unit.
- Following an error display, diagnostics can be carried out on the controller.

Background light

- Background light enables easy operation in a darkened room.
- Background light activates during all button operations, and lasts 10 seconds in Operation mode and 5 seconds in stop mode after a button is pressed.

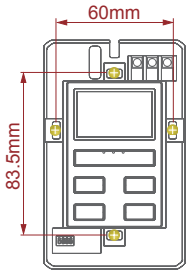
Simple installation

Can be mounted on the European Mounting Box (Installation dimension: 60mm) or the JIS Built-in Box (Installation dimension: 83.5mm).



European switch box

JIS built-in box



Functions summary

Operation \ Model	 UTY-RSK*	 UTY-RHK*
On / Off	●	●
Fan control	●	●
Operation mode	●	— *1
Room temp. setting	●	●

*1: "Operation mode" setting is not available.
It is recommend to use together with other type controller.

Specifications

Model name	UTY-RSK*	UTY-RHK*
Power Supply	DC 12V	
Dimensions (H x W x D) (mm)	120 x 75 x 14	
Weight (g)	90 (100 : UTY-RSKYT)	90 (100 : UTY-RHKYT)

DC12V is supplied by the indoor unit. K* : KY(FUJITSU), KYT(FUJITSU), KG(GENERAL)

Wireless Remote Controller

UTY-LNH*

Simple and sophisticated operations
with a choice of 4 daily timers

• A single controller controls up to 16 indoor units.

Max. controllable
16
indoor units

Selectable
4
daily timers

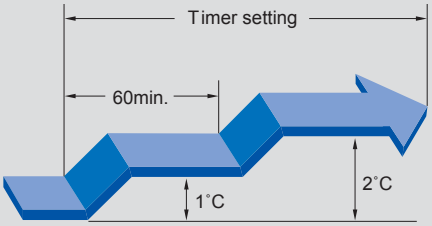
Functions

Built-in daily timer

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.

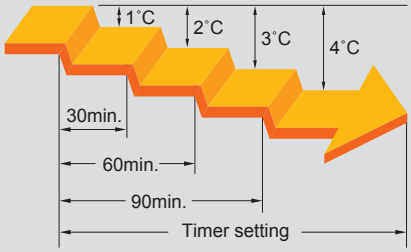
Cooling operation/dry operation

When the sleep timer is set, the set temperature automatically rises 1˚C every hour. The set temperature can rise up to a maximum of 2˚C.



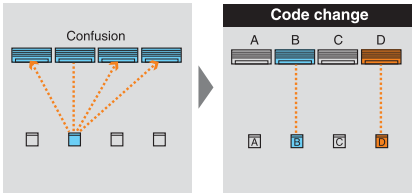
Heating operation

When the sleep timer is set, the set temperature automatically drops 1˚C every 30 minutes. The set temperature can drop to a max. of 4˚C.



Easy installation and operation

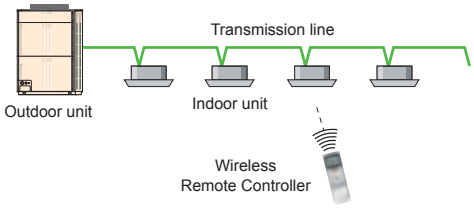
Code selector switch prevents indoor unit mix-up. (Up to 4 codes can be set.)



Wide and precise

Address setting

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



Specifications

Model name	UTY-LNH*
Battery	1.5V (R03 / LR03 / AAA) x 2
Dimensions (H x W x D) (mm)	158 x 56 x 20
Weight (g)	70

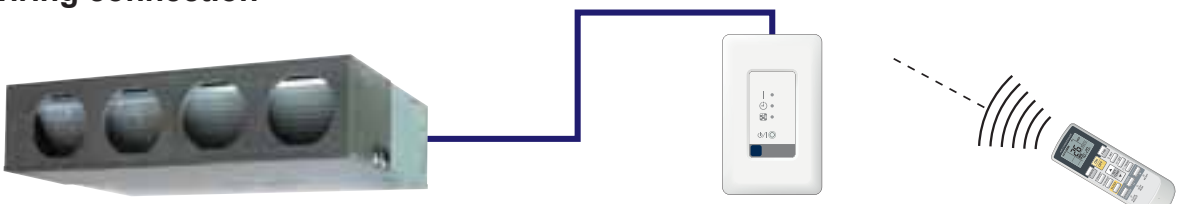
H* : HY(FUJITSU), HG(GENERAL)

IR Receiver Unit

UTB-*WB

Necessary to control for all duct type by
Wireless Remote Controller

Wiring connection



Specifications

Model name	UTB-*WB
Battery	DC 12V
Dimensions (H x W x D) (mm)	122 x 60 x 26.5
Weight (g)	150

*WB : YWB, TWB

IR Receiver Kit

UTY-LRH*B1

Cassette type indoor unit can be controlled
with Wireless Remote Controller

Specifications

Model name	UTY-LRH*B1
Battery	DC 12V
Dimensions (H x W x D) (mm)	213.8 x 213.8x 25.7
Weight (g)	140

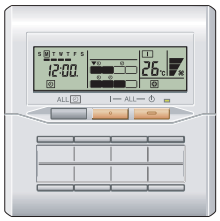
H* : HY(FUJITSU), HG(GENERAL)

Group Remote Controller

UTY-CGG*

Max. controllable **8** remote controller groups

Max. connectable **64** group R.C. in a VRF network system



Group control of indoor units with simple operation

- Up to 8 remote controller groups can be controlled by one Group Remote Controller.
- Up to 64 Group Remote Controllers can be connected in one VRF network system.
- Network Convertor (UTY-VGGX) is required to connect Group Remote Controllers to a VRF network system.
  (Network Convertor allows up to 4 Group Remote Controllers)

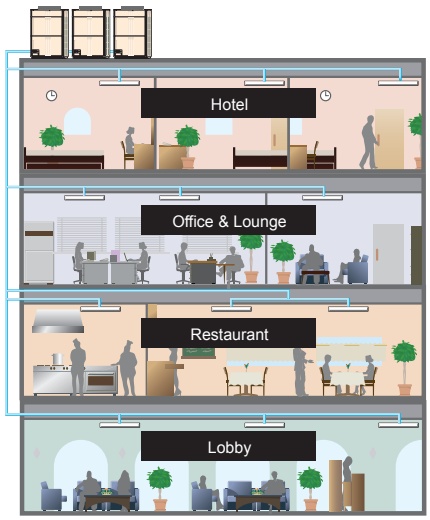
Functions

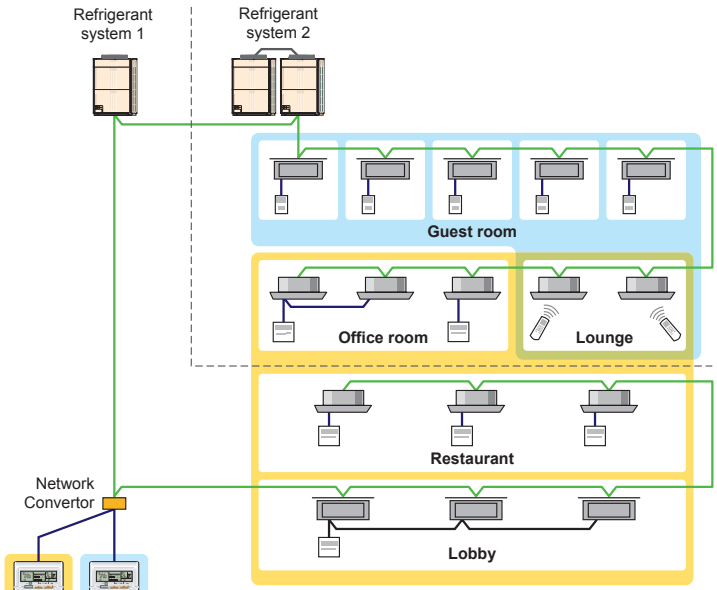
High performance and compact size

ON / OFF, Operating mode, Room temperature and Fan speed setting can be controlled / monitored centrally or individually.

Control up to 8 remote controller groups

Single Group Remote Controller controls and monitors up to 8 remote controller groups.





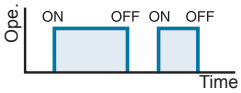
Group Remote Controller 1
To control office room, lounge, restaurant and lobby (8 remote controller groups)

Group Remote Controller 2
To control guest room and lounge (7 remote controller groups)

Built-in weekly timers

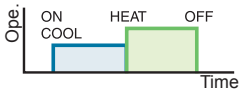
The weekly timer is provided as a standard function.
1. The timer can be set up for up to 4 times per day. (On / Off, operating mode, set temperature)
2. Allows separate settings for each day of the week.

ON / OFF switching



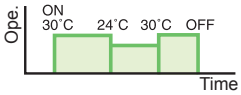
Air conditioning ON/OFF setting corresponding to air conditioning specification needs is possible.

Cooling / Heating switching



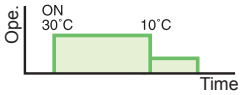
Switching between the cooling mode and heating mode can be set by time.

Temperature switching
(Peak power cut)



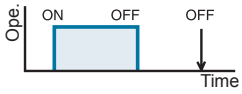
Since peak power cut is performed in a planned way, setting which changes the room temperature linked with time is possible.

Temperature switching
(Anti-freeze)



Low temperature heating operation can be set to prevent freezing in cold regions at night, etc.

Stop setting



Indoor unit stop setting at operation end time is possible.

Useful functions

1 Timer setting at all the connected indoor units is possible by centralized timer on the front panel.

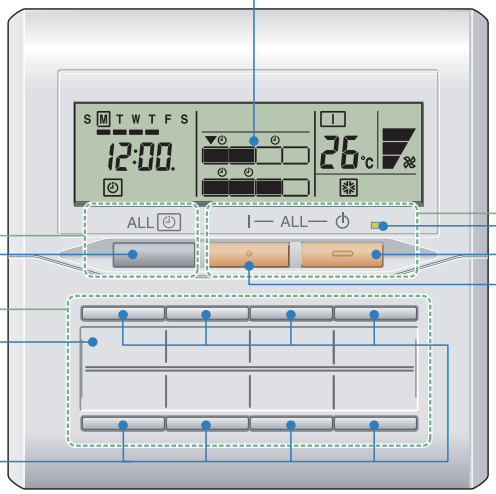
ALL TIMER Button
Press the ALL TIMER button to turn the timer operation on or off for all indoor units.

3 The indoor unit can be quickly turned on and off by ON / OFF button of each indoor unit on the front of the door.

Indoor Unit Name Labels
Write the names of the indoor units on the included labels and attach them.

ON / OFF Button
Press the ON / OFF button to turn the corresponding indoor unit on or off.

With cover closed



Indoor Unit Operation Indicators
Timer setting at all the connected indoor units is possible by centralized timer on the front panel.
■ : On ▭ : Off
⊘ : Timer operation ▼ : Selection

2 All the connected indoor units can be turned on / off simultaneously by centralized ON/OFF button on the front of the cover.

Operation Lamp
This is on if any of the indoor units is operating. This flashes if any of the indoor units has malfunction(s).

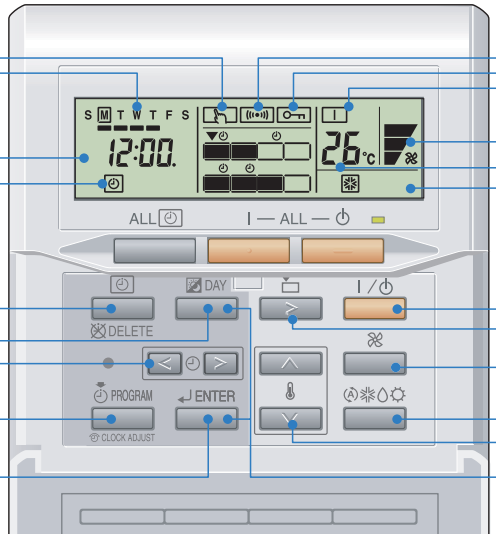
ALL OFF Button
Press the ALL OFF button to turn off all of the indoor units.

ALL ON Button
Press the ALL ON button to turn on all of the indoor units.

Timer and Clock Display and setting

- Setting Display
- Day Display
- Timer and Clock Display
- Timer Mode Display
- Timer Mode (DELETE) Button
- DAY Button
- Set Time Button
- PROGRAM (CLOCK ADJUST) Button
- ENTER Button

With cover open



Displaying the Status and Controlling indoor units

- Transmission Display
- Operation Lock Display
- ON / OFF Display
- Fan Speed Display
- Set Temperature Display
- Operation Mode Display
- ON / OFF Button
- Select Button
- Fan Control Button
- Master Control Button*1, *2, *3
- Set Temperature Button
- Child Lock Function

*1 : "AUTO Ⓐ" is not available for a heat pump model unless it is set up for the master indoor unit.
*2 : "FAN ※" is not available for a heat pump model
*3 : "HEAT ☼" is not available for a cooling only model

Specifications

Model name	UTY-CGG*
Power Supply	DC 12V
Dimensions (H x W x D) (mm)	120 x 120 x 17
Weight (g)	200

DC12V is supplied by a network converter. G* : GY(FUJITSU), GG(GENERAL)

Central Remote Controller

UTY-DCG*

Max. controllable **100** Indoor units

Max. controllable **16** groups

Central control of small- and medium-sized buildings and tenants. The operation status of all connected indoor units can be viewed at a glance on a large LCD monitor to simplify individual control to batched control.

- Individual control and monitor of 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 (English, Chinese, French, German, Spanish, Russian, Polish)

User friendly operation

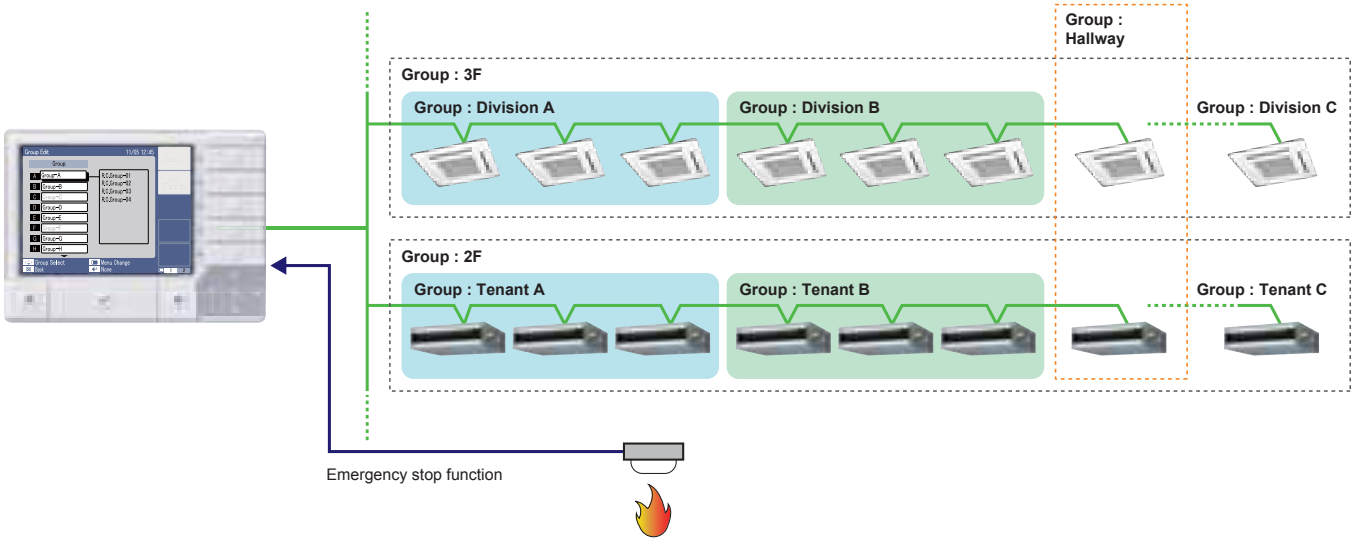
Operation status monitor displays for all indoor units
Easy comprehensible display and operation button

Function Menu
Function menu displays the items to select.

Function button
1 to 1 function button supports easy setting.

System overview

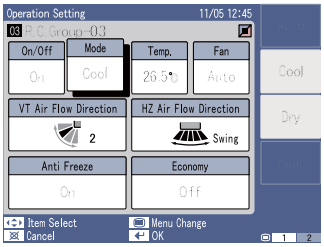
- It allows multiple indoor units grouping (Max.16 groups controlled)
- Interlock with external device



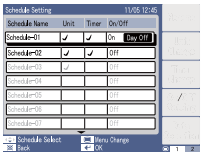
Functions

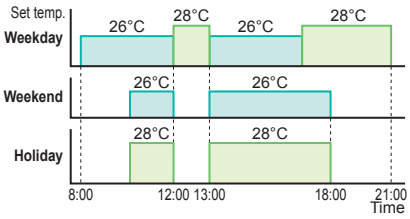
Diverse control of indoor units

• Individual control (On / Off, Mode, set Temp, Fan speed, Economy operation, Antifreeze operation)

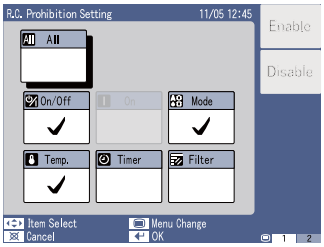


• **Weekly timer :** Weekly timer can set the timer by various combinations.

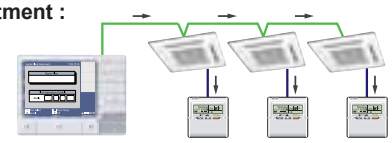




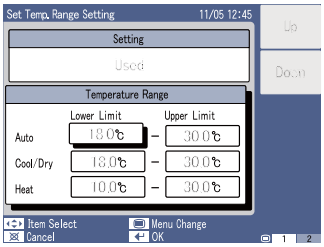
• **Remote controller prohibition (All, On / Off, Mode, Temp, Timer, Filter) :** R.C prohibition setting prohibits individual remote control operation from this controller



• **Automatic clock adjustment :** The time setting of each controller can be set in batch automatically.

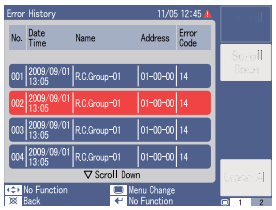


• Room temperature set point upper and lower limitation



Error history

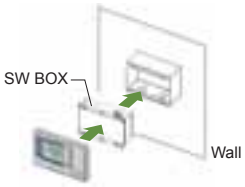
• Max 200 Errors memorize.
• Suitable maintenance is possible by analysis of the error history data.



Easy Installation

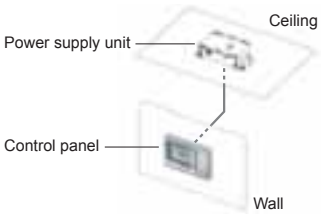
• The control panel and power supply unit can be installed separately.
• For flexibility in installation, the Control panel can be built into the wall or fix on the wall.

Setting pattern 1



Control panel + Power supply unit

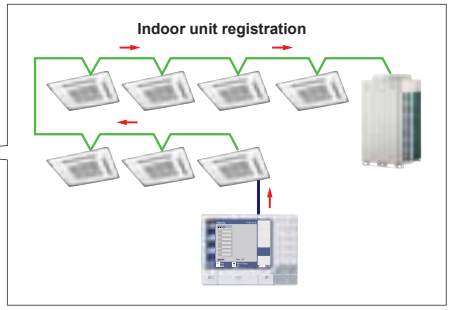
Setting pattern 2



• Automatic or manual indoor unit registration

Indoor unit registration start

Indoor unit registration finish



Specifications

Model name	UTY-DCG*	
	Control Panel	Power Supply Unit
Power Supply	DC 5 V	100-240V, 50-60Hz, Single phase
Dimensions (H x W x D) (mm)	120 x 162 x 26	99 x 135 x 40
Weight (g)	308	355

<PACKING LIST>

Packing List	Control Panel / Power Supply Unit / Connecting cable, etc.

G* : GY(FUJITSU), GG(GENERAL)

Touch Panel Controller

UTY-DTG*

Max. controllable 400 Indoor units

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

- Large-sized 7.5-inch TFT color
- LCD Easy finger touch operation
- Stylish shape and design to suit all application
- No additional component is required for installation
- Up to 400 indoor units can be controlled
- Selectable 2 display types (Icon / List) in monitoring mode
- Corresponds to 7 different languages, English, Chinese, French, German, Spanish, Russian, Polish.

Functions

Real size screen image

Easy operation

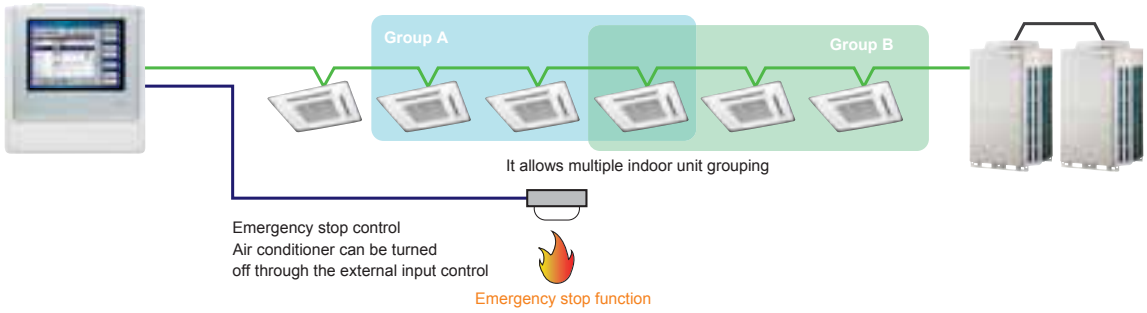
- Large and wide-angled LCD is easily viewable even at a distance
- Easy-to-understand icon-driven Graphical User Interface (GUI)
- Wide range of simple-to-understand icons

- 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

Easy maintenance

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

Up to 400 indoor units can be controlled



Function

- Up to 400 indoor units can be controlled
- It allows multiple indoor units grouping
- Schedule timer function is standard (20 patterns per day)
- Emergency stop function(through the external input control)
- Temperature upper and lower limit setting
- The clock of each indoor unit correct setting


Individual control

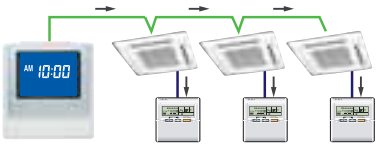

Flexible grouping


Schedule control


Indoor units operation monitoring

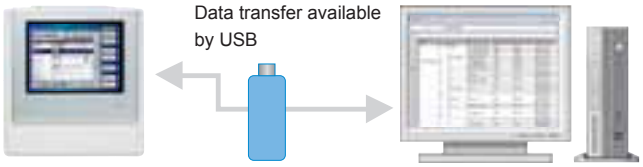
Automatic clock adjustment

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



Versatility

CSV format data edited by PC can be imported to Touch Panel Controller.



Easy installation

Touch Panel Controller is easily mounted to the wall Flat back surface allows to be installed wherever it is needed.

- Correctable mechanism for tilting (horizontal) after the installation of the body

No additional component is required for installation

- There is no need for the installation space of power supply adaptor and transmission adaptor etc.

Specifications

Model name	UTY-DTG*
Power Supply	100-240V 50/60Hz
Dimensions (H x W x D) (mm)	260 x 246 x 54
Weight (g)	2,150
Interface	USB 2.0

G* : GY(FUJITSU), GG(GENERAL)

System Controller Software

UTY-APGX

Max. controllable **4** VRF network systems

Max. controllable **400** Outdoor units

Max. controllable **1,600** Indoor units

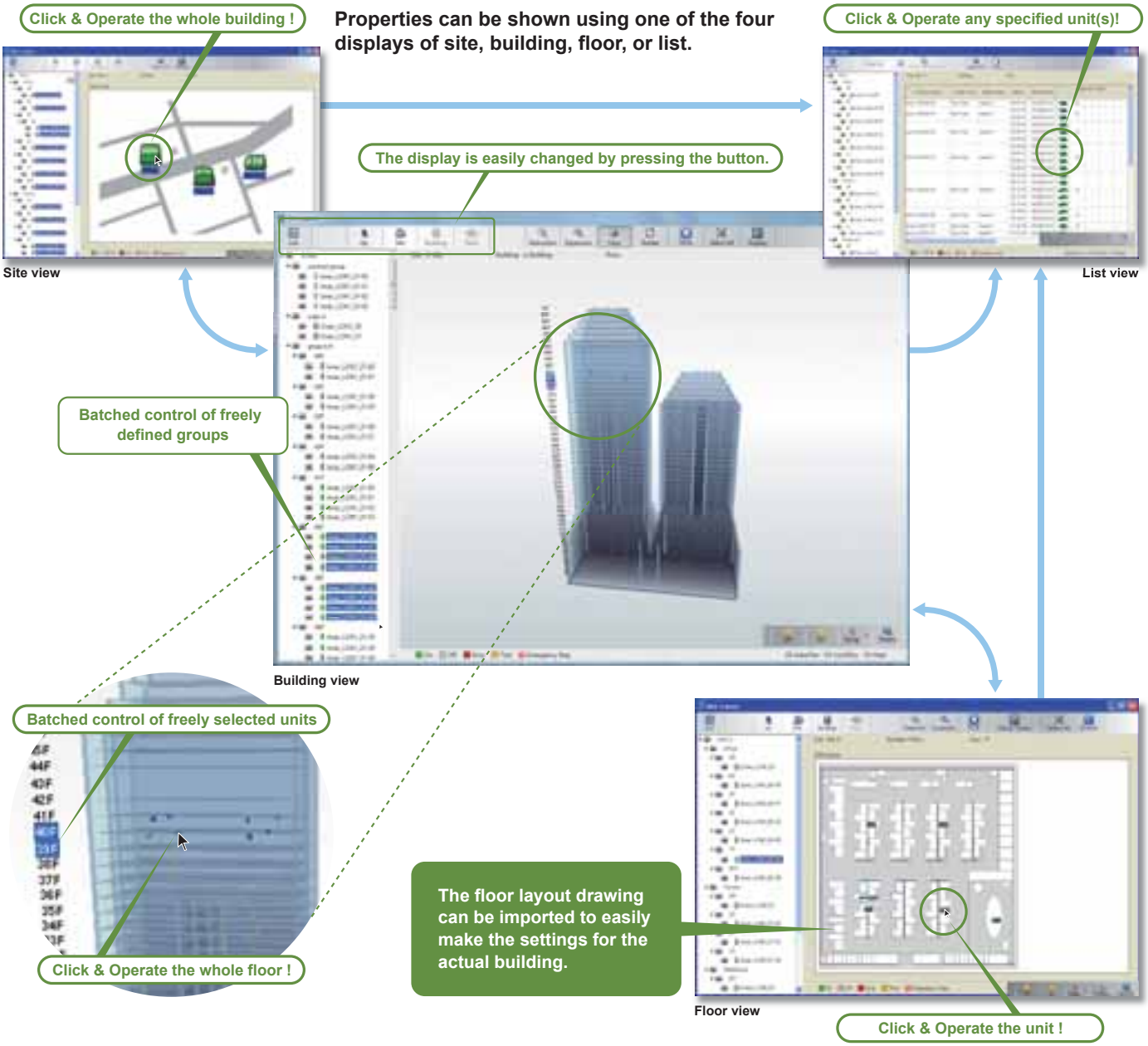
System Controller realizes the advanced integrated monitoring & control of VRF network system from small scale buildings to large scale buildings.

- Up to a maximum of 4 VRF network systems, 1600 indoor units, and 400 outdoor units can be controlled.
- Supports VRF S series, V series and V-II series.
- 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.

Functions

User friendly view and operation

- **Click & Operate :** The property is shown visually from the perspective most suitable for operation and operated accordingly (Click & Operate). You can select from among the 4 displays of site, building, floor, or list.
- **Freely define groups for batched control :** Indoor units can be freely grouped for simple batched control from a tree menu. Grouping by hierarchal structure, such as by section, division or department is possible.

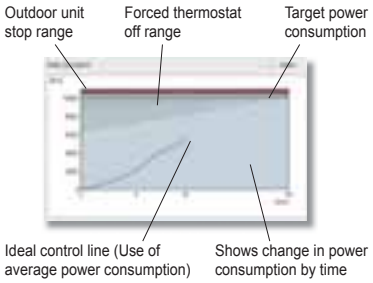


Energy saving management

With UTY-PEGX Option

Peak cut operation Option

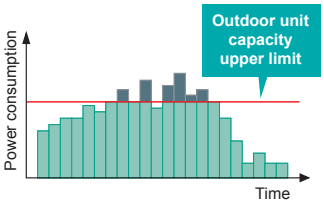
A power meter is connected to detect the total power consumption while shifting the indoor unit set temperature, set the indoor unit forced thermostat off, and taking other measures to carefully control the power consumed while maintaining comfort and conducting control to maintain the target power consumption set for each time.
The indoor units to be controlled can be freely grouped and the control level can be set.



Outdoor unit capacity save Option

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.

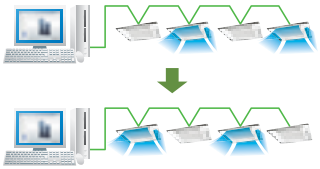
Outdoor unit capacity control screen



Indoor unit rotation operation Option

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.

Indoor unit rotation screen



Batched stop

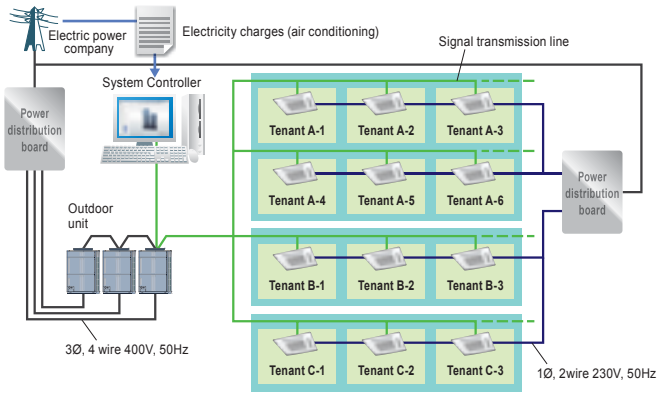
Batched stop at a freely set time for a property, building, or freely set block unit can be done to prevent any air conditioning unit from being forgotten to be turned off at the end of office hours, etc. In addition, any air conditioning unit whose operation is left on can be immediately identified by the icon color for a building or indoor unit in the monitoring screen and batched stop conducted in response.

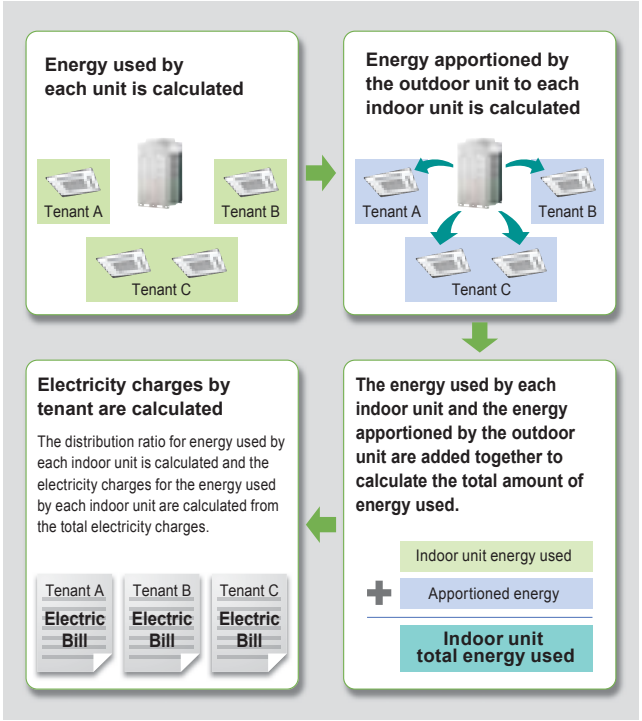
Electricity charge apportionment

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



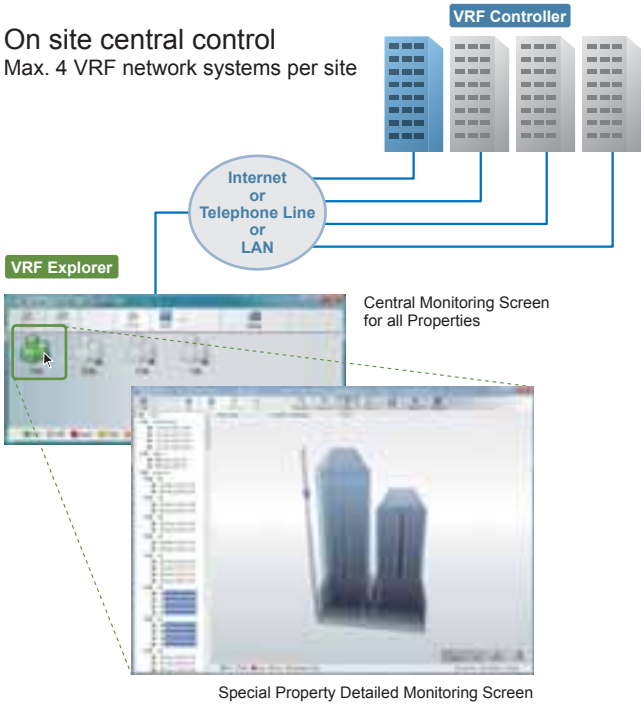


Remote centralized control

System Controller may be used on site or remotely over various networks for remote central control. System Controller requires 2 softwares working together. VRF Controller runs on site and communicate with VRF system. VRF Explorer runs remotely and provides user interface and communicate with the VRF Controller. VRF Controller and VRF Explorer program may run in a single PC or in different PCs separated by network. 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

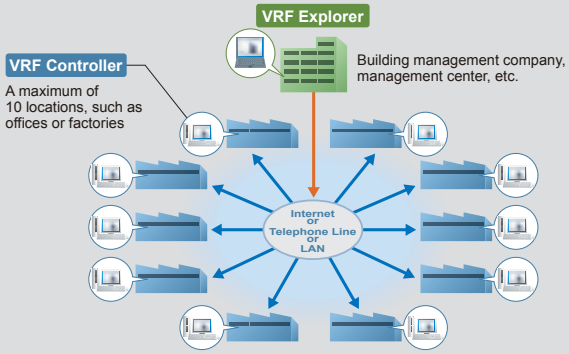
Max. 4 VRF network systems per site



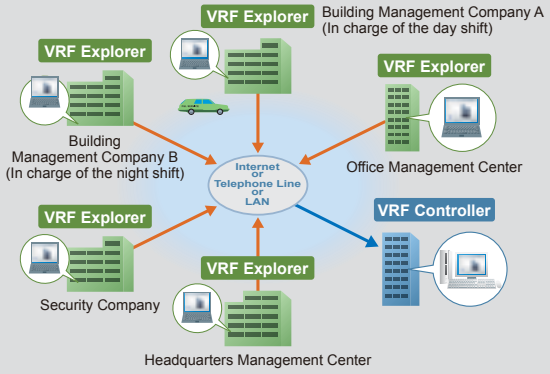
Special Property Detailed Monitoring Screen

Remote central control

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 connections simultaneously).



Can be used for a variety of applications

Air conditioning management for large shopping malls or the outlets of nationwide franchises

- Remote centralized management can be used for nighttime only to manage the air conditioning of multiple stores, operate air conditioning for people working overtime, and checking to see if employees forgot to turn off the air conditioning after they leave.
- Multiple users via a LAN can control the air conditioning in the office, general affairs department, or janitor's room.
- The air conditioning for franchise locations nationwide can be centrally controlled from headquarters to facilitate operation status and control to save energy.

Commercial buildings　Franchises

Air conditioning management of multiple buildings spread over a large site

- Batched operation of the factory buildings on a large site can be remotely conducted from the management office of the administration building to employ power saving operation.
- The headquarters can conduct centralized remote monitoring of the company's factories in outlying areas to improve the power saving effect for the entire company.
- Controlling the operation of each building and each classroom on campus makes it possible to reduce expenses by remotely controlling those spaces in accordance with the teaching schedule.

Factories　Universities　Hospitals

Provides high-quality building air conditioning service

- Service companies that manage buildings that are empty at night after the managers leave to go home can conduct centralized remote monitoring of the building without dispatching employees to the site, which allows them to monitor the air conditioning for multiple clients.
- The System Controller remote monitoring and control functions can be used to receive outsourcing business from small and medium size building owners to manage their air conditioning energy.
- Nighttime only remote monitoring of multiple properties after the people leave can be performed for areas that require 24-hour operation, such as server rooms, to monitor for problems.

Service Companies

Security Support

Employs SSL Encryption Technology

Encryption technology is used for communications to remote sites to prevent information from being stolen.

Detailed User Management

User identification : Authorization using user IDs and passwords is employed to prevent unauthorized access.

Access authority : The functions that can be used are restricted for individual login users to prevent unauthorized use.

Schedule control

- Annual schedules can be set for each remote controller group / user defined group.
- Start / stop, operating mode, remote controller 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.
- Settings can be made for periods straddling midnight.
- 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 units

- Indoor unit operation state, operation mode, etc. are displayed
- Indoor unit start / stop and operation mode switching
- Temperature setting, Remote Controller prohibition.

Error display & E-mail notification

Error is notified with popup message, audible sound and E-mail real time when error occurs. Error for the past 1 year are logged and can be reviewed later.

Operating & control record

Displays the history of operation status and control.

Prohibition Setting

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

Multiple language display

Corresponds to 7 different languages (English, Chinese, French, German, Spanish, Russian, Polish)

Operating Conditions

The following chart shows the detail requirement for an AT compatible personal computer to run System Controller.
Applies for both VRF Controller and VRF Explorer PC.

Personal Computer		AT compatible machine that runs Microsoft® Windows®
	Operating System	Microsoft® Windows® XP Professional (Service Pack 3 or later / English version) Microsoft® Windows Vista® Home Premium, Business (Service Pack 2 or later / Corresponds to 7 different languages.*) Microsoft® Windows® 7 Home Premium, Professional (Corresponds to 7 different languages.*) *English, Chinese, French, German, Spanish, Russian, Polish •64-bit version of Windows® are not supported.
	CPU	Intel® Pentium® / Celeron 2 GHz (VRF Controller), 1 GHz (VRF Explorer) or higher
	HDD	40 GB or more of free space (5 GB for VRF Explorer PC)
	Memory	2 GB or more (VRF Controller), 1 GB or more (VRF Explorer)
	Display	1024 x 768 dots or more. 15 inch or higher size is preferable.
	Interface	USB port is required for each of the followings for Server PC ; • Wibu Key (Software protection key) • Echelon® U10 USB Network Interface (Required for each VRF Network) Ethernet port is required for remote connection using internet.
Accelerator		Requires the internal graphics accelerator be compatible with Microsoft® DirectX® 9.0
Other Software Required		Adobe® Reader® 9.0 or later

<OPTION AVAILABLE>

Energy Saving Software	UTY-PEGX(*1)	Additional support for energy saving function and Electricity Charge Apportionment using electricity meter.

<PACKING LIST>

Item	Q'ty	Application
CD-ROM	1	Includes the software for System Controller. Both VRF Controller and VRF Explorer software is included.
Wibu Key (Software protection key)	1	Software protection key to be inserted in a USB slot running System Controller. System Controller may only run on a PC with Wibu Key. Remote VRF Explorer software does not require Wibu Key.

Personal computer must be field supplied. U10 USB Network Interface must be field supplied. Contact Echelon® Corporation or its local sales representative for detail.
Product Name : U10 USB Network Interface - TP/FT-10 Channel Model Number : 75010R
*1: Energy Saving Software (UTY-PEGX) is available for the indoor units and the outdoor units after revision code B

Network Convertor

UTY-VGGX

Max. connectable 16 single indoor units

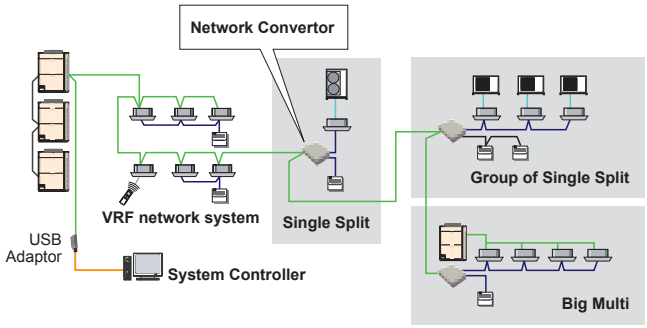
Max. connectable 4 Group Remote Controllers

- This Network Convertor is to be used for connecting single split system or Group Remote Controller (UTY-CGGY / UTY-CGGG) with the VRF network system.
- Please select the function by switching the dip switch during the installation.

Functions

Used for connecting single split system

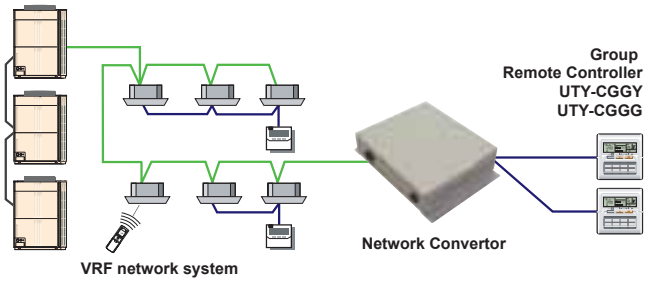
- Split type systems can be centrally controlled from Touch Panel Controller or System Controller through connection to the VRF's network convertor.
- On / Off Control, Master control, Room temperature and Fan speed setting via the Network Convertor are available.
- One Network Convertor can be used to connect and control up to 16 single units.



Please consult your distributor for connectable split type air conditioner.
Up to 100 Network Convertors may be connected in single VRF network system.
One Network Convertor is considered as a single refrigerant system, irrespective of the number of connected single models.

Used for connecting Group Remote Controller

4 Group Remote Controllers can be connected to a single Network Convertor (UTY-VGGX).

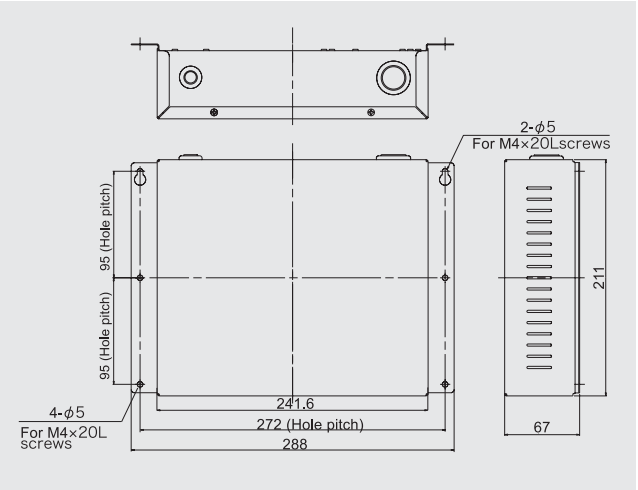


* 2 refrigerant circuits can be covered by a single Network Convertor (UTY-VGGX) . Up to a total of 16 Network Convertors (UTY-VGGX) and System Controller adaptors can be connected in a single VRF network system.

Specifications

Model name	UTY-VGGX
Power Supply	220-240V 50/60Hz
Power Consumption (W)	8.5
Dimensions (H x W x D) (mm)	67 x 288 x 211
Weight (g)	1,500

Dimensions (Unit : mm)



Network Convertor for LONWORKS®

UTY-VLGX

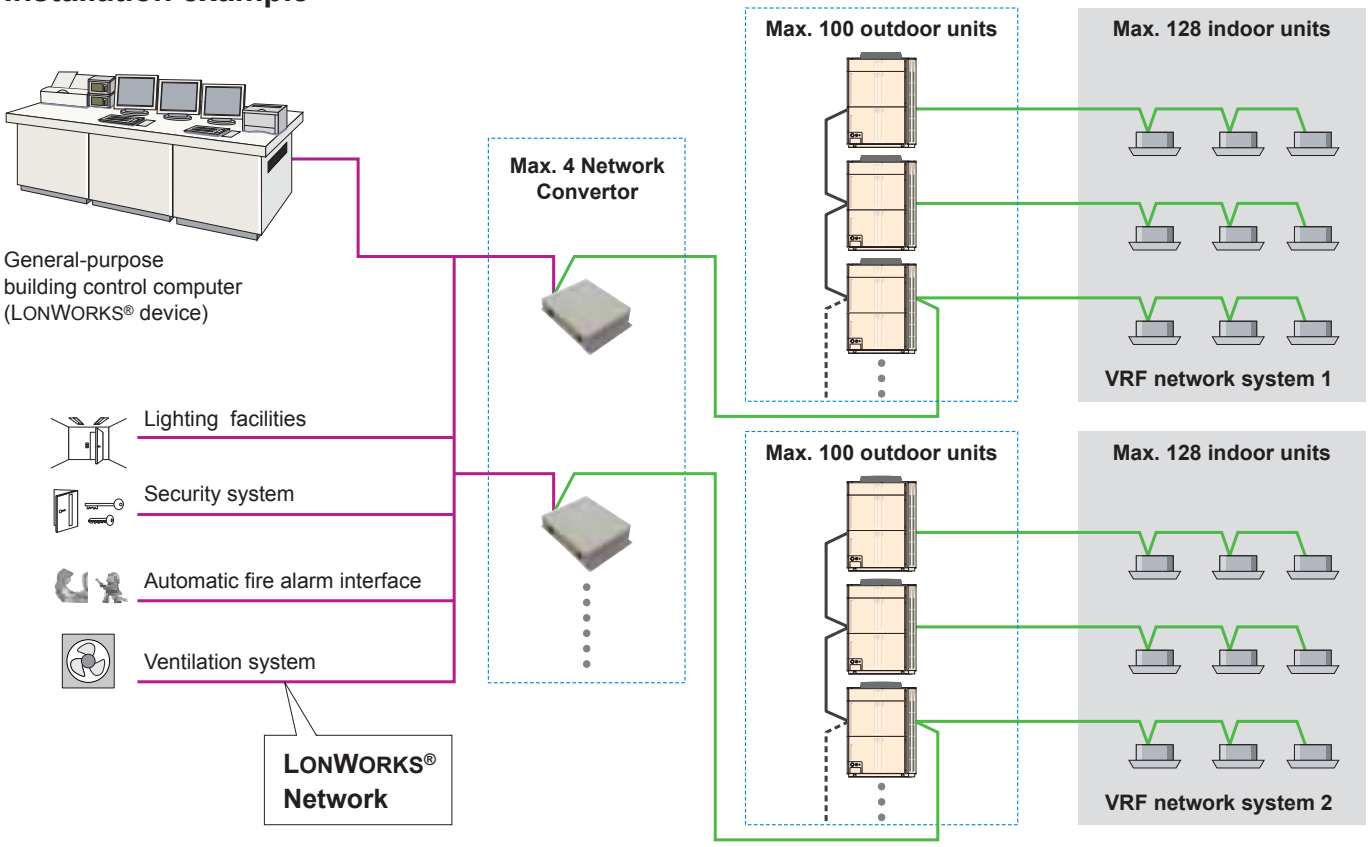
Max. controllable **4** Units to BMS

Max. controllable **100** Outdoor units

Max. controllable **128** Indoor units

- For connection between VRF network system and a LONWORKS® open network for management of small to medium-sized BMS and VRF network system.
- 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®

Installation example



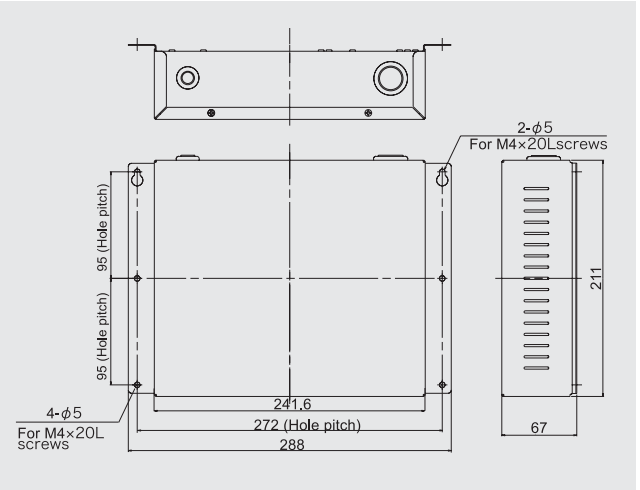
Specifications

Model name	UTY-VLGX
Power Supply	220-240V 50/60Hz
Power Consumption (W)	4.5
Dimensions (H x W x D) (mm)	67 x 288 x 211
Weight (g)	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.)

Dimensions (Unit : mm)



BACnet® Gateway Software

UTY-ABGX

- It is possible to connect medium to large sized BMS to VRF network system via BACnet®, 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.
- It is possible to control or monitor VRF network system from BMS via BACnet® Gateway.
- Compatible with BACnet® (ANSI / ASHRAE-135-2004) 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.

CD-ROM (Software)

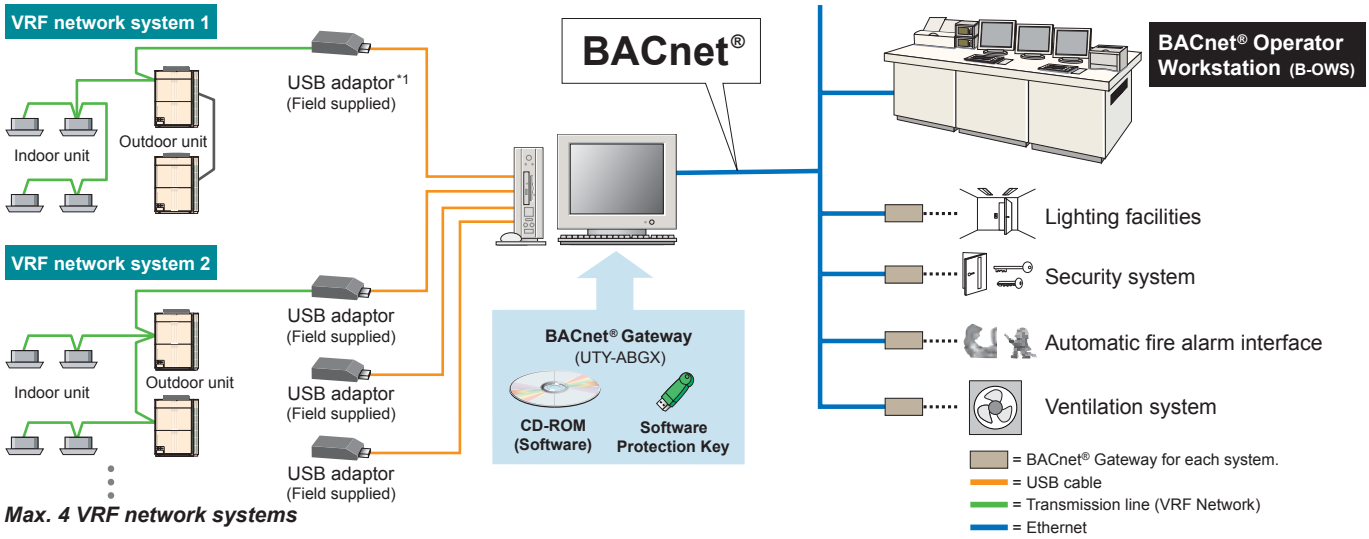
Software Protection Key

Max. controllable 4 VRF network systems

Max. controllable 400 Outdoor units

Max. controllable 1,600 Indoor units

Installation example



Max. 4 VRF network systems

*1: USB adaptor is U10 USB Network Interface of Echelon® Corporation.

The BACnet Gateway version 2.0 is eligible to display BTL Mark. Founded by BACnet International, BTL (BACnet Testing Laboratories) is an indication of worth trusting for its quality after passing the strict tests.

PERSONAL COMPUTER SPECIFICATIONS

	For BACnet® Gateway (UTY-ABGX)
CPU	At compatible machine that runs Microsoft® Windows® Intel® Pentium® / Celeron®, AMD Athlon / Duron processor 2 GHz or higher
Hard Drive	40 GB or more of free space
Memory	2 GB or more
Display	1024 x 768 dots or more, High color (16bit) or more
Interface	USB port (x 2-5) is required Ethernet port is required
Operating System	Microsoft® Windows® XP Professional (Service Pack 3 or later / English version) Microsoft® Windows Vista® Home Premium, Business (Service Pack 2 or later / Corresponds to 7 different languages.*) Microsoft® Windows® 7 Home Premium, Professional (Corresponds to 7 different languages.*) *English, Chinese, French, German, Spanish, Russian, Polish •64-bit version of Windows® are not supported.
Required Hardware	CD-ROM drive
Required Software	Adobe® Reader® 9.0 or later
<PACKING LIST>	
Packing List	CD-ROM / Wibu Key

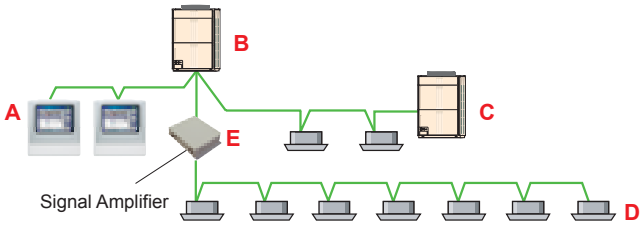
Personal computer must be field supplied. U10 USB Network Interface must be field supplied. Contact Echelon® Corporation or its local sales representative for detail.
Product Name : U10 USB Network Interface - TP/FT-10 Channel Model Number : 75010R

Signal Amplifier

UTY-VSGX

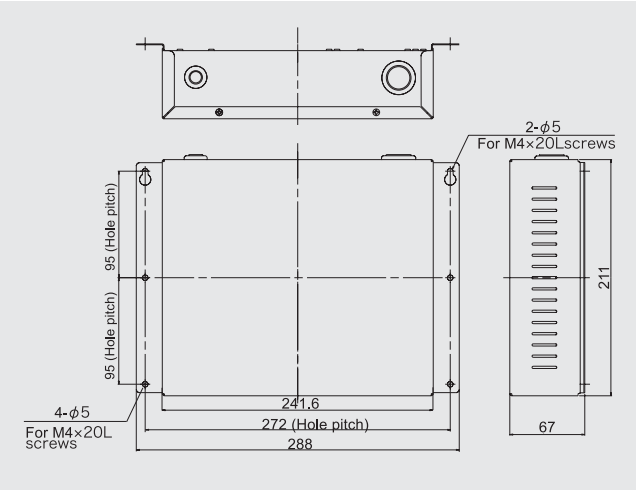
- Transmission Line length can be extended up to 3,600m with multiple Signal Amplifiers.
- Up to 8 signal amplifiers can be installed in a VRF network system.
- A signal amplifier is required,
  (1) When the total wiring length of the transmission line exceeds 500m.
  (2) When the total number of units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

Installation example



AB+BE+BC＜500m
ED ＜500m

Dimensions (Unit : mm)



Specifications

Model name	UTY-VSGX
Power Supply	220-240V 50/60Hz
Power Consumption (W)	4.5
Dimensions (H x W x D) (mm)	67 x 288 x 211
Weight (g)	1,500

External Switch Controller

UTY-TEKX

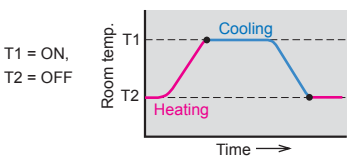
Air conditioner switching can be controlled by connecting other sensor switches

- 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.

Installation example

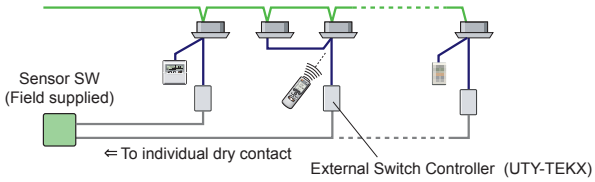
Auto mode operation, which switches the cooling and the heating automatically, is enabled by using the sensor switch and External Switch Controller.

Note: All indoor units will operate in the same mode.

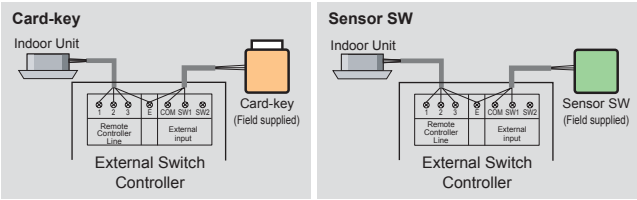


Note 1.
Please choose a thermosensor switch which can be set up for T1 and T2.

Note 2.
The remote controller's operation is prior to the auto mode operation.



Electrical wiring



Specifications

Model name	UTY-TEKX
Power Supply	DC 12V
Dimensions (H x W x D) (mm)	120 x 75 x 30
Weight (g)	90

DC12V is supplied by the indoor unit.

Service Tool Software

UTY-ASGX

Max. Monitor and control **100** Outdoor units

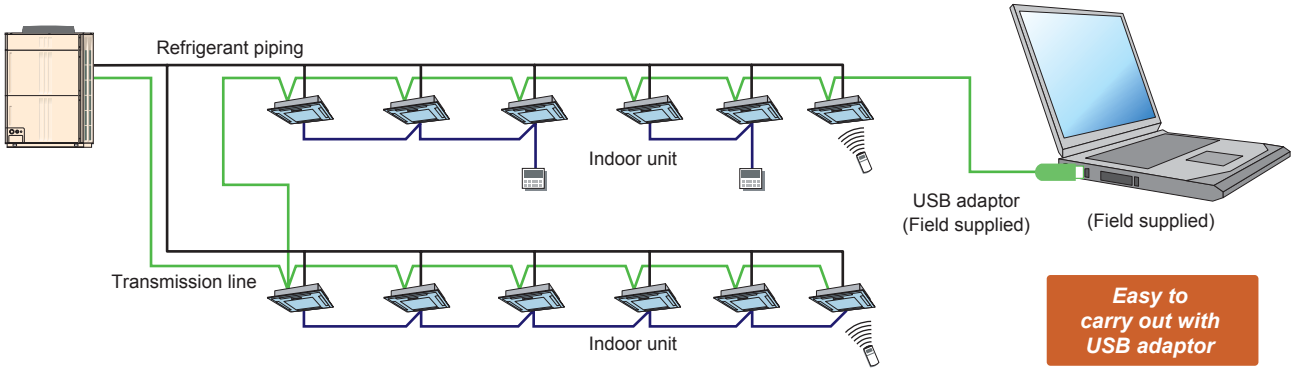
Max. Monitor and control **400** Indoor units

Extensive monitoring and analysis functions for installation and maintenance.

- Operation status can be checked and analyzed to detect even the small abnormalities.
- Data collected and stored on site can be checked later, off-line, off-site for more detail analysis.
- One VRF network system with maximum number of up to 400 units can be monitored and controlled.
- Operation status and various sensor information can be monitored and checked real time in the form of list, refrigerant circuit diagram, graphs as well.
- Simple operation control functions are useful during maintenance.
- The recent error history can be retrieved from units on demand to perform analysis on the cause of the error, after connecting Service Tool to the VRF network system.
- Commissioning tool supports test runs, data storage for each unit and saving of data as CSV files, which may be formatted to create commissioning report.
- Connectable to any point of transmission line with USB adaptor*1 (field supplied)
- 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.
- New 8 functions are added for V-II series and service performance is advanced furthermore. (supported by Ver. 1.1 or later)

* 1: Service Tool (UTY-ASGX) will only support USB type network adaptor and will not support transmission adaptor of the traditional type(UTR-YTMA)

Wiring connection



Easy to carry out with USB adaptor

*USB Adaptor is U10 USB Network interface of Echelon® Corporation.

Functions

1) System List

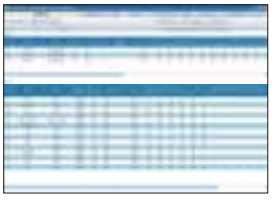
Displays the overall operation status of all or specified units in the system in a list form.

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.

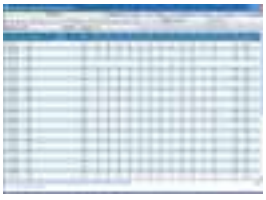
3) Equipment Detail (List)

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.



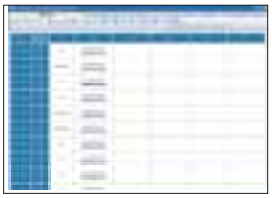
4) Operation History

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 data can be downloaded. Only the required data may be downloaded specifying the refrigerant system, unit and time range.

7) Commissioning Tool

Test run commands can be executed with this tool.
During test running, the outdoor unit / indoor unit sensor data can be saved (commissioning log data).
After the end of test running, 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 *

Function (Field) Setting for indoor unit is realized remotely

10) System Time Setting *

An arbitrary time is set for all the remote controllers within the system.

11) Software Version *

The software version of units are acquired and displayed.

12) Central Release *

The operation setting restriction function of the indoor units set from the controller can be forcibly released.(remote controller inhibit, temperature upper/lower limit setting)

13) Model Name Writer *

An arbitrary model name can be written to the target unit.

14) Error Memory Reader *

When an error occurs at an outdoor unit, the operation data records before the error are acquired over a network and saved to a CSV file.

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

15) Time Guard Information *

Reference data for judging the maintenance period of indoor and outdoor units (compressor,FAN, etc. integrated time) is output to a CSV file.

*: Supported by Ver. 1.1 or later

PERSONAL COMPUTER SPECIFICATIONS

Operating System	AT compatible machine that runs Microsoft® Windows® Microsoft® Windows® XP Professional (English version / Service pack 3 or later) Microsoft® Windows® Vista® Home Premium, Business Edition (English version) Microsoft® Windows® 7 Professional (English version) *64-bit version of Windows® are not supported.
CPU	Intel® Pentium® / Celeron®, AMD Athlon™ / Duron™ 1 GHz or higher
HDD	10 GB or more of free space
Memory	1 GB (Vista, 7), 512 MB (XP) or more
Interface	USB port for U10 USB Network Interface and Software protection key.
Required Software	Internet Explorer 6.0 or 7.0 or 8.0 / Adobe® Reader® 9.0 or later
Required Hardware	CD-ROM drive
<PACKING LIST>	
Packing List	CD-ROM / Wibu Key

Personal computer must be field supplied. U10 USB Network Interface must be field supplied. Contact Echelon® Corporation or its local sales representative for detail.
Product Name : U10 USB Network Interface - TP/FT-10 Channel Model Number : 75010R

Web Monitoring Tool

Software

UTY-AMGX

4
VRF network systems can be supported

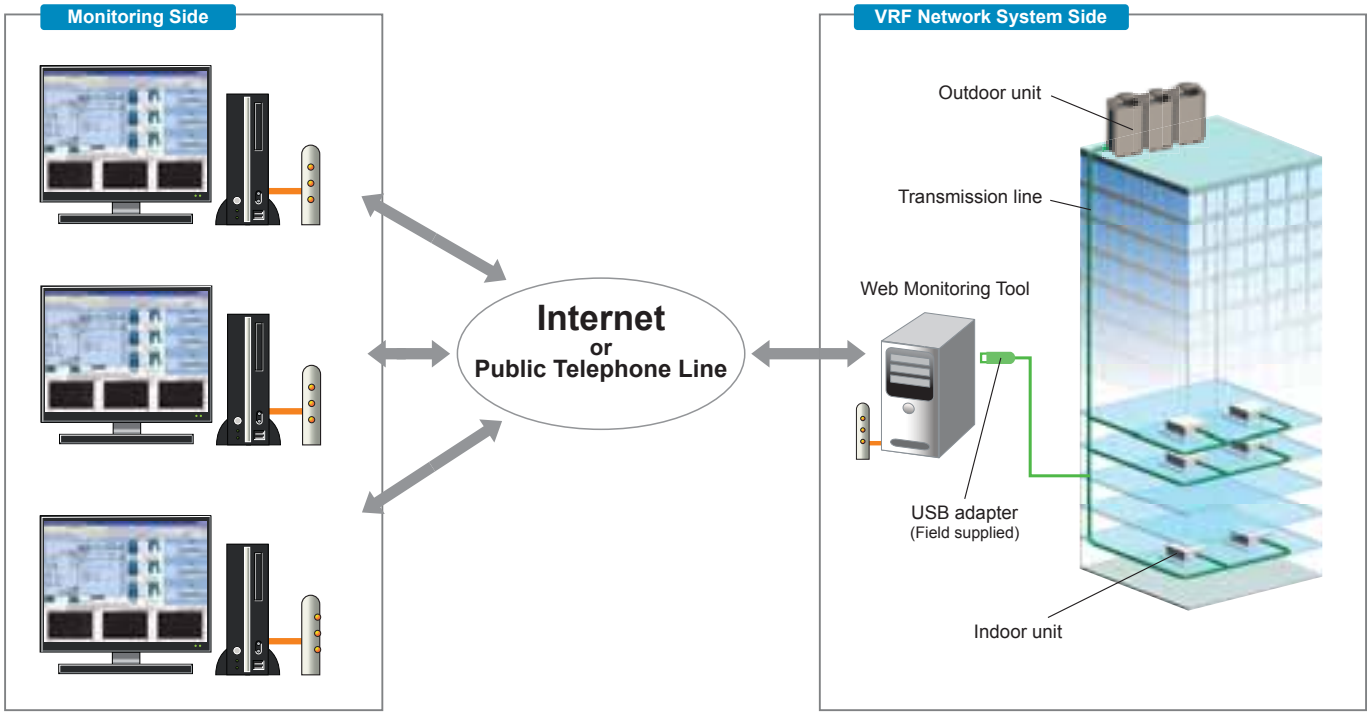
1600
Indoor unit can be monitored

Product features

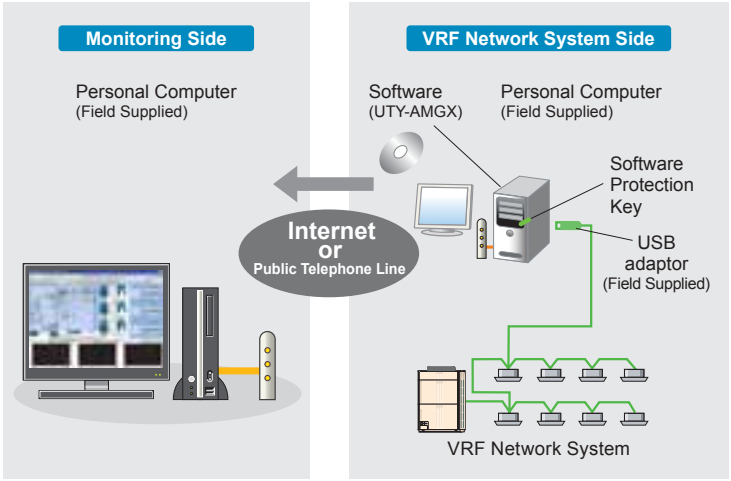
- Troubleshooting is performed by monitoring each unit remotely during periodical system checks off-site.
- Operation status can be checked and analyzed to detect even the smallest abnormalities.
- Four VRF network systems each with 400 units, with maximum number of up to 1,600 units can be monitored and controlled.
- Operation status and various sensor information can be monitored and checked real time in the form of list, refrigerant circuit diagram, and graphs as well.
- The monitoring data in a remote side can be optionally downloaded. And, this data can be displayed in off-line mode of the Service Tool.
- Error notification can be automatically transmitted to several locations using the internet*1.
- Monitoring side computer is not required to install special software, requires only general web browser.
- Connectable to any point of transmission line with U10 USB interface*2 (field supplied)
- 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.
- New 6 functions are added for V-II series and service performance is advanced furthermore. (supported by Ver. 1.1 or later)

* 1: USB of internet mail system required.
* 2: Web Monitoring Tool (UTY-AMGX) will only support USB type network adaptor and will not support transmission adaptor of the traditional type (UTR-YTMA).

Web Monitoring System

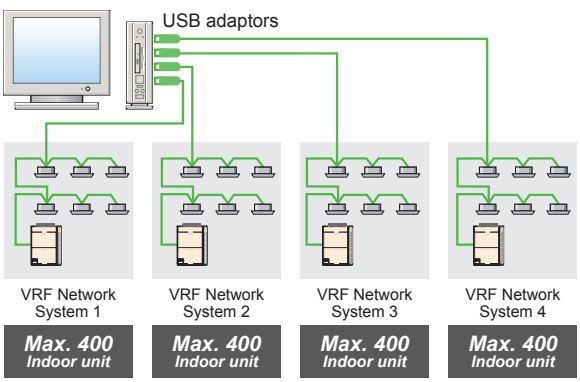


System components



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.



COMPARISON TABLE

No.	Item	Service Tool UTY-ASGX	Web Monitoring Tool UTY-AMGX	
			VRF network system Side	Monitoring Side
1	Interchangeability of equipment	●	●	●
2	Indication of equipment list	●	●	●
3	Operation control	●	●	—
4	Indication of refrigerant circuit diagram	●	●	●
5	Commissioning tool	●	●	—
6	Monitoring of equipment information	●	●	●
7	Monitoring of operating condition	●	●	●
8	Monitoring of sensor data	●	●	●
9	Storage and CSV output of operating history (sensor data)	●	●	●
10	Indication of trend graph	●	●	●
11	Printing of trend graph	●	●	●
12	Monitoring and screen display of abnormalities	●	●	●
13	E-mail automatic transmission of abnormalities	—	●*1	—
14	Setting for user level	—	●	—
15	Network Topology Analyzer *	●	●	—
16	Remote Setting *	●	●	—
17	System Time Setting *	●	●	—
18	Software Version *	●	●	—
19	Central Release *	●	●	—
20	Model Name Writer *	●	—	—
21	Error Memory Reader *	●	—	—
22	Time Guard Information *	●	●	●

*: Supported by Ver. 1.1 or later
*1: it is available only during a connection to the Internet.

PERSONAL COMPUTER SPECIFICATIONS

Operating System	AT compatible machine that runs Microsoft® Windows® Microsoft® Windows® XP Professional (English version / Service pack 3 or later) Microsoft® Windows® Vista® Home Premimum, Business Edition (English version) Microsoft® Windows® 7 Professional (English version) *64-bit version of Windows® are not supported.
CPU	Intel® Pentium® / Celeron®, AMD Athlon™ / Duron™ 1 GHz or higher
HDD	10 GB or more of free space
Memory	1 GB or more
Interface	USB port (for U10 USB Network Interface Max.4 , Software protection key) Following interface is required for remote connection: Public Telephone LIne : Modem is required Internet using LAN : Ethernet port is required
Required Software	Internet Explorer 6.0 or 7.0 or 8.0 / Adobe® Reader® 9.0 or later
Required Hardware	CD-ROM drive

<PACKING LIST>

Packing List	CD-ROM / Wibu Key

Personal computer must be field supplied. U10 USB Network Interface must be field supplied. Contact Echelon® Corporation or its local sales representative for detail.
Product Name : U10 USB Network Interface - TP/FT-10 Channel Model Number : 75010R

Energy Recovery Ventilator

Models

UTZ-BX025A
UTZ-BX035A
UTZ-BX050A
UTZ-BX080A
UTZ-BD100A

UTZ-BX025A UTZ-BX035A UTZ-BX050A

UTZ-BX080A UTZ-BD100A

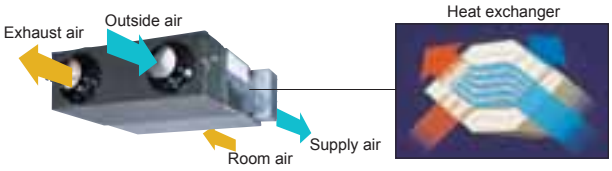
Energy recovery ventilator unit offers maximum comfort and greater energy savings.

Heat exchange ventilation and normal ventilation

Heat exchange ventilation
When a room is cooled or heated, the exhausted cooling / heating energy is recovered by heat-exchange ventilation.

Normal ventilation
This is used in spring and autumn, when rooms are not cooled or heated, that is, when there is little difference between the indoor and outdoor air conditions. In addition, at night during the hot season, when the outside air temperature drops the outside air is drawn inside without heat exchange, alleviating the load on the air conditioning equipment.

Adopts a highly efficient counter-flow heat exchange element



Specifications

Rated flow rate				250 m³/h	350 m³/h	500 m³/h	800 m³/h	1000 m³/h
Model No.				UTZ-BX025A	UTZ-BX035A	UTZ-BX050A	UTZ-BX080A	UTZ-BD100A
Power source				220 - 240V, 50Hz				
HEAT EXCHANGE VENTILATION	Input power	(Extra high) / High / Low	W	119 / 99 / 79	154 / 124 / 117	214 / 169 / 151	347 / 309 / 302	445 / 360 / 332
	Air flow rate	(Extra high) / High / Low	m³/h	250 / 250 / 170	350 / 350 / 280	500 / 500 / 370	800 / 800 / 650	1,000 / 1,000 / 810
	External static pressure	(Extra high) / High / Low	Pa	90 / 80 / 37	95 / 65 / 42	105 / 70 / 38	140 / 110 / 70	90 / 55 / 35
	Temperature Exchange Efficiency	(Extra high) / High / Low	%	75 / 75 / 77	75 / 75 / 77	75 / 75 / 77	75 / 75 / 76	75 / 75 / 76
	Energy Exchange Efficiency Cooling	(Extra high) / High / Low	%	63 / 63 / 66	66 / 66 / 69	62 / 62 / 67	65 / 65 / 68	65 / 65 / 68
	Energy Exchange Efficiency Heat pump	(Extra high) / High / Low	%	70 / 70 / 73	69 / 69 / 71	67 / 67 / 71	71 / 71 / 74	71 / 71 / 73
	Sound pressure level	(Extra high) / High / Low	dB*	28 / 26 / 21	32 / 29 / 25	34 / 31 / 25	38 / 36.5 / 32	37.5 / 36 / 31
NORMAL VENTILATION	Input power	(Extra high) / High / Low	W	119 / 98 / 79	151 / 119 / 113	210 / 161 / 145	337 / 300 / 297	438 / 358 / 329
	Air flow rate	(Extra high) / High / Low	m³/h	250 / 250 / 170	350 / 350 / 280	500 / 500 / 370	800 / 800 / 650	1,000 / 1,000 / 810
	External static pressure	(Extra high) / High / Low	Pa	90 / 80 / 37	95 / 65 / 42	105 / 70 / 38	140 / 110 / 70	90 / 55 / 35
	Sound pressure level	(Extra high) / High / Low	dB*	27 / 26.5 / 21.5	31 / 30 / 26	34 / 32 / 26.5	38.5 / 37 / 33	38 / 36.5 / 31.5
Dimensions (W × D × H)			mm	882 x 599 x 270	882 x 804 x 270	962 x 904 x 270	1,322 x 884 x 388	1,322 x 1,134 x 388
Weight			kg	29	37	43	71	83
Outlet duct diameter			mm	150	150	200	250	250
Operation range			°C	-10 to 40	-10 to 40	-10 to 40	-10 to 40	-10 to 40
Maximum humidity			%	85	85	85	85	85

* The noise level must be measured 1.5 m below the centre of the unit.

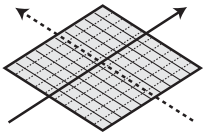
Energy efficiency and ecology

Energy consumption is dramatically reduced by using a counterflow heat-exchange element. Air conditioning load is reduced by approximately 20%, resulting in significant energy savings. Recovers up to 77% of the heat in the outgoing air.

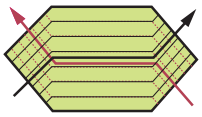
20% *Energy saving*

Features of heat exchange element

With the cross-flow element, air moves in a straight line across the element. With the counter-flow element , air flows through the element for a longer time (longer distance) ,so the heat-exchange effect remains unchanged.



Other element
(Cross-flow element)



Fujitsu element
(Counter-flow element)

Features of heat exchange element

Significantly reducing low pressure loss and noise allows low-noise operation of 32 dB (High) or less for models with a capacity of 500 m3/h or less, and 37.5 dB (High) for models with a capacity of 1,000 m³/h.

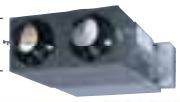
Long heat-exchanger service life

Cleaning reduced due to the special material heat exchanger. The nylon/polyester fibre filter offers high dust retention capacity.

Slim shape and easier installation

Counter-flow heat exchange element used for reduced noise and slimmer, more compact body shape.

Height 270mm



UTZ-BX025A/BX035A/BX050A

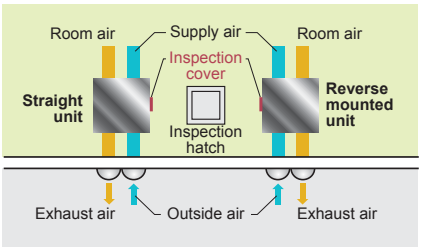
Height 388mm

UTZ-BX080A/BD100A

Reverse mountable direct air supply / exhaust system

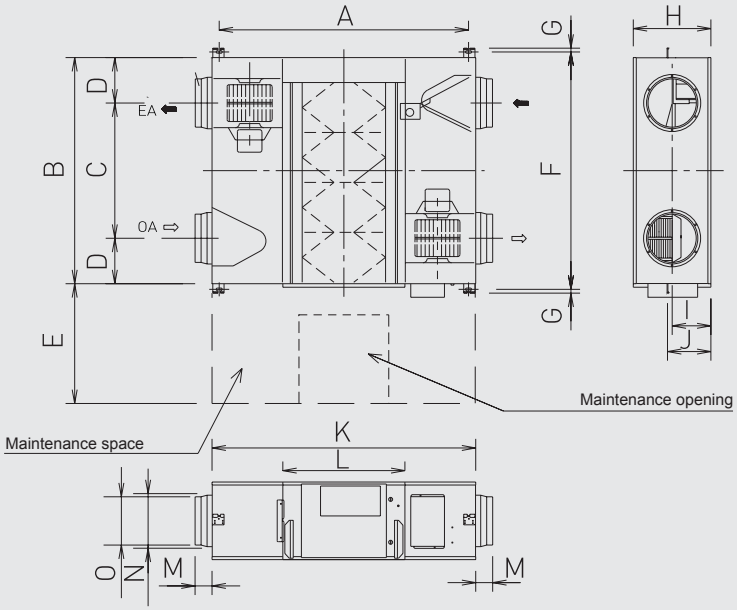
Adoption of straight air supply / exhaust system: Duct design is simplified because the air supply / exhaust ducts are straight.

Since each unit can be mounted in reverse position, only one inspection hole is needed for two units: Two units can share one inspection hole so duct work is easier and more flexible.



Dimensions (Unit : mm)

Models: UTZ-BX025A / UTZ-BX035A / UTZ-BX050A / UTZ-BX080A / UTZ-BD100A



	UTZ-BX025A	UTZ-BX035A	UTZ-BX050A	UTZ-BX080A	UTZ-BD100A
A	810	810	890	1,250	1,250
B	599	804	904	884	1,134
C	315	480	500	428	678
D	142	162	202	228	228
E	600	600	600	600	600
F	655	860	960	940	1,190
G	19	19	19	19	19
H	270	270	270	388	388
I	135	145	145	194	194
J	159	159	159	218	218
K	882	882	962	1,322	1,322
L	414	414	414	612	612
M	95	95	107	85	85
N	219	219	246	258	258
O	144	144	194	242	242

Fujitsu General Supports Diverse

VRF System Design

1. Quick model selection and design tool "Design Simulator" for VRF

Fujitsu General offers software which quickly performs model selection and creates material for model estimation in the VRF initial design stage. "Design Simulator" has functions which automatically select the proper model for the required capacity, automatically draft piping diagrams and wiring diagrams, and also automatically calculate the additional refrigerant charge amount, automatically generates the reports necessary for estimation. Operation is also easily performed by drag & drop and full-fledged model design estimates can be quickly made.

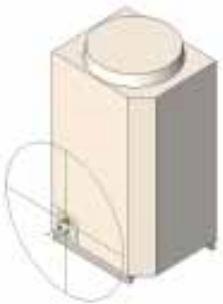
Design Simulator
for
FUJITSU VRF

Features

- Automatic model selection of indoor unit and outdoor unit
- Simple drag & drop operation
- Automatic generation of piping diagrams and wiring diagrams
- Automatic calculation of additional refrigerant charge amount
- Auto CAD Data (DXF), Revit Mep Data (RFA) export
- Automatic report generation (Word, Excel)
- Multi-language capability

2. 2D (DXF), 3D (RFA) contents data

Two kinds of model data, DXF data and RFA data, necessary in detailed design are offered.
These data can be procured from the Fujitsu General web site and Design Simulator



RFA data

FGL Web site

*Please contact your nearest FGL sales company for details of each kind of design support.

Optional Parts

Controllers

Wired Remote Controller
UTY-RNK*

Simple Remote Controller
UTY-RSK*
With operation mode

Simple Remote Controller
UTY-RHK*
Without operation mode

Wireless Remote Controller
UTY-LNH*

IR Receiver Unit
UTB-YWB
UTB-TWB

For All Duct type

IR Receiver Kit
UTY-LRHYB1
UTY-LRHGB1

For Cassette type

Group Remote Controller
UTY-CGG*

Central Remote Controller
UTY-DCG*

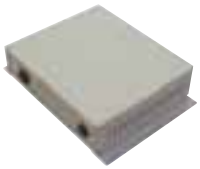
Touch Panel Controller
UTY-DTG*

System Controller Software
UTY-APGX

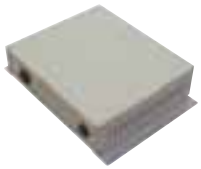
K*: KY (FUJITSU), KYT (FUJITSU), KG (GENERAL) H*: HY (FUJITSU), HG (GENERAL) G*: GY (FUJITSU), GG (GENERAL)

Convertors / Adaptors

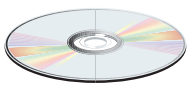
Network Convertor
UTY-VGGX



Network Convertor for LONWORKS®
UTY-VLGX



BACnet® Gateway Software
UTY-ABGX



CD-ROM (Software)

Software Protection Key

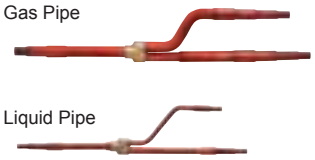
Signal Amplifier
UTY-VSGX

External Switch Controller
UTY-TEKX

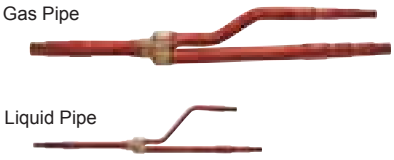
Optional Parts

Connection Tube

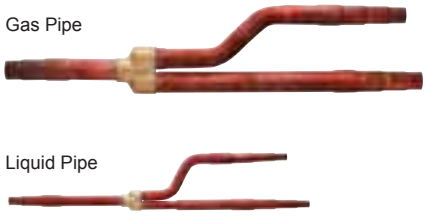
Separation Tube
UTR-BP090X



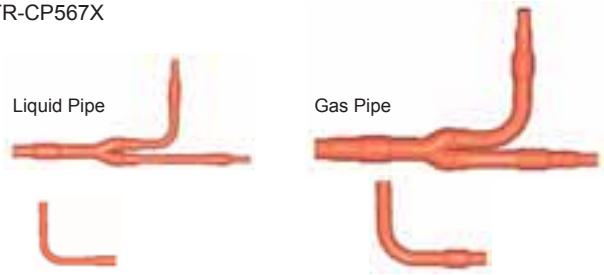
Separation Tube
UTR-BP180X



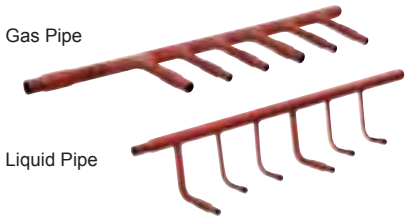
Separation Tube
UTR-BP567X



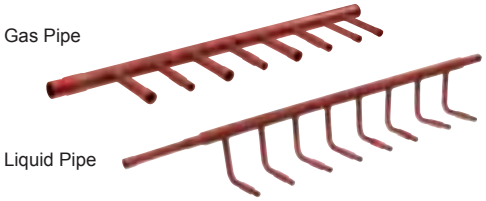
Outdoor Unit Branch kit
UTR-CP567X



Header
UTR-H0906L
UTR-H1806L



Header
UTR-H0908L
UTR-H1808L



Specifications

Outdoor unit Branch kit

Model name		UTR-CP567X
Number of Outdoor unit	2 outdoor units	1
	3 outdoor units	2

Separation Tube

Model name	UTR-BP090X	UTR-BP180X	UTR-BP567X
Total cooling capacity of indoor unit (kW)	28.0 or less	28.1 to 56.0	56.1 or more

Header

Model name			
	3-6 Branches	UTR-H0906L	UTR-H1806L
	3-8 Branches	UTR-H0908L	UTR-H1808L
Total cooling capacity of indoor unit (kW)		28.0 or less	28.1 to 56.0

EV Kit

Model name	UTR-EV09XB	UTR-EV14XB
Application Model	AS*E07LACH AS*E09LACH	AS*E12LACH AS*E14LACH

AS* : ASY(FUJITSU), ASH(GENERAL)

Others

Flange (Round)
UTD-RF204

For Low Static Pressure Duct type / Duct type

Flange (Square)
UTD-SF045T

For Low Static Pressure Duct type / Duct type

Remote Sensor Unit
UTD-RS100

For All Duct type

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

Long-Life Filter
UTD-LF25NA

For Low Static Pressure Duct type / Duct type

Long-Life Filter
UTD-LF60KA

For High Static Pressure Duct type

Auto Louver Grille Kit
UTD-GXSA-W (for ARXD07/09/12/14LATH)
UTD-GXSB-W (for ARXD18LATH)
UTD-GXSC-W (for ARXD24LATH)

For Slim Duct type

Drain Pump Unit
UTZ-PX1BBA

For Compact Duct type

UTZ-PX1NBA

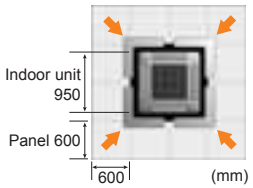
For Low Static Pressure Duct type / Duct type

Drain Pump Unit
UTR-DPB24T

For Ceiling type

Wide Panel
UTG-AGYA-W

For Cassette type



Air Outlet Shutter Plate
UTR-YDZB

For Compact Cassette type

Shuts the air outlet when only using as 3 blow out.

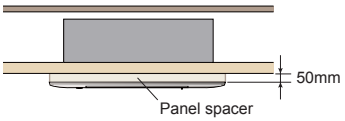
Air Outlet Shutter Plate
UTR-YDZC

For Cassette type

Shuts the air outlet when only using as 3 blow out.

Panel Spacer
UTG-BGYA-W

For Cassette type



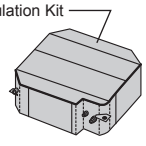
Grille Kit
UTG-UFYC-W
UTG-UFGC-W

For Compact Cassette type

Grille Kit
UTG-UGYA-W
UTG-UGGA-W

For Cassette type

Insulation Kit for High Humidity
UTZ-KXGA For Cassette type
UTZ-KXGB For Slim Cassette type
UTZ-KXGC For Compact Cassette type



Fresh Air Intake Kit
UTZ-VXAA

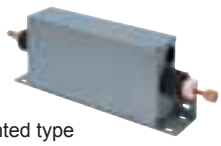
For Compact Cassette type

Fresh Air Intake Kit
UTZ-VXGA

For Cassette type

EV Kit
Model code < 09 : UTR-EV09XB
Model code ≧ 12 : UTR-EV14XB

For Compact Wall Mounted type



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