

AIRSTAGE //- II

Variable Refrigerant Flow System

Multi Air Conditioning System for Buildings



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.



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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.



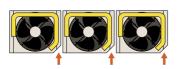
DC twin rotary compressor

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)

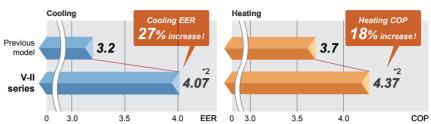
In multiple outdoor unit installations, the unique front intake design improves airflow into the Heat Exchanger.



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

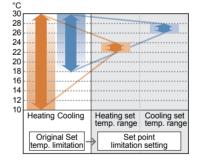
Room temperature set point limitation

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)





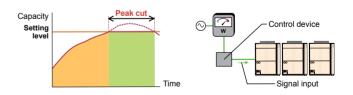
Operation setting (System Controller)

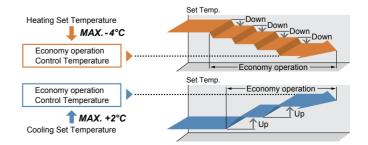
Capacity save operation

Operation capacity can be set in 5 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.

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.

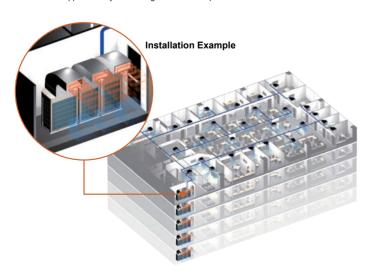
80Pa as standard

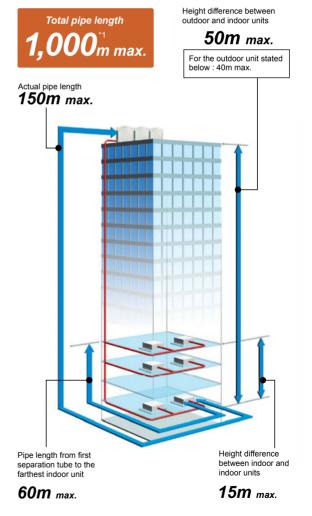


Previous model



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.



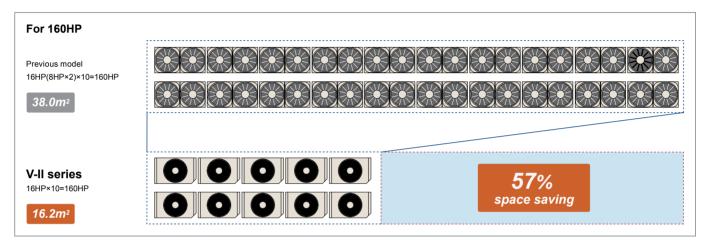


*1. Note: When there is 1 outdoor unit, the maximum is 700m.

Space saving and compact size

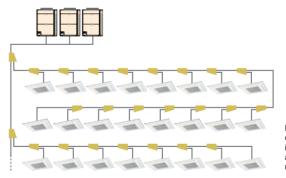
Compact size has been achieved by significantly reducing the width of the outdoor units compared to previous models.





High capacity connection

Various combinations from 8HP to 48HP with 2HP increments. 11 types, 51 models of indoor units can be selected ranging from 2.2kW to 25kW in capacity. A maximum of 150% indoor unit connectable capacity.

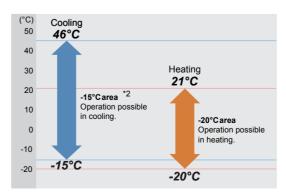


Note: When indoor unit connected capacity is greater than 100%, individual indoor units will operate at a slightly lower capacity when maximum capacity is required.

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.

FEATURES

High reliability considering long-term safety and confidence

High Reliability

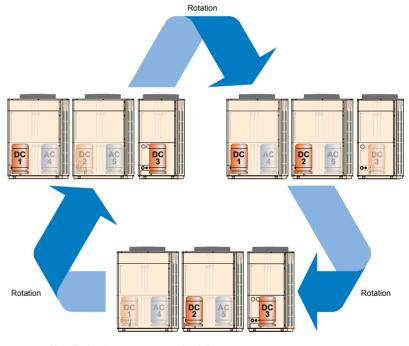


Life-extending operation

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.

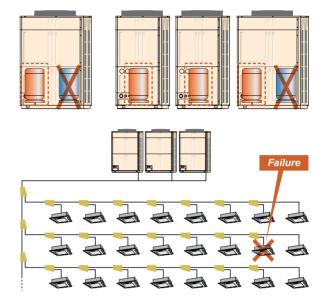
Outdoor Units

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

Indoor unit continuous operation

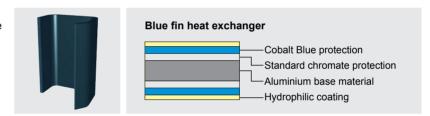
Each indoor unit is controlled individually on the system network. This allows all indoor units to continue to operate unaffected even if an error should occur at any indoor unit's on the VRF network system.

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



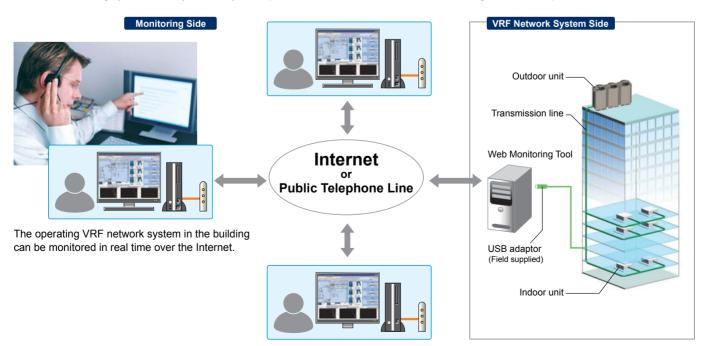
Adoption of blue fin heat exchanger

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



Remote monitoring

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



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



Note: In the case of 14HP

Easily craned using lifting belt hooks

Design of outdoor unit allows for lifting straps to be used

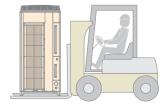


Can be transported in a small elevator



Transporting by forklift

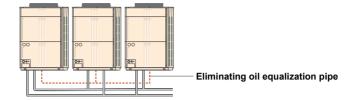
Transport with forklift is possible.





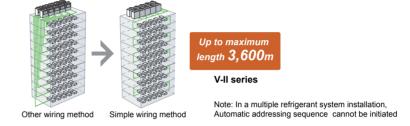
Easy piping connection

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



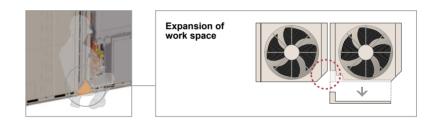
Simple signal line connection

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



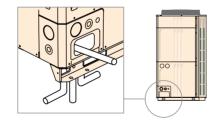
Easy access

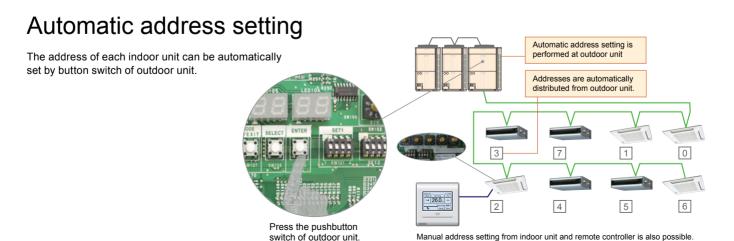
By adopting a L-Shape front panel that can be removed, the work space for installation and service has been significantly expanded by this new design. For multiple installations, work is performed easily and efficiently even in a narrow space.



Flexible piping connection

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





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

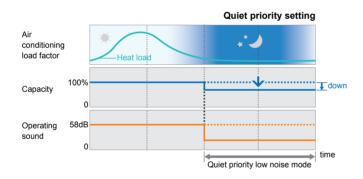
Comfort and Convenience

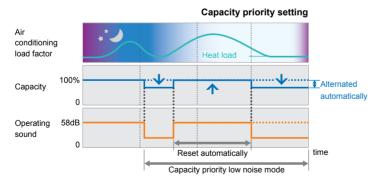


Quiet operation

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.







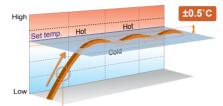
Auto changeover function

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.



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 $\pm 0.5^{\circ}$ C.



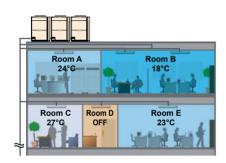
Reach the set temperature quickly

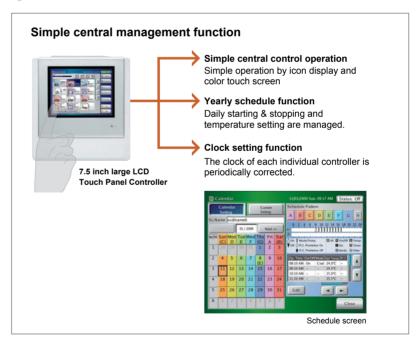
Thermal change of the room *Simulation in heating operation.

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

Individual air conditioning control

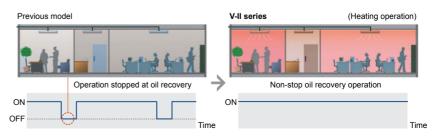
The desired temperature conditions of each room are met due to the Individual thermostat control of each indoor unit.





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.

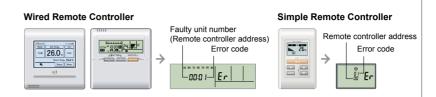


Split front panel

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.

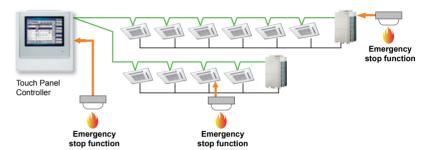


Emergency stop function

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.

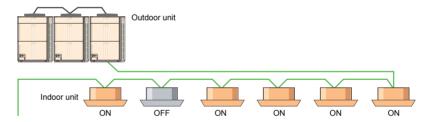
Touch Panel Controller: all unit connected within VRF network system with Touch Panel Controller will be stopped.



Continuous operation during maintenance

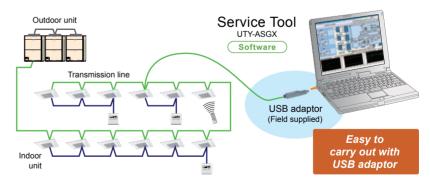
Non-stop operation

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

























Energy efficiency combination













- 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.







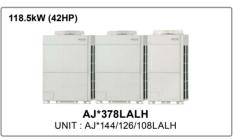
























Specifications

Space saving combination

Rating Capacity range	Н	Р	8	10	12	14	16	18	20	22	24
				238.2							
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	22.5-67.5	25.2-75.6	28.0-83.8	30.8-92.2	33.5-100.5
Power source						3 F	hase ~ 400 V, 50)Hz			
0	Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.4	55.9	61.5	67.0
Capacity	Heating	KVV	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	KVV	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	00/00	4.37	4.02	4.04	3.93	3.97	4.17	4.17	4.03	4.04
Air flow rate	High	m³/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	Cooling	dB	56	58	58	60	61	60	60	61	61
pressure level*2	Heating	(A)	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				
	Height	mm	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
Dimensions	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	303	303	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	Liquid	mm	12.70	12.70	12.70	12.70	12.70	15.88	15.88	15.88	15.88
pipe diameter	Gas	11/411	22.22	22.22	28.58	28.58	28.58	28.58	28.58	34.92	34.92
Operation	Cooling	°C	-15 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46				
range	Heating		-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21				

Energy efficiency combination

Rating Capacity range	Н	Р	16	22	24	26	28	30
			200 200					
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 Indoo	r 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 ~	400 V, 50Hz		
Canacity	Cooling	kW	44.8	62.4	67.2	72.8	78.3	84.8
Capacity	Heating	KVV	50.0	70.0	75.0	81.5	87.5	95.0
	Cooling	kW	11.02	17.04	16.53	18.75	20.64	22.55
Input power	Heating	1 KVV	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	VV/VV	4.37	4.08	4.37	4.23	4.22	4.15
Air flow rate	High	m³/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
	Cooling	dB	59	61	61	62	62	63
pressure level*2	Heating	(A)	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
	Height	mm	1,690	1,690	1,690	1,690	1,690	1,690
Dimensions	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	303 + 220	220 + 220 + 220	220 + 220 + 220	275 + 220 + 220	303 + 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	Liquid	mm	12.70	15.88	15.88	15.88	15.88	19.05
pipe diameter	Gas		28.58	34.92	34.92	34.92	34.92	34.92
Operation	Cooling	°C	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
range	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.

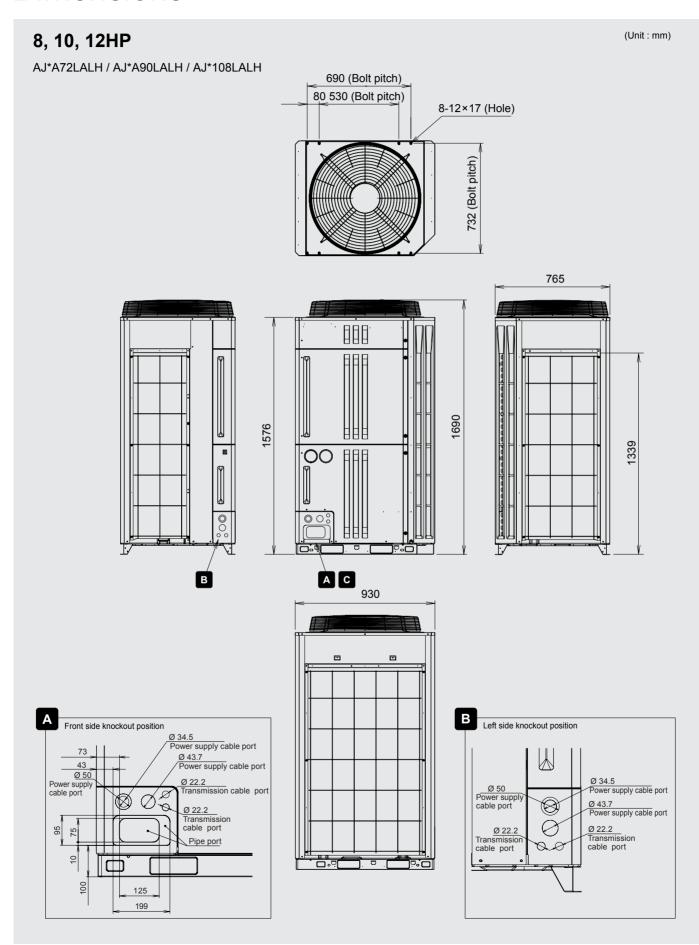
26	28	30	32	34	36	38	40	42	44	46	48
	230										
AJ*234LALH	AJ*252LALH	AJ*270LALH	AJ*288LALH	AJ*306LALH	AJ*324LALH	AJ*342LALH	AJ*360LALH	AJ*378LALH	AJ*396LALH	AJ*414LALH	AJ*432LALH
AJ*126LALH AJ*108LALH	AJ*144LALH AJ*108LALH	AJ*144LALH AJ*126LALH	AJ*144LALH AJ*144LALH	AJ*108LALH AJ*108LALH AJ*A90LALH	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
36.8-110.2	39.3-117.7	42.5-127.5	45.0-135.0	47.5-142.5	50.3-150.7	53.5-160.5	56.0-168.0	59.3-177.7	61.8-185.2	65.0-195.0	67.5-202.5
					3 Phase ~ 4	100 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 3 + 4.5 x 2	3.9 x 3 + 4.5 x 3									
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
303 + 275	303 + 275	303 + 303	303 + 303	275 + 275 + 220	275 + 275 + 275	303 + 275 + 275	303 + 275 + 275	303 + 303 + 275	303 + 303 + 275	303 + 303 + 303	303 + 303 + 303
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						
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				
-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*126LALH	AJ*126LALH	AJ*126LALH	AJ*126LALH	AJ*144LALH
AJ*108LALH	AJ*108LALH	AJ*126LALH	AJ*126LALH	AJ*126LALH	AJ*126LALH
AJ*A72LALH	AJ*A72LALH	AJ*A72LALH	AJ*108LALH	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	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
$3.9 \times 3 + 4.5 \times 2$	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
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	303 + 275 + 220	303 + 303 + 220	303 + 303 + 275	303 + 303 + 303	303 + 303 + 30
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

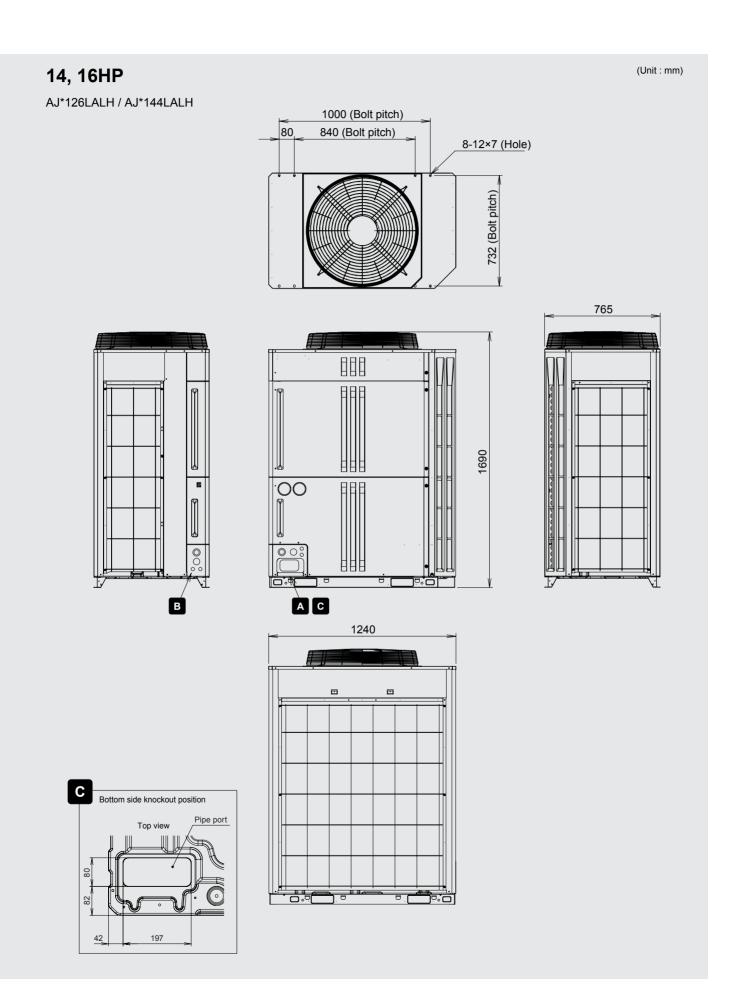
^{*1} Minimum connectable indoor unit number is 2. However ARXC72 and ARXC90 can be used signal connection.

^{*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



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



Indoor Unit Lineup

11 Types, 51 Models, Capacity range from 2.2kW to 25.0kW

Capacity range (kW)	, Capacity range from 2.2kW to	2.2	2.8	3.6	4.5
Model code		7	9	12	14
Cassette	Compact Cassette	AUXB07GALH	AUXB09GALH	AUXB12GALH	AUXB14GALH
	Cassette				
	Low Static Pressure Duct	ARXB07GALH	ARXB09GALH	ARXB12GALH	ARXB14GALH
Duct	Slim Duct (Drain pump internal)	ARXD07GALH	ARXD09GALH	ARXD12GALH	ARXD14GALH
	Medium Static Pressure Duct				
	High Static Pressure Duct				
	Floor (*Same as Ceiling models)			AB*A12GATH	AB*A14GATH
Floor	Concealed Floor (*Same as Low Static Pressure Duct models)	ARXB07GALH	ARXB09GALH	ARXB12GALH	ARXB14GALH
	Slim Concealed Floor (*Same as Slim Duct models)	ARXD07GALH	ARXD09GALH	ARXD12GALH	ARXD14GALH
Ceiling	Ceiling			AB*A12GATH	AB*A14GATH
Wall Mounted	Wall Mounted	AS*A07GACH	AS*A09GACH	AS*A12GACH	AS*A14GACH
	Wall Mounted (EEV external)	AS*E07GACH W	AS*E09GACH	AS*E12GACH ection of EV kit is n	

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.

5.6	7.1	9.0	11.2	12.5	14.0	18.0	22.4	25.0
18	24	30	36	45	54	60	72	90
AUXB18GALH	AUXB24GALH							
AUXD18GALH	AUXD24GALH	AUXA30GALH	AUXA36GALH	AUXA45GALH	AUXA54GALH			
ARXB18GALH								
ARXD18GALH	ARXD24GALH							
	ARXA24GBLH	ARXA30GBLH	ARXA36GBLH	ARXA45GBLH				
			ARXC36GATH			ARXC60GATH	ARYC72GATH	APYCOGATH
AB*A18GATH	AB*A24GATH		740000071111	711010-10071111		740.000071111	7400072074111	74000007111
ARXB18GALH								
	ARXD24GALH							
AB*A18GATH	AB*A24GATH	AB*A30GATH	AB*A36GATH	AB*A45GATH	AB*A54GATH			
AS*A18GACH	AS*A24GACH	AS*A30GACH						

Compact Cassette

Models

AUXB07GALH AUXB09GALH AUXB12GALH AUXB14GALH AUXB18GALH AUXB24GALH

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

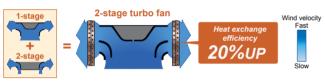


2-stage turbo fan

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.

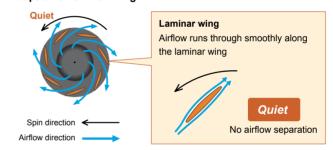


Quiet quality

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				AUXB07GALH	AUXB09GALH	AUXB12GALH	AUXB14GALH	AUXB18GALH	AUXB24GALH		
Power source)					230V ~	-, 50Hz				
Capacity		Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1		
		Heating	KVV	2.8	3.2	4.1	5.0	6.3	8.0		
Input power	Input power W			25	25	29	35	36	84		
Airflow rate		High		540	550	600	680	710	1,030		
		Med	m³/h	450	450	530	590	580	830		
		Low		350	350	390	390	400	450		
Sound pressu	Sound pressure level			34	35	37	38	41	50		
		Med	dB(A)	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		1	1	7				
Connection		Liquid (Flare)			ø6	.35		ø9	.52		
pipe diameter	ſ	Gas (Flare)	mm		ø12	2.70		ø15	5.88		
		Drain				ø25 (I.D) ;	ø32 (O.D.)				
Cassette	Model na	ame		UTG-UF*C-W							
Grille	Dimensi	ons (H x W x D)	mm			50 x 70	0 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



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-s

B: 2-stage turbo fan

C : Bell-mouth D : Panel

2 Long life filter: standard equipment

3 Adaptation of transparent drainage parts

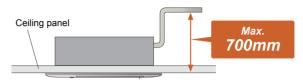
During installation, maintenance and operation, the drain pump and kit can be checked easily.

Compact design

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



High lift drain pump



High ceiling mode

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

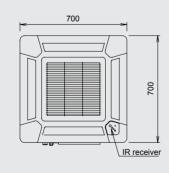
	The maximum height from floor to ceiling (m)						
Model code	Standard mode	High ceiling mode					
07	2.7	_					
09	2.7	_					
12	2.7	3.0					
14	2.7	3.0					
18	2.7	3.0					
24	2.7	3.0					

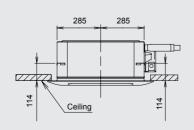
Optional parts

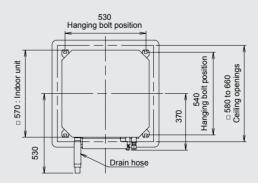
Air Outlet Shutter Plate : UTR-YDZB Insulation Kit for High Humidity : UTZ-KXGC Fresh Air Intake Kit : UTZ-VXAA

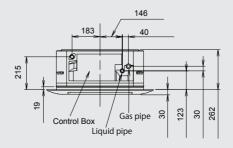
Dimensions (Unit:mm)

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









Cassette

Models

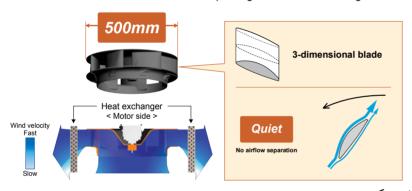
AUXD18GALH AUXD24GALH AUXA30GALH AUXA36GALH AUXA45GALH AUXA54GALH





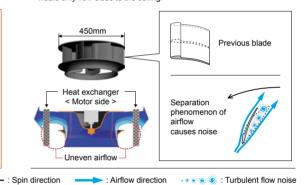
High efficiency turbo fan with 3-dimensional blade

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.



Specifications

Model name				AUXD18GALH	AUXD24GALH	AUXA30GALH	AUXA36GALH	AUXA45GALH	AUXA54GALH		
Power source						230V ~	-, 50Hz				
Capacity		Cooling	kW	5.6	7.1	9.0	11.2	12.5	14.0		
		Heating	KVV	6.3	8.0	10.0	12.5	14.0	16.0		
Input power	Input power W			39	46	59	80	99	119		
Airflow rate		High		1,150	1,280	1,600	1,800	1,900	2,000		
		Med	m³/h	940	1,040	1,300	1,300	1,370	1,370		
		Low		870	870	1,100	1,100	1,100	1,100		
Sound pressu	re 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	1 x W x D)		mm	246 x 840 x 840			288 x 840 x 840				
Weight			kg	2	2		2	7			
Connection		Liquid (Flare)				ø9	.52				
pipe diameter		Gas (Flare)	mm		ø15.88			ø19.05			
		Drain				ø25 (I.D.) ;	ø32 (O.D.)				
Cassette	Model na	ime		UTG-UG*A-W							
Grille	Dimension	ons (H x W x D)	mm	50 x 950 x 950							
	Weight		kg			5	.5				

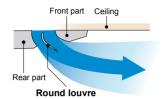
 G^\star : $\mathsf{GY}(\mathsf{FUJITSU})$; $\mathsf{GG}(\mathsf{GENERAL})$

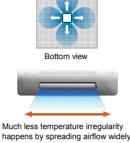
Note: Specifications are based on the following conditions.

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.

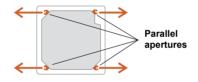




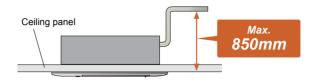
Adjustment of hanger position is possible after installation



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).

Madelanda	The maximum height from floor to ceiling (m)						
Model code	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 Unit : UTY-LRH*B1
Air Outlet Shutter Plate : UTR-YDZC
Panel Spacer : UTG-BGYA-W

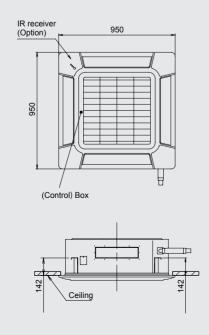
Insulation Kit for High Humidity: UTZ-KXGA / UTZ-KXGB

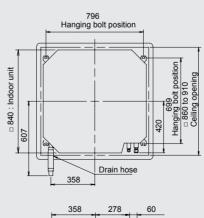
Wide Panel : UTG-AGYA-W Fresh Air Intake Kit : UTZ-VXGA

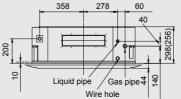
H*: HY(FUJITSU), HG(GENERAL)

Dimensions (Unit:mm) ():AUXD18/AUXD24 Models: AUXD18 / AUXD24 (Slim type)

AUXA30 / AUXA36 / AUXA45 / AUXA54







Low Static Pressure Duct / Concealed Floor

Models

ARXB07GALH ARXB09GALH ARXB12GALH ARXB14GALH ARXB18GALH

Small and compact indoor unit suitable for many applications



ARXB07GALH ARXB09GALH



ARXB12GALH ARXB14GALH ARXB18GALH

Concealed Floor

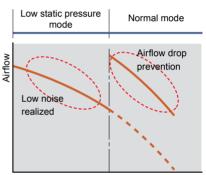




Low noise level

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



Static pressure (Pa)

Specifications

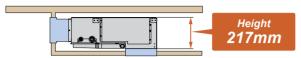
Model name Power source			ARXB07GALH	ARXB09GALH	ARXB12GALH	ARXB14GALH	ARXB18GALH
			230V ~, 50Hz				
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6
	Heating		2.8	3.2	4.0	5.0	6.3
Input power		W	46	55	63	90	96
Airflow rate	High		370	440	590	800	890
	Med	m³/h	310	370	500	750	810
	Low		280	340	450	700	730
Static pressure range		Pa	0 to 50	0 to 50	0 to 50	0 to 50	0 to 50
Standard static pressure		Ра	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) m		mm	217 x 663 x 595		217 x 953 x 595		
Weight kg		kg	15 22			2	23
Connection	Liquid (Flare)		ø6.35				ø9.52
pipe diameter	Gas (Flare)	mm	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.

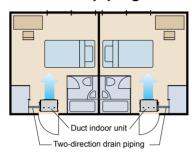
Compact design

Ultra-slim duct air conditioner for easy installation



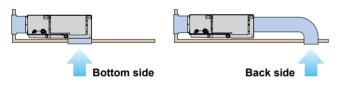
Slim size (217mm) allows installation even where the space behind the ceiling is narrow.

Two-direction drain piping



Air-intake

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



Flexible installation

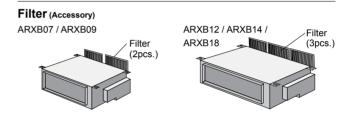












Optional parts

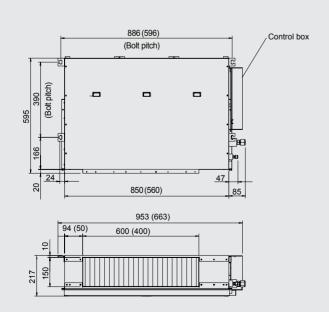
Remote Sensor Unit : UTY-XSZX
IR Receiver Unit : UTB-YWC
Drain Pump Unit : UTZ-PX1BBA

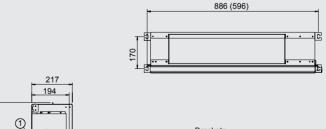
Dimensions (Unit:mm) ():AR7/AR9

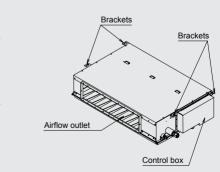
Models: ARXB07 / ARXB09 / ARXB12 / ARXB14 / ARXB18

*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

150

2

587

Slim Duct / Slim Concealed Floor

Models (Drain pump internal model)

ARXD07GALH ARXD09GALH ARXD12GALH ARXD14GALH ARXD18GALH ARXD24GALH

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



ARXD07GALH ARXD12GALH ARXD09GALH ARXD14GALH

ARXD18GALH



ARXD24GALH

Slim Concealed Floor

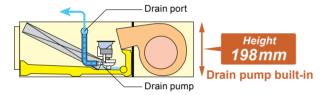






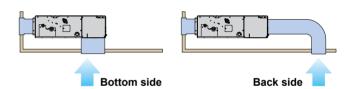
Slim design

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



Air-intake

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



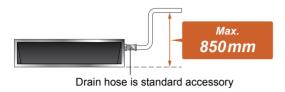
Specifications

Model name			ARXD07GALH	ARXD09GALH	ARXD12GALH	ARXD14GALH	ARXD18GALH	ARXD24GALH	
Power source			230V ~, 50Hz						
Capacity	Cooling		2.2	2.8	3.6	4.5	5.6	7.1	
	Heating	kW	2.8	3.2	4.0	5.0	6.3	8.0	
Input power	•	W	44	50	54	92	83	122	
Airflow rate	High		550	600	600	800	940	1,330	
	Med	m³/h	490	550	510	710	840	1,240	
	Low		440	480	450	610	750	1,100	
Static pressure range		D-	0 to 90	0 to 90	0 to 90	0 to 90	0 to 90	0 to 50	
Standard static pressure		Pa	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		kg	17 18			8	22	26	
Connection pipe diameter	Liquid (Flare)		ø6.35				ø9.52		
	Gas (Flare)	mm		ø12.70			ø15.88		
	Drain								

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



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

Flexible installation







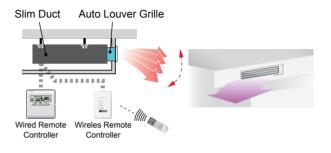
Floor concealed

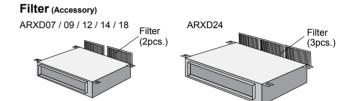




Auto Louver Grille Kit (Option)

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





Optional parts

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

Auto Louver Grille Kit: UTD-GXSA-W (for ARXD07/09/12/14GALH)

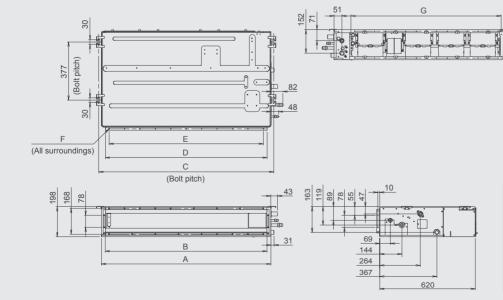
UTD-GXSB-W (for ARXD18GALH) UTD-GXSC-W (for ARXD24GALH)

Dimensions (Unit:mm)

Models: ARXD07 / ARXD09 / ARXD12 / ARXD14 / ARXD18 / ARXD24

*Service accessibility must be allowed for when installing the product.

Please consult the installation manual for the necessary service access size.



	ARXD07-14	ARXD18	ARXD24
Α	700	900	1100
В	650	850	1050
С	734	934	1134
D	650	850	1050
Е	P100x6=600	P100x8=800	P100x10=1000
F	18xØ5	22xØ5	26xØ5
G	574	774	974

Medium Static Pressure Duct

Models

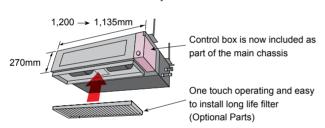
ARXA24GBLH ARXA30GBLH ARXA36GBLH ARXA45GBLH

Low energy consumption by DC fan motor. Selectable with a wide range of static pressure.



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.



Low energy consumption by high efficiency DC fan motor

Improved motor efficiency from previous model.



Specifications

Model name			ARXA24GBLH	ARXA30GBLH	ARXA36GBLH	ARXA45GBLH	
Power source			230V ~, 50Hz				
Capacity	Cooling	kW	7.1	9.0	11.2	12.5	
	Heating	KVV	8.0	10.0	12.5	14.0	
Input power		W	94	108	194	240	
Airflow rate	High		1,280	1,410	1,840	1,970	
	Med	m³/h	990	1,280	1,600	1,860	
	Low		840	1,150	1,470	1,640	
Static pressure range		De	0 to 150	0 to 150	0 to 150	0 to 150	
Standard static pressure		Pa	40	50	50	60	
Sound pressure level	High	dB(A)	31	34	37	41	
	Med		27	32	35	38	
	Low		23	29	33	36	
Dimensions (H x W x D)	mm	270 x 1,135 x 700				
Weight kg		kg	36	36 40			
Connection	Liquid (Flare)		ø9.52				
pipe diameter	Gas (Flare)	mm	ø15.88		ø19	ø19.05	
	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.

Selectable with a wide range of static pressure

It is possible to change of static pressure range 0 to 150Pa.

Static pressure range 0 to 150 Pa

Can be installed for various location

It can be installed in such locations as high-rise condominiums by low static pressure design.



It can also be installed in wide spade when high static pressure is required, such as for offices.

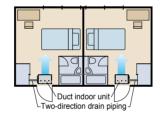


Easy setting by using remote controller

The change of static pressure range is possible by remote controller

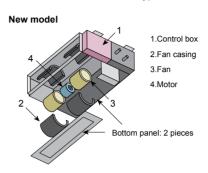


Two-direction drain piping



Easy maintenance

See below for the case of rear suction type



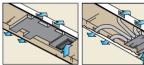
The maintenance of the motor and fan can be easily carried out by removing the rear panel and the lower part of the casing while leaving the main chassis installed

Installation styles

Embedded in Ceiling



Hanging from Ceiling



Optional parts

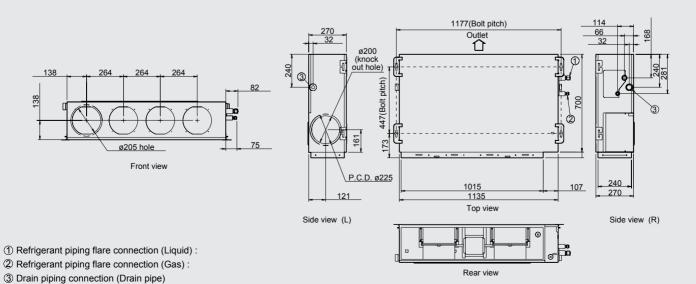
Remote Sensor Unit : UTY-XSZX Long Life Filter : UTD-LF25NA Flange (Square) : UTD-SF045T Flange (Round): UTD-RF204 IR Receiver Unit: UTB-YWC Drain Pump Unit: UTZ-PX1NBA

Dimensions (Unit:mm)

Models: 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.



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High Static Pressure Duct

Models

ARXC36GATH ARXC45GATH ARXC60GATH ARXC72GATH ARXC90GATH

These indoor units allow for high airflow quantities



ARXC36GATH ARXC45GATH ARXC60GATH



ARXC72GATH ARXC90GATH

Specifications

Model name			ARXC36GATH	ARXC45GATH	ARXC60GATH	ARXC72GATH	ARXC90GATH	
Power source			230V ~, 50Hz					
Capacity	Cooling	kW	11.2	12.5	18.0	22.4	25.0	
	Heating	KVV	12.5	14.0	20.0	25.0	28.0	
Input power		W	405	715	730	1,110	1,250	
Airflow rate	High		2,600	3,500	3,500	3,900	4,300	
	Med	m³/h	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		Pa	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		kg	43	4	16	83	85	
Connection	Liquid			ø9.52 (Flare)		ø12.70 (Brazing)		
pipe diameter	Gas	mm	ø19.05 (Flare)			ø22.22 (Brazing)		
	Drain							

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.

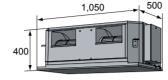
Easy installation (Compact size & Lightweight)

Models: ARXC36

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



Weight 42% down

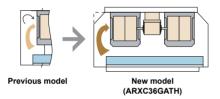


ARXC36GATH: 43kg (unit: mm)

Low noise

Models: ARXC36 / ARXC45 / ARXC60

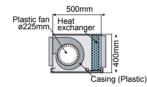
Cutting off the corners of the conventional indoor unit front panel and fan casing, has enabled less turbulent air flow. Low noise is realized by adopting a plastic case and a plastic fan.



ARXC36GATH : Plastic fan [45dB(A)]

* Model : Material

(At 100Pa : Actual noise measurement value)

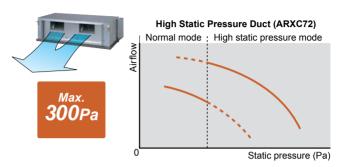


1,410

Static pressure selection

Models: ARXC72/ARXC90

2 Types of static pressure mode are selectable.



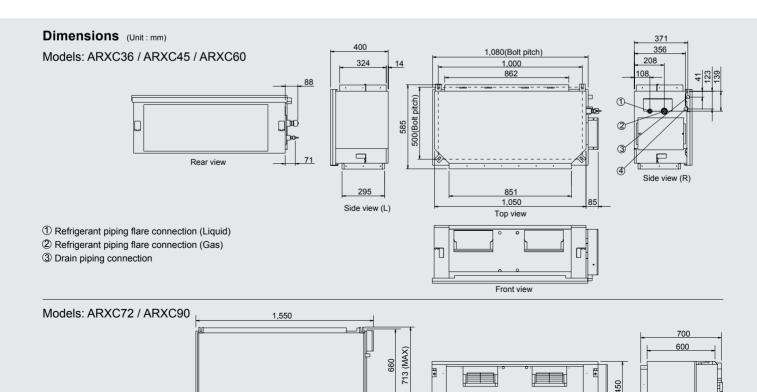
The adoption of a single phase fan motor allows 3 steps fan speed control

Optional parts

Long-Life Filter: UTD-LF60KA (For ARXC36 / 45 / 60)

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

Front view



Side view

Floor / Ceiling

Models

AB*A12GATH AB*A14GATH AB*A18GATH AB*A24GATH

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



Floor standing



Flexible installation

Example for floor installation

Floor console



Example for ceiling installation

Under ceiling



Specifications

Model name			AB*A12GATH	AB*A14GATH	AB*A18GATH	AB*A24GATH		
Power source			230V ~, 50Hz					
Capacity	Cooling	kW	3.6	4.5	5.6	7.1		
	Heating	KVV	4.0	5.0	6.3	8.0		
Input power		W	30	42	74	99		
Airflow rate	High	m³/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		mm	199 x 990 x 655					
Weight		kg	25	26	26	27		
Connection	Liquid (Flare)		ø6.35		ø9.52			
pipe diameter	Gas (Flare)	mm	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

High power DC fan motor

- High power
- Wide rotation range
- · High efficiency



Super vane

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

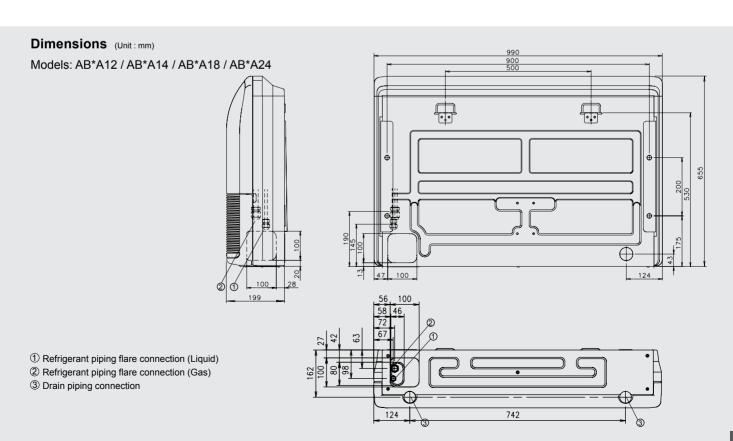
Auto-closing louvre

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

Compact design

Symmetrical, slim and compact design.





Ceiling

Models

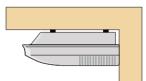
AB*A30GATH AB*A36GATH AB*A45GATH **AB*A54GATH**

Easily concealed in any installation



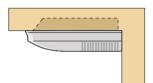
Installation

Open



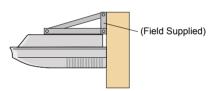
General installation pattern which suspends the indoor unit from the ceiling.

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*A30GATH	AB*A36GATH	AB*A45GATH	AB*A54GATH		
Power source			230V ~, 50Hz				
Capacity	Cooling	kW	9.0	11.2	12.5	14.0	
	Heating	KVV	10.0	12.5	14.0	16.0	
Input power		W	66	85	131	180	
Airflow rate	High		1,630	1,690	2,010	2,270	
	Med	m³/h	1,370	1,400	1,600	1,780	
	Low		1,140	1,170	1,230	1,280	
Sound pressure level	High		42	45	48	51	
	Med	dB(A)	38	38	42	45	
	Low		33	34	35	36	
Dimensions (H x W x D))	mm	240 x 1,660 x 700				
Weight kg		kg	46 48				
Connection	Liquid (Flare)		ø9.52		ø9.52		
pipe diameter	Gas (Flare)	mm	ø15.88		ø19.05		
	Drain			ø25 (I.D.)	; ø32 (O.D.)		

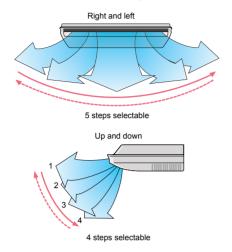
AB*: ABY(FUJITSU), ABH(GENERAL)

Note: Specifications are based on the following conditions.

Cooling : Indoor temperature of 27 $^{\circ}$ CDB / 19 $^{\circ}$ CWB, and outdoor temperature of 35 $^{\circ}$ CDB / 24 $^{\circ}$ 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].

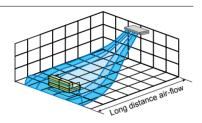
Double auto swing and wide airflow

Auto airflow direction and auto swing

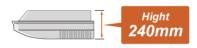


Long airflow

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

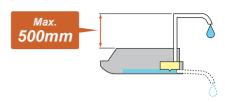


Slim & Compact design

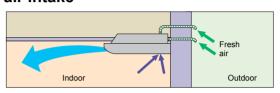


High lift drain pump

Optional drain pump unit allows flexible installation design.



Fresh air intake



High power DC fan motor

- High power
- Wide rotation range
- · High efficiency



Long-life filter

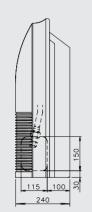
High Efficiency long-life filter doubles the life of the filter compared to standard filters.

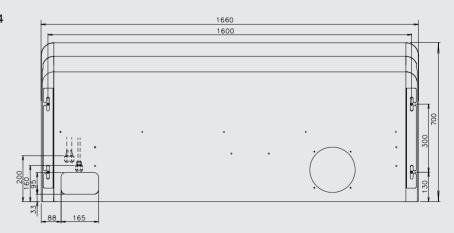
Optional parts

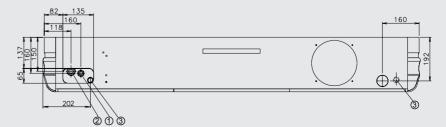
Drain Pump Unit: UTR-DPB24T Flange: UTD-RF204

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

Wall Mounted

Models (EEV internal model)

Models (EEV external model)

AS*A07GACH AS*E07GACH AS*A09GACH AS*E09GACH AS*A12GACH AS*E12GACH AS*A14GACH AS*E14GACH

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.

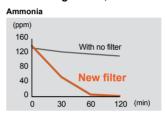
(*The filter can be used for approx. 3 years if it is washed under water to restore its surface action when it is dirty.)

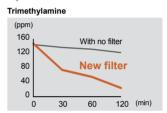


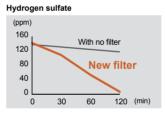
Apple-catechin Filter

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)







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

Specifications

Model name			AS*A07GACH	AS*A09GACH	AS*A12GACH	AS*A14GACH	AS*E07GACH	AS*E09GACH	AS*E12GACH	AS*E14GACH
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	KVV	2.8	3.2	4.1	5.0	2.8	3.2	4.1	5.0
Input power		W	17	18	22	34	15	16	21	34
Airflow rate	High		490	500	560	670	490	500	560	680
	Med	m³/h	450	450	480	490	450	450	480	490
	Low		370/420*1	370/420*1	420	420	370/420*1	370/420*1	420	420
Sound pressure	High	dB(A)	35	36	39	44	34	35	38	43
level	Med		33	33	35	37	32	32	34	35
	Low		27/31*1	27/31*1	31	32	26/30*1	26/30*1	30	30
Dimensions (H x W x D)		mm	275 x 790 x 215				275 x 790 x 215			
Weight		kg	9				9			
Connection	Liquid (Flare)			ø6	ø6.35			ø6	.35	
pipe diameter	Gas (Flare)	mm		ø12.70			ø12.70			
	Drain			ø13.8(I.D.) ; ø1	5.8-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].

*1 : This value is under cooling operation.

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.



Auto swing louvre

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

New style high power DC fan motor

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



Easy maintenance

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



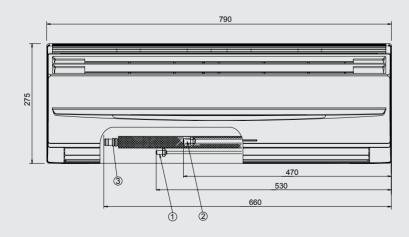
Swing

Symmetrical design

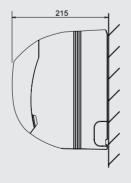
Symmetrical, clean design that suits all interiors.

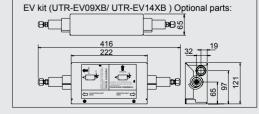
Dimensions (Unit:mm)

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





Wall Mounted

Models

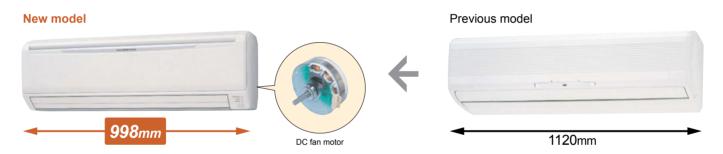
AS*A18GACH AS*A24GACH AS*A30GACH

Simple & Elegant Appearance Design



Compact & Slim design

By using DC fan motor, compact design is realized.



Specifications

Model name			AS*A18GACH	AS*A24GACH	AS*A30GACH		
Power source			230V ~, 50Hz				
Capacity	Cooling	kW	5.6	7.1	8.0		
	Heating	KVV	6.3	8.0	9.0		
Input power		W	32	60	91		
	High		840	1,100	1,240		
Airflow rate	Med	m³/h	770	910	980		
	Low		690	730	770		
	High	dB(A)	41	48	52		
Sound pressure level	Med		39	43	45		
	Low		35	35	35		
Dimensions (H x W x D))	mm	320 x 998 x 228				
Weight k		kg	15				
Connection	Liquid (Flare)		ø9.52				
pipe diameter	Gas (Flare)	mm	ø15.88				
	Drain			ø12 (I.D.) ; ø16 (O.D.)			

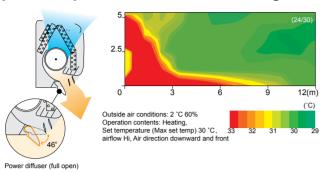
AS*: ASY(FUJITSU), ASH(GENERAL)

Note : Specifications are based on the following conditions.

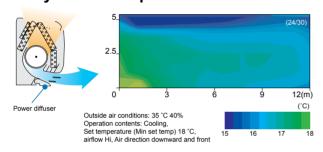
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB. Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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



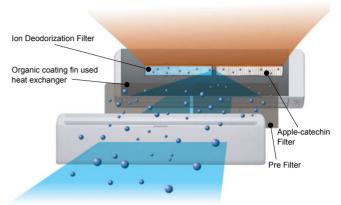
"Horizontal airflow" does not blow cool air directly at the occupants in the room



Easy maintenance

Simplification of drain pan cleaning improves maintenance-ability.

Air conditioner filter features



Antibacterial deodorizing pre-filter with special ceramic powder



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

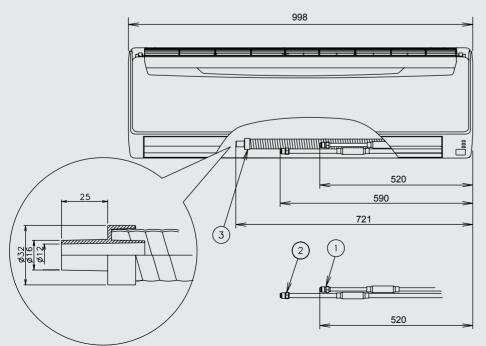
(*The filter can be used for approx. 3 years if it is washed under water to restore its surface action when it is dirty.)

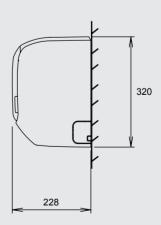


Fine dust, invisible mold spores, and harmful microorganisms are absorbed onto the filter by static electricity, and further growth is inhibited and deactivated by the polyphenol extracted from apples.

Dimensions (Unit:mm)

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

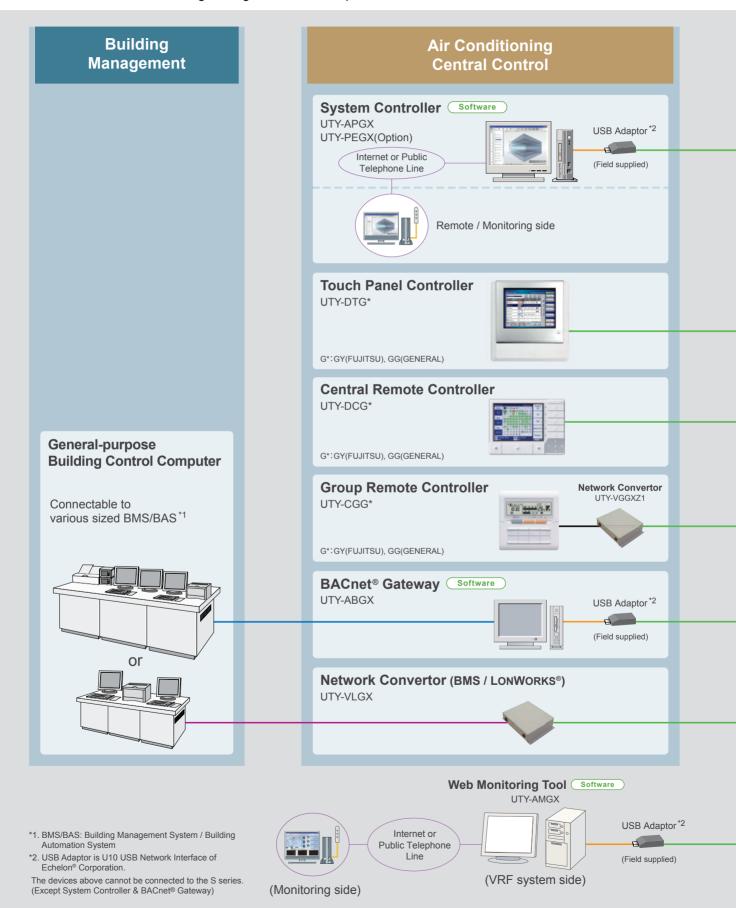


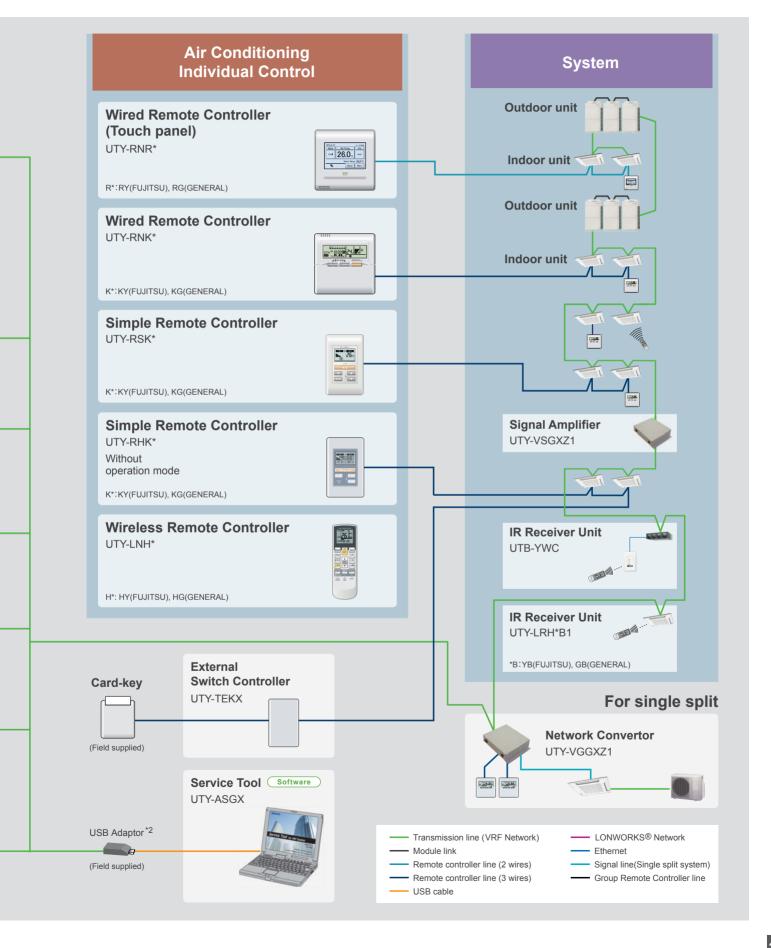


- ① Refrigerant piping flare connection (Liquid)
- 2 Refrigerant piping flare connection (Gas)
- ③ Drain hose connection

Control System

Every user's needs are supported by offering a variety of controls, such as individual control, central control and building management control options.



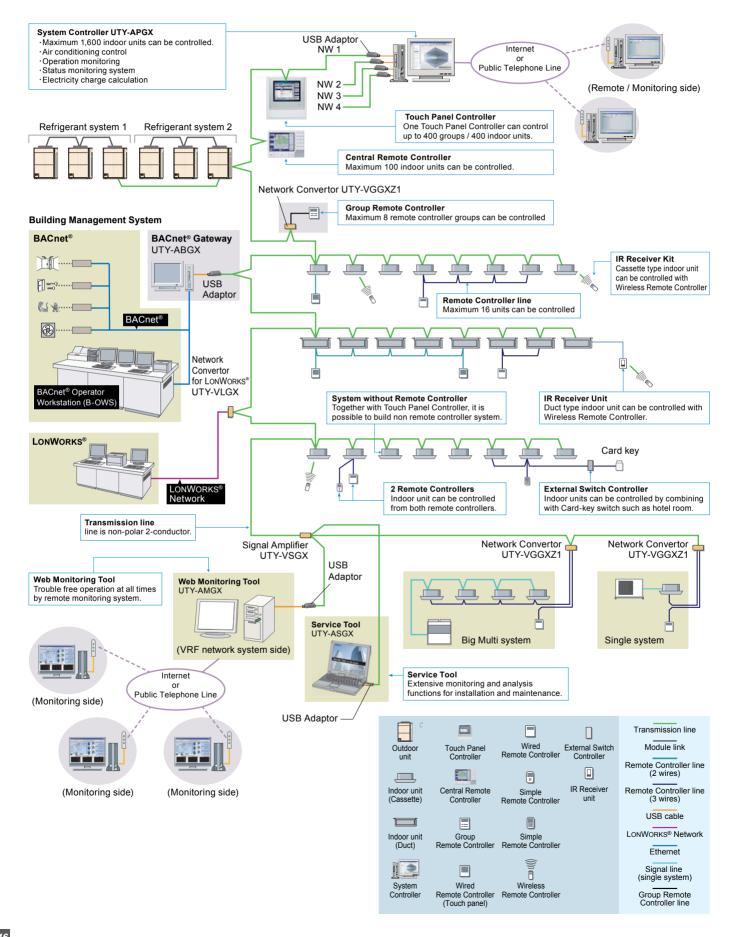


Wiring system

· 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).





Comparison table of Controllers

	ltem		Wired Remote Controller (Touch panel)	Wired Remote Controller	Simple Remote Controller	Simple Remote ¹	Wireless Remote Controller	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller Software
	Model name		UTY-RNRY UTY-RNRG	UTY-RNKY UTY-RNKG	UTY-RSKY UTY-RSKG	UTY-RHKY UTY-RHKG	UTY-LNHY UTY-LNHG	UTY-CGGY UTY-CGGG	UTY-DCGY UTY-DCGG	UTY-DTGY UTY-DTGG	UTY-APGX
Ma	x. controllable remo	ote controller groups	1	1	1	1	1	8	100	400	1600
Ma	x. controllable indo	or units	16	16	16	16	16	96	100	400	1600
Ma	x. controllable grou	ıps	-	_	-	_	-	_	16	400	1600
	On / Off		•	•	•	•	•	•	•	•	•
	Operation mode	setting	•	•	•	_	•	•	•	•	•
tion	Fan speed setting	g	•	•	•	•	•	•	•	•	•
nuc	Room temp. setti	ing	•	•	•	•	•	•	•	•	•
0 t	Room temp. set p	point limitation	•	-	-	_	-	_	•	•	•
ontr	Test operation		•	•	•	-	•	-	•	•	-
S D	Up/down air direc	ction flap setting	•	•	-	_	•	-	•	•	•
nin	Right/left air direc	ction flap setting	•	•	-	_	•	-	•	•	•
Hitio	Group setting		-	_	-	_	_	-	•	•	•
Air conditioning control function	RC prohibition		-	_	-	_	_	-	•	•	•
ir c	Anti freeze setting	g	•	_	-	_	_	-	•	•	•
٩	Setback cool/heat		0	_	-	-	-	-	-	-	-
	Economy mode setting		•	•	-	_	•	-	•	•	•
	Failure		•	•	•	•	-	•	•	•	•
	Defrosting		•	•	•	•	-	-	•	•	•
	Current time		•	•	_	_	•	•	•	•	•
	Day of week		•	•	_	_	-	•	_	•	•
	R.C. prohibition		•	•	•	•	-	•	•	•	•
olay	Cooling/heating p	oriority	•	•	•	•	-	•	•	•	•
Display	Address display		•	•	•	•	-	•	•	•	•
	Room temp		•	-	-	_	_	_	-	-	_
	Multi language		•	-	-	-	-	_	•	•	•
	Summer time		•	_	-	_	_	-	•	•	•
	Name registration	n	•	-	-	_	_	-	•	•	•
	Backlight		•	-	•	•	-	-	•	•	-
		Period	Week	Week	-	-	-	Week	Week	Year	Year
	Schedule timer	On/Off, Temp, mode, times per day	8	4	_	_	_	4	20	20	144
<u>_</u>	On/off timer		•	•	-	_	•	_	-	-	_
Timer	Sleep timer		-	-	-	-	•	-	-	-	-
	Program timer		-	-	-	_	•	-	-	-	-
	Auto off timer		•	-	-	-	-	-	-	-	-
	Day off		•	•	-	-	-	-	•	•	•
	Min. unit of timer setting (Minutes)		10 • 30	30	-	-	5	10	10	10	10
	Status monitoring system		-	_	-	_	_	_	•	•	•
	Electricity charge calculation		-	-	-	-	-	-	-	-	•
_	Error history		•	•	•	•	-	•	•	•	•
Control	Emergency stop		-	-	-	-	-	-	● *2	● *2	_
Col	Control via intern	et	-	_	-	_	_	_	_	-	•
	E-mail notification	n for malfunction	-	_	-	_	_	_	_	_	•
	Key lock		Child lock	_	_	_	_	Child lock	Password setting	Password setting	Password setting

^{*1 &}quot;Operation mode" setting is not available for this model.
*2 This function is available only through external input. control.

[:] Supported: Not supported yet

O : Supported soon

Wired Remote Controller (Touch Panel)

UTY-RNR*

Max. controllable

16
indoor units

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

- Easy finger touch operation with LCD panel
- Built-in weekly/Daily timer(ON/OFF,Temp.,Mode)
- · Backlight enables easy operation in a darkened room
- · Room temperature display
- · Control up to 16 indoor units
- Corresponds to 7 different languages (English, Chinese, French, German, Spanish, Russian, Polish)



Functions

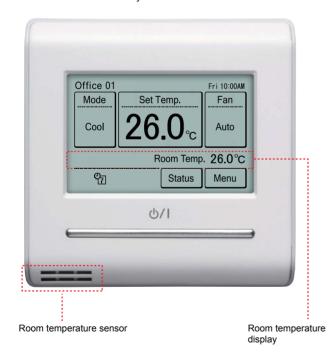
High performance and compact size

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



Accurate and comfortable control

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



Backlight

- Backlight enable easy operation in a darkened room.
- For the lighting time of Backlight, 30 or 60 seconds can be set.
- Backlight activates while the buttons are operated and goes off 30 or 60 seconds after the operation stops.



Various energy saving control

Auto OFF Timer

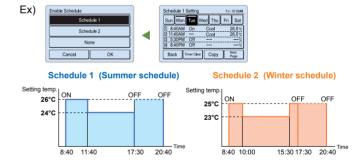
- The indoor unit automatically turns off after a set time has passed.
- The time interval for which auto off works can be set.

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



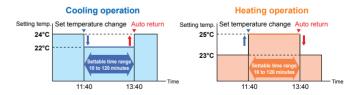
2 schedules Weekly Timer

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



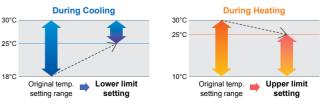
Set Temperature Auto Return

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



Set Temperature Upper and Lower Limit Setting

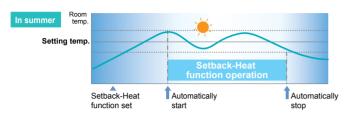
• The set temperature range can be set for each operation mode. (Cooling / Heating / Auto)

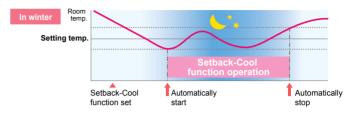


Various convenient functions

Setback-Cool / Setback-Heat (Future release)

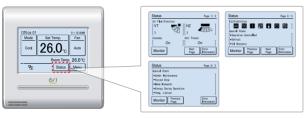
·Cooling / Heating is automatically started when the room temperature reaches a setting temperature even if the indoor unit is off.





Displays setting status and Limitations

• The remote controller settings can be easily checked



Child lock

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



Summer Time display

 This function can be set easily from Menu screen



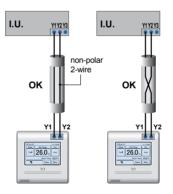
Name Registration

 Indoor unit names can be registered in the remote controller screen.
 This makes it easy to identify the indoor unit you want to control in the room.

Simplified installation

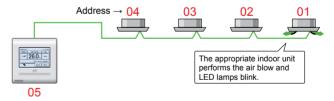
Uses non-polar 2-wire type

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



Auto Address Setting/Setting Position Notification

- Reduce errors and install time compared with the current specification Rotary SW
- When will be set remote controller groups, can also be set automatically new Wired remote controller address
- After auto address setting of new wired remote controller groups, what number can also confirm addresses



Easy Maintenance

Error History Display

- The errors that occur in the indoor unit or remote controller are saved as a history.
- · A maximum of 32 error incidents can be saved.



Specifications

Model name	UTY-RNR*
Power Supply	DC 12V
Dimensions (H x W x D) (mm)	120 x 120 x 20.4
Weight (g)	220

Wired Remote Controller

UTY-RNK*

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.



Max. controllable 16 indoor units

Functions

Powerful features and compact size

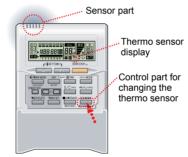
This Wired Remote Controller incorporates four primary functions into a single unit.

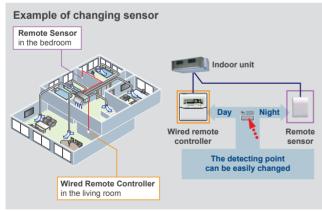


Accurate and comfortable

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.

Indoor temperature can be



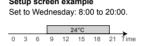


Displayed temperature is set temperature

Built-in timers

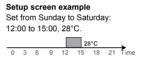
Weekly timer: Possible to set ON/OFF time to operate twice each day of the week.







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





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



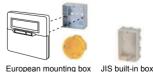
Diagnosis check function

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.





Specifications

Model name	UTY-RNK*
Power Supply	DC 12V
Dimensions (H x W x D) (mm)	120 x 120 x 18
Weight (g)	160

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

Simple Remote Controller

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.

Backlight

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



Max. controllable **16**

indoor units

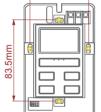
Simple installation

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

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

^{*1: &}quot;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)	9	0		

Wireless Remote Controller

Simple and sophisticated operations with a choice of 4 daily timers

• A single controller controls up to 16 indoor units.





Functions

Built-in daily timer

Select from 4 different timer programs :

On / Off / Program / Sleep

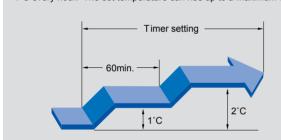
Program timer: The program timer operates the ON and OFF

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.

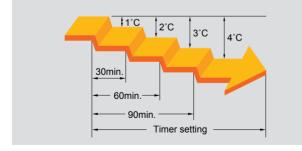
Cooling operation/dry operation

When the sleep timer is set, the set temperature automatically rises $1^{\circ}C$ every hour. The set temperature can rise up to a maximum of $2^{\circ}C$.



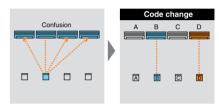
Heating operation

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 $4^\circ C$.



Easy installation and operation

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

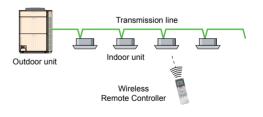


Wide and precise



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)	170 x 56 x 19
Weight (g)	85

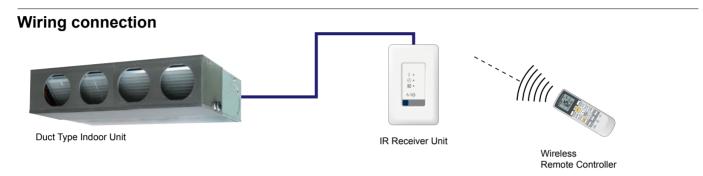
H*: HY(FUJITSU), HG(GENERAL)

IR Receiver Unit

UTB-YWC

Necessary to control for all duct type by Wireless Remote Controller





Specifications

Model name	UTB-YWC
Battery	DC 12V
Dimensions (H x W x D) (mm)	145 x 90 x 30
Weight (g)	150

IR Receiver Unit

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)	193.9 x 193.9 x 31.2
Weight (g)	140

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

Group Remote Controller

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-VGGXZ1) is required to connect Group Remote Controllers to a VRF network system.

(Network Convertor allows up to 4 Group Remote Controllers)





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

Functions

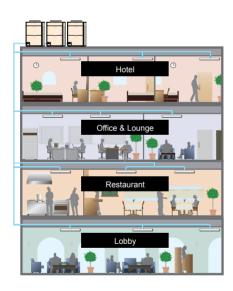
High performance and compact size

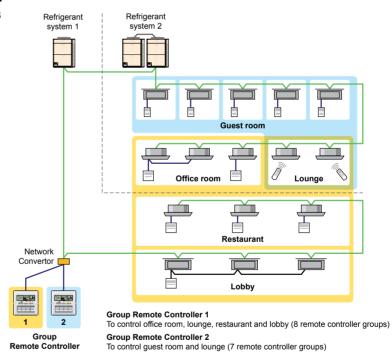
ON / OFF, Operating mode, Room temperature and Fan speed setting can be controlled / monitored centrally or individually.



Control up to 8 remote controller groups

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





Built-in weekly timers

The weekly timer is provided as a standard function.

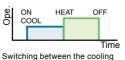
- 1. The timer can be set up for up to 4 times per day. (On / Off, operating mode, set temperature)
- 2. Allows separate settings for each day of the week.

ON / OFF switching



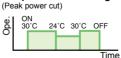
Air conditioning ON/OFF setting corresponding to air conditioning specification needs is possible.

Cooling / Heating switching



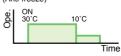
Switching between the cooling mode and heating mode can be set by time.

Temperature switching



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)



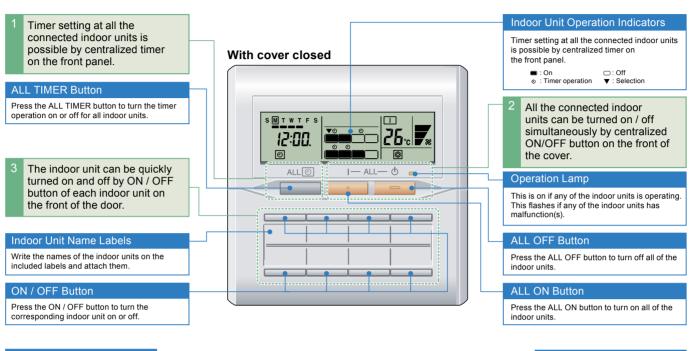
Low temperature heating operation can be set to prevent freezing in cold regions at night, etc.

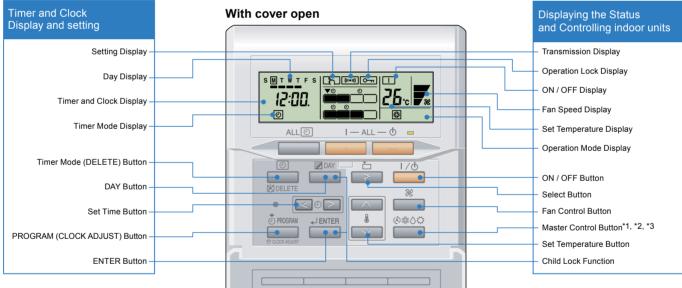
Stop setting



Indoor unit stop setting at operation end time is possible.

Useful functions





- *1 : "AUTO (A)" is not available for a heat pump model unless it is set up for the master indoor unit.
- *2 : "FAN lpha " 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 18
Weight (g)	200

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

Central Remote Controller

UTY-DCG*

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)



Max. controllable
100
Indoor units

Max. controllable
16

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.

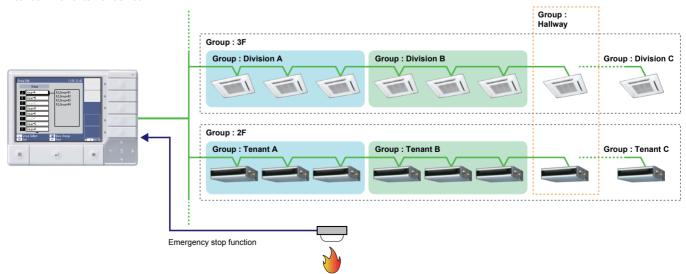


Function button 1 to 1 function button

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)



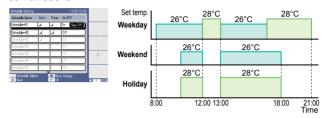
 Remote controller prohibition (All, On / Off, Mode, Temp, Timer, Filter):
 R.C prohibition setting prohibits individual remote control operation from this controller



 Room temperature set point upper and lower limitation



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



· Automatic clock adjustment :

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



Error history

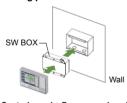
- Max 200 Errors memorize.
- Suitable maintenance is possible by analysis of the error history data.



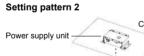
Easy Installation

- 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

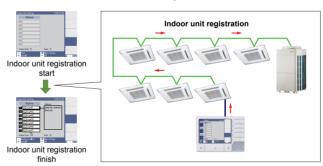


Control panel + Power supply unit





· Automatic or manual indoor unit registration



Specifications

UTY-DCG*	
Control Panel	Power Supply Unit
DC 5 V	100-240V, 50-60Hz, Single phase
120 x 162 x 25.7	99 x 135 x 39.2
308	355
	Control Panel DC 5 V 120 x 162 x 25.7

<PACKING LIST>

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

Touch Panel Controller

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



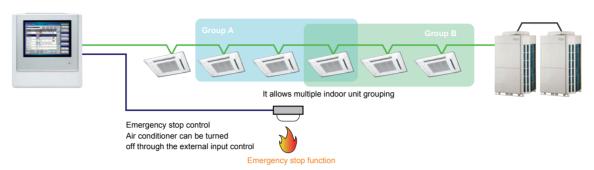
- Operation can be selected using your finger or the dedicated touch pen by pressing the appropriate on-screen icon
- · Up-to-date status display
- Background color identifies current control operation Blue for monitoring, green for operational control

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



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, Single phase
Dimensions (H x W x D) (mm)	260 x 246 x 54
Weight (g)	2,150
Interface	USB 2.0

System Controller Softwar

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.





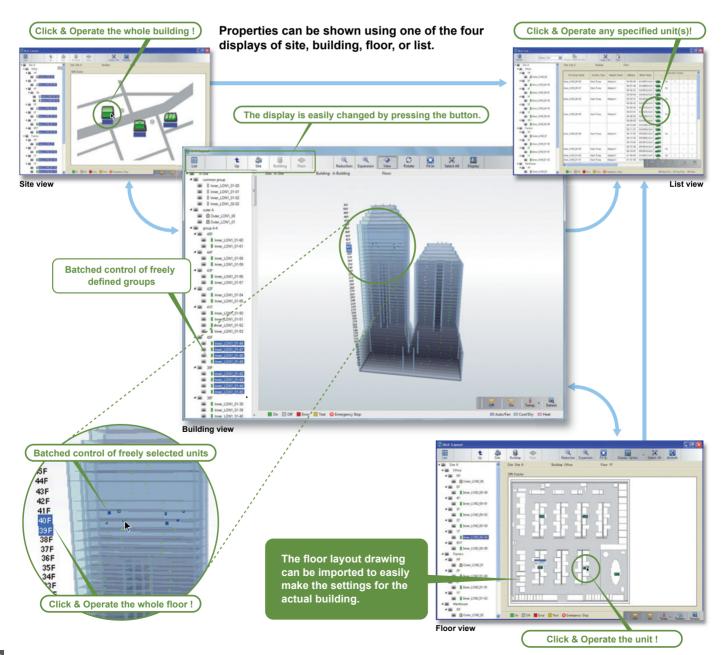
Max. controllable
400
Outdoor units

1,600
Indoor units

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 (

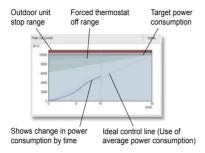
Option

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.

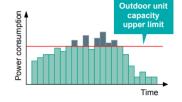
The indoor units to be controlled can be freely grouped and the control level can be set.



Outdoor unit capacity save

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.

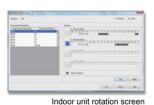




Outdoor unit capacity control screen

Indoor unit rotation operation

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.





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.



Entire building stopped Forget to turn off

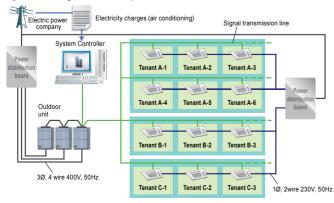
Electricity charge apportionment

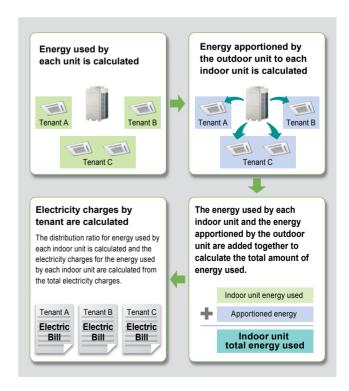
Electricity charge apportionment calculation framework

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.

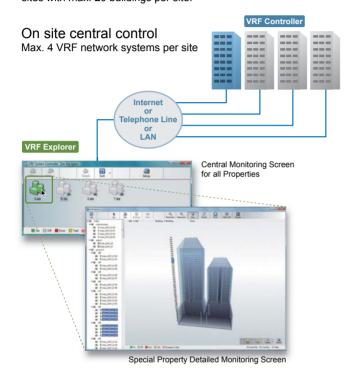
System Configuration Example

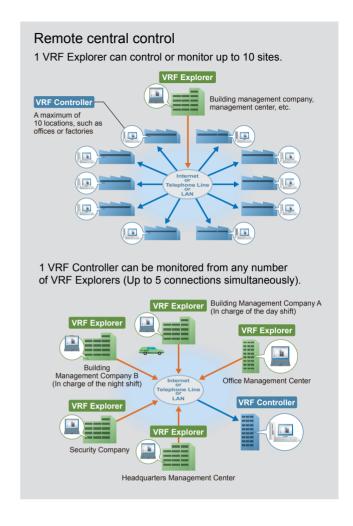




Remote centralized control

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.





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









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



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 144 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)

PERSONAL COMPUTER SPECIFICATIONS

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.

Operating system	Microsoft® Windows® XP SP3 (32-bit) Professional (*1) Microsoft® Windows® Vista® SP2 (32-bit) Home Premium, Business (*2) Microsoft® Windows® 7 SP1 (32/64-bit) Home Premium, Professional (*2) [Supported languages] (*1) English only (*2) English, Chinese, French, German, Russian, Spanish, and Polish
CPU	Intel® Core™ i3 2GHz or higher
Memory	2GB or more (Windows® XP, Vista®, 7 32-bit), 4GB or more (Windows® 7 64-bit)
HDD	40GB or more of free space
Display	1024 x 768 or higher resolution
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
Software required	Adobe® Reader® 9.0 or later
Hardware required	DVD-ROM Drive

<OPTION AVAILABLE>

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

<PACKING LIST>

The same and the s		
Name and shape	Quantity	Application
DVD-ROM	1	Includes the software and manuals for System Controller. Both VRF Controller and VRF Explorer software are 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. However, Wibu key is not required for remote VRF Explorer software.

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: 110 USB Network Interface - TP/FT-10 Channel. Model Number: 75010R

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 or later.

Microsoft® Windows® 8 will be supported.(Future release)

Network Convertor

- 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.

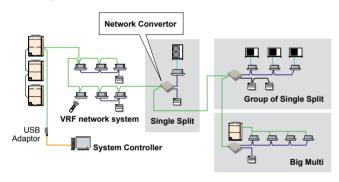




Functions

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.



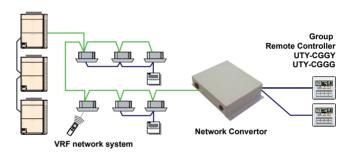
Please consult your distributor for connectable split type air conditioner.

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-VGGXZ1).

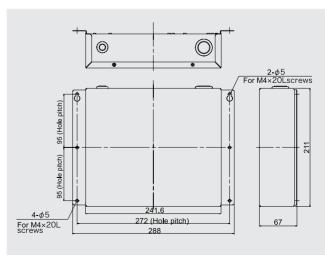


* 2 refrigerant circuits can be covered by a single Network Convertor (UTY-VGGXZ1) . Up to a total of 16 Network Convertors (UTY-VGGXZ1) and System Controller adaptors can be connected in a single VRF network system.

Specifications

Model name	UTY-VGGXZ1
Power Supply	208-240V 50/60Hz, Single phase
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®

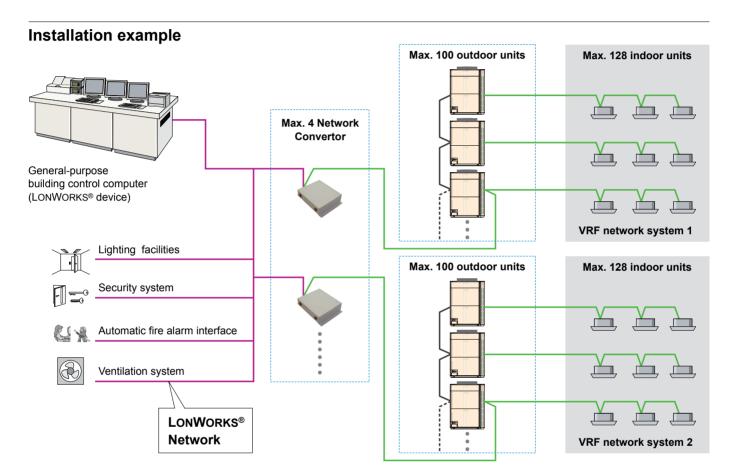
UTY-VLGX







- 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®



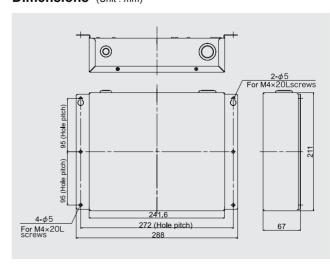
Specifications

Model name	UTY-VLGX
Power Supply	208-240V 50/60Hz, Single phase
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





Max. controllable

4

VRF network

systems

Max. controllable

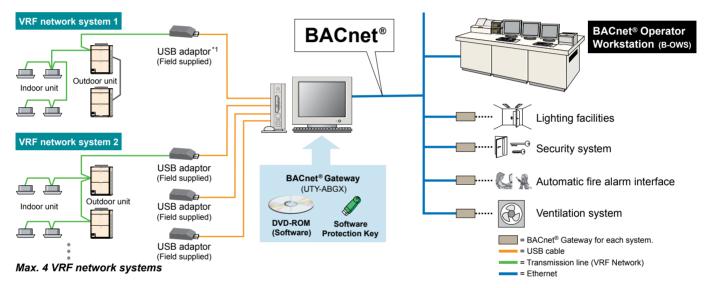
400

Outdoor units

Max. controllable 1,600 Indoor units

- 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.

Installation example



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

PERSONAL COMPUTER SPECIFICATIONS

Quantity

Operating system	Microsoft® Windows® XP SP3 (32-bit) Professional Microsoft® Windows® Vista® SP2 (32-bit) Home Premium, Business Microsoft® Windows® 7 SP1 (32/64-bit) Home Premium, Professional
	[Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish
CPU	Intel® Core™ i3 2GHz or higher
Memory	2GB or more (Windows® XP, Vista®, 7 32-bit), 4GB or more (Windows® 7 64-bit)
HDD	40GB or more of free space
Display	1024 x 768 or higher resolution
Interface	USB port (x2-5) is required Ethernet port is required
Software required	Adobe® Reader® 9.0 or later
Hardware required	DVD-ROM Drive
<packing list=""></packing>	

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

Microsoft® Windows® 8 will be supported.(Future release)

Software protection key to be inserted in a USB slot running BACnet® Gateway.

Includes the software and manuals for BACnet® Gateway.

BACnet® Gateway may only run on a PC with Wibu Key

Name and shape

(Software protection key)

DVD-ROM

Wibu Key

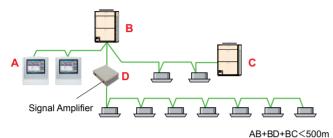
Signal Amplifier

UTY-VSGXZ1

- Transmission Line length can be extended up to 3,600m with multiple Signal Amplifiers.
- Up to 40 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.



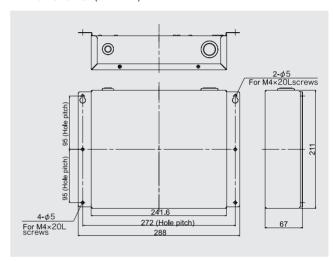
Installation example



Specifications

Model name	UTY-VSGXZ1
Power Supply	208-240V 50/60Hz, Single phase
Power Consumption (W)	4.5
Dimensions (H x W x D) (mm)	67 x 288 x 211
Weight (g)	1,500

Dimensions (Unit:mm)



External Switch Controller

UTY-TEKX

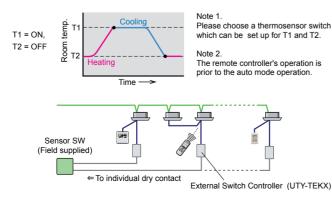
Air conditioner switching can be controlled by connecting other sensor switches

- 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.

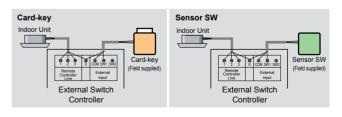
Installation example

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



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)	100

DC12V is supplied by the indoor unit.

Service Tool

Software

UTY-ASGX

Max. Monitor
100
Outdoor units

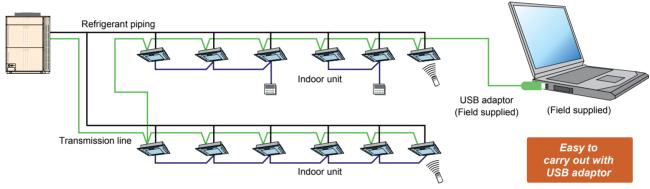
Max. Monitor and control
400

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.
- 14 advanced functions are available for the VR-II series for through servicing and through shooting.
- •The operating state (Solenoid valve) of RB unit can be checked.
- * 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



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

Functions

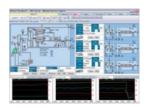
1) System List

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.



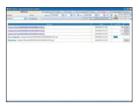
5) Error History

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) 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)

12) Model Name Writer *

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

13) 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.

14) 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	Microsoft® Windows® XP SP3 (32-bit) Professional Microsoft® Windows® Vista® SP2 (32-bit) Home Premium, Business Microsoft® Windows® 7 SP1 (32/64-bit) Professional [Supported languages] English only
CPU	1GHz or higher
Memory	512 MB or more (Windows® XP 32-bit) 1GB or more (Windows® Vista®, 7 32-bit) 2GB or more (Windows® 7 64-bit)
HDD	10GB or more of free space
Display	1024 x 768 or higher resolution
Interface	USB port for U10 USB Network Interface and Software protection key
Software required	Internet Explorer 7.0 or 8.0 or 9.0 / Adobe® Reader® 9.0 or later
Hardware required	DVD-ROM Drive

<PACKING LIST>

Name and shape	Quantity	Application
DVD-ROM	1	Includes the software and manuals for Service Tool.
Wibu Key (Software protection key)	1	Software protection key to be inserted in a USB slot running Service Tool. Service Tool may only run on a PC with Wibu Key.

Web Monitoring Tool

Software

UTY-AMGX

Product features

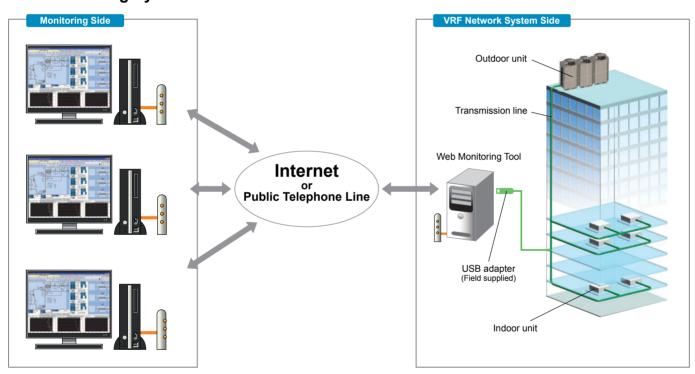
- Troubleshooting is performed by monitoring each unit remotely during periodical system checks off-site.
- Operation status can be checked and analyzed to detect even the smallest abnormalities.
- Four VRF network systems each with 400 units, with maximum number of up to 1,600 units can be monitored 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.
- •The operating state (Solenoid valve) of RB unit can be checked.
- * 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).

4 VRF network systems can be supported

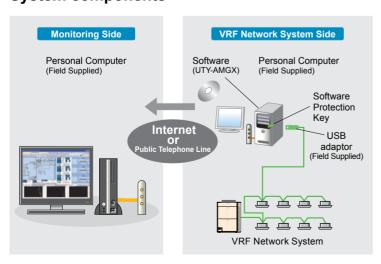
Max. Monitor
400
Outdoor units



Web Monitoring System



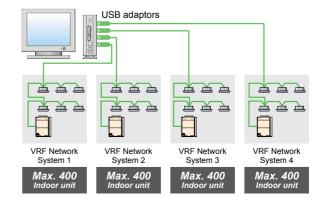
System components



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	Web Monitoring Tool UTY-AMGX		
		UTY-ASGX	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	Central Release *	•	•		
19	Model Name Writer *	•	_	_	
20	Error Memory Reader *	•	_	_	
21	Time Guard Information *	•	•	•	

^{*:} Supported by Ver. 1.1 or later

PERSONAL COMPUTER SPECIFICATIONS

Operating system	Microsoft® Windows® XP SP3 (32-bit) Professional Microsoft® Windows® Vista® SP2 (32-bit) Home Premium, Business Microsoft® Windows® 7 SP1 (32/64-bit) Professional [Supported languages]			
	English only			
CPU	1GHz or higher			
	1GB or more (Windows® XP, Vista®, 7 32-bit)			
Memory	2GB or more (Windows® 7 64-bit)			
HDD	40GB or more of free space			
Display	1024 x 768 or higher resolution			
	USB port (for U10 USB Network Interface Max.4 , Software protection key)			
	Either of the following interface is required for remote connection:			
	Public Telephone Line: Modem is required			
Interface	Internet using LAN : Ethernet port is required			
Software required	Internet Explorer 7.0 or 8.0 or 9.0 / Adobe® Reader® 9.0 or later			
Hardware required	DVD-ROM Drive			
	•			

<PACKING LIST>

Name and shape	Quantity	Application
DVD-ROM	1	Includes the software and manuals for Web Monitoring Tool.
Wibu Key (Software protection key)	1	Software protection key to be inserted in a USB slot running Web Monitoring Tool. Web Monitoring Tool may only run on a PC with Wibu Key.

^{*1:} it is available only during a connection to the Internet.

Energy Recovery Ventilator

Models

UTZ-BD025B UTZ-BD035B UTZ-BD050B UTZ-BD080B UTZ-BD100B







UTZ-BD025B UTZ-BD035B

UTZ-BD050B

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





LITZ BD090

UTZ-BD100B

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-BD025B	UTZ-BD035B	UTZ-BD050B	UTZ-BD080B	UTZ-BD100B
Power source				220 - 240V, 50Hz				
HEAT EXCHANGE VENTILATION	Input power	Extra high / High / Low	W	128 / 123 / 96	190 / 185 / 168	289 / 225 / 185	418 / 378 / 295	464 / 432 / 311
	Air flow rate	Extra high / High / Low	m³/h	250 / 250 / 190	350 / 350 / 240	500 / 500 / 440	800 / 800 / 630	1000 / 1000 / 700
	External static pressure	Extra high / High / Low	Pa	105 / 95 / 45	140 / 60 / 45	120 / 60 / 35	140 / 110 / 55	105 / 80 / 75
	Temperature Exchange Efficiency	Extra high / High / Low	%	75 / 75 / 77	75 / 75 / 78	75 / 75 / 76	75 / 75 / 76	75 / 75 / 79
	Energy Exchange Efficiency Cooling	Extra high / High / Low	%	63 / 63 / 65	66 / 66 / 71	62 / 62 / 64	65 / 65 / 68	65 / 65 / 70
	Energy Exchange Efficiency Heat pump	Extra high / High / Low	%	70 / 70 / 72	69 / 69 / 73	67 / 67 / 69	71 / 71 / 74	71 / 71 / 76
	Sound pressure level	Extra high / High / Low	dB*	31.5 / 30.5 / 26.5	33 / 31 / 25.5	37.5 / 35.5 / 32.5	37.5 / 37 / 34.5	38.5 / 37.5 / 34.5
NORMAL VENTILATION	Input power	Extra high / High / Low	W	128 / 123 / 96	190 / 185 / 168	289 / 225 / 185	418 / 378 / 295	464 / 432 / 311
	Air flow rate	Extra high / High / Low	m³/h	250 / 250 / 190	350 / 350 / 240	500 / 500 / 440	800 / 800 / 630	1000 / 1000 / 700
	External static pressure	Extra high / High / Low	Pa	105 / 95 / 45	140 / 60 / 45	120 / 60 / 35	140 / 110 / 55	105 / 80 / 75
	Sound pressure level	Extra high / High / Low	dB*	31.5 / 30.5 / 26.5	33 / 31 / 25.5	38.5 / 38 / 32.5	37.5 / 37 / 34.5	40.5 / 39.5 / 36.5
Dimensions (W × D × H)			mm	882 x 599 x 270	1050 x 804 x 317	1090 x 904 x 317	1322 x 884 x 388	1322 x 1134 x 388
Weight			kg	29	49	57	71	83
Outlet duct diameter mm			mm	150	150	200	250	250
Operation range °C			°C	-10 ~ 40	-10 ~ 40	-10 ~ 40	-10 ~ 40	-10 ~ 40
Maximum humidity			%	85	85	85	85	85

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

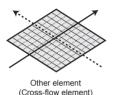
Energy efficiency and ecology

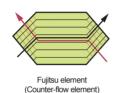
Energy consumption is dramatically reduced by using a counterflow heat-exchange element. Air conditioning load is reduced by approximately 20%, resulting in significant energy savings. Recovers up to 77% of the heat in the outgoing air.



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.





Quiet operation

Significantly reducing low pressure loss and noise allows low-noise operation.

Extended range of an external static pressure

An external static pressure is improved by adopting a powerful fan motor.

This allows for application in a wide variety building.

Slim shape and easier installation

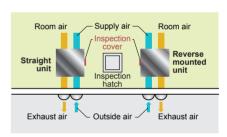
Counter-flow heat exchange element used for reduced noise and slimmer, more compact body shape.



Reverse mountable direct air supply / exhaust system

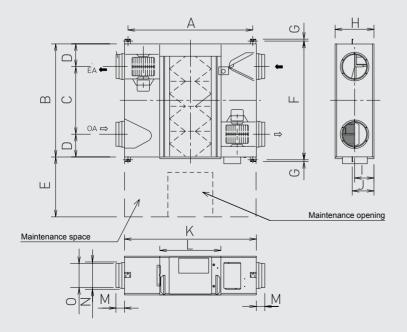
Adoption of straight air supply / exhaust system: Duct design is simplified because the air supply / exhaust ducts are straight.

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-BD025B / UTZ-BD035B / UTZ-BD050B / UTZ-BD080B / UTZ-BD100B



	I			I	
	UTZ-BD025B	UTZ-BD035B	UTZ-BD050B	UTZ-BD080B	UTZ-BD100B
Α	810	978	1018	1250	1250
В	599	804	904	884	1134
С	315	580	640	428	678
D	142	112	132	228	228
Е	600	600	600	600	600
F	655	860	960	940	1190
G	19	19	19	19	19
Н	270	317	317	388	388
-1	135	159	159	194	194
J	159	182	182	218	218
K	882	1050	1090	1322	1322
L	414	470	470	612	612
M	95	70	127	85	85
N	219	162	210	258	258
0	144	144	194	242	242

Auto Louver Grille Kit (Option)

Models

UTD-GXSA-W UTD-GXSB-W UTD-GXSC-W

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





Flexible Control

• Operation with indoor unit

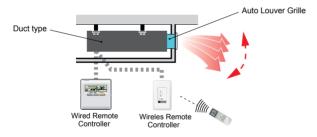
Auto Louver can be operated by synchronizing remote controller of indoor unit.

• UP and Down auto swing

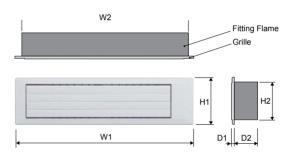
- · Auto airflow direction and auto swing
- 4 steps selectable

Auto-closing louver

When operation of indoor unit is stopped, the louver will automatically close.



Dimensions



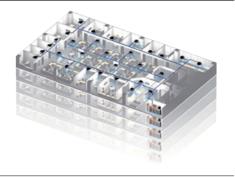
					OTHE. ITHII
W1	W2	H1	H2	D1	D2
683	645				
883	845	180	148	9	84
1,083	1,045				
	683 883	683 645 883 845	683 645 883 845 180	683 645 883 845 180 148	W1 W2 H1 H2 D1 683 645 883 845 180 148 9

Specifications

Model name			UTD-GXSA-W	UTD-GXSB-W	UTD-GXSC-W	
Applicable Indoor Unit			ARXD07/09/12/14GALH	ARXD18GALH	ARXD24GALH	
Power Supply			Connecting with Control box of indoor unit			
Fixing of Auto Louver G	ille		Screw fixing to Flange or Square Duct			
Extension Square Duct	Limit		1.0m (Max. duct length between indoor unit and Grille)			
Net Dimension mm (inch)			180x683x(84+9) [7-3/32x26-7/8x(3-5/16+11/32)]	180x883x(84+9) [7-3/32x34-3/4x(3-5/16+11/32)]	180x1083x(84+9) [7-3/32x42-5/8x(3-5/16+11/32)]	
Weight	Net	kg	2.0 (4.4)	2.5 (5.6)	3.0 (6.7)	
vveigni	Gross	(lb.)	3.0 (6.7)	3.5 (7.8)	4.0 (8.9)	
Color			White			
Louver Motor			Stepping Motor			
Accessories			Fitting Flame, etc.			
Cooling °C (°F)		18 to 32 (64 to 90)				
Operation range			80% or less			
Heating		°C (°F)	16 to 30 (60 to 88)			

Building Information Modeling (BIM)

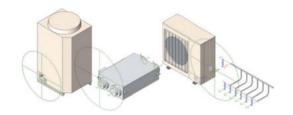
FUJITSU provides the Building Information Modeling (BIM) object models and contents for our VRF system and some products to the architect, designer and contractor using Autodesk® Revit® technology from our Website and Autodesk® Seek Website, etc.



BIM Object Models Ensure Proper Design

Many products available

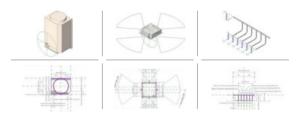
We provide BIM data for indoor units, outdoor units, and accessories. We will continue to create and provide products to support the global market. Object models: VRF "AIRSTAGE V-II" /8 Rooms Multi "HFI" / Energy Recovery Ventilator Files: Indoor units 75 files / Outdoor units 22 files / Options 15 files



3D and 2D product data

We provide 3D data that is similar to the product appearance. 2D CAD design operations are supported and 2D display is also provided.

The data can also be output in other formats, such as DXF and DWG, which are used by other design CAD.



Installation limitation

The equipment installation limitation range is shown. The distance range from the wall, etc., is automatically displayed to make it easy to provide highly reliable layout designs.

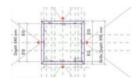






Installation information

Other information, such as symbols showing the airflow direction that are required for installation drawings, is built in and can be automatically reflected in 2D drawings. Installation drawings can be created easily.





Product specifications & Link information

Contains the basic information required for air conditioner design, including unit size, capacity, input power, noise, and airflow rate.

*:URL: http://airstage.fujitsugeneral.com

Data volume

Fujitsu Revit® files are small, requiring very little system resources.

Required software

Autodesk® Revit® series software

·Autodesk® Revit® Architecture

·Autodesk® Revit® MEP

Autodesk® Revit® Structure

utodesk® Revit® Architecture

Data format

•RFA

Product parameter

Power source Input power Capacity Airflow rate Sound pressure level Dimensions Weight Connection pipe diameter

Material/Color

1

FUJITSU GENERAL Website*

Link

*: URL:http://www.fujitsu-general.com/index.html

Design Simulator

Enter your requirements, select your controls and options, design your layout and let the program do the rest.

Put the charts and pens away and design your projects on your computer with ease using the Design Simulator. Everything from selecting indoor and outdoor units, allocating controls and optional parts to designing the piping and wiring systems is made easier using the program's built-in features. Once your project is designed take advantage of the Export functions to easily get materials lists, product specifications, refrigerant calculations and more - it'll even export to Word or Excel formats, and group the relevant CAD data for your project.

1) Input Project Details

Enter the details of the project (optional)



2) Selection of Series

Select which series of equipment you are after, systems which share common units are grouped together.



3) Select Indoor units

Enter the Indoor Unit Requirements and conditions - then use automatic or manual selection to determine the unit to suit your needs.



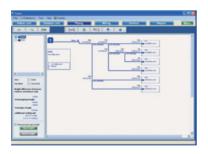
4) Select Outdoor Units

Add Indoor units to each system, then determine the Outdoor unit to suit your needs. If indoors in Step 3 were selected using Auto selection, Step 4 may reselect these indoors to suit the actual capacity



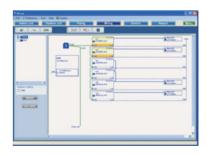
5) Piping Diagram / Input piping lengths

Piping diagrams are automatically created for each refrigerant system and information for each unit is automatically displayed. When the piping lengths are added the refrigerant charge is calculated and any additional refrigerant is shown.



6) Wiring Diagram / Grouping of Remote Controllers

Wiring and remote control diagrams are automatically created for each refrigerant system. Set remote controller groups and addition of unit accessories and optional parts here.



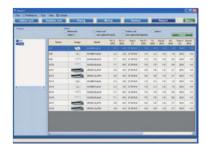
5) Central Controller and Converter options

Select any central controllers and converters that are to be used on the system. There is an Auto function available to let the program determine home many of each control you require for the system as designed.



8) Display and Export Project Report

View materials list for the project. Select which components are to be included into report and then export as csv, rff or dxf format. You can also include the CAD data in your export to suit the models on your project - in 2D DXF or 3D RFA formats.



*For further assistance, follow the link in the program to the online Movie Manual to view step by step explanations of all you need to know.

Select Your Preferences

Select your language, region, default unit names and your preferred units of measurement. The program will then perform the required calculations and return the results in the format you want to see. Once this is done once, the program will remember your choices for future use.



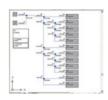


Update your Design Simulator

The information specific to your project can be exported in a number of industry standard file formats.



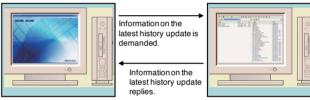




- Word format (rtf)
- Excel format (csv)
- AutoCAD format (DXF)
- 2D Data (DXF) 3D Data (RFA)

Update your Design Simulator

Database can be easily updated online using AutoUpdate function through FTP. Once you hit update, the program will connect to the online server and tell you if a newer version is available.



User side(PC) FTP server side (PC)

Installation Requirements

Software	Design Simulator	Design Simulator		
Operating System	Microsoft Windows XP / Vis	Microsoft Windows XP / Vista / 7		
		CPU: 500 MHz or faster		
	Hardware	Memory: 2GB (Vista/7) 512MB (XP) or more		
	Display	HDD: 1GB or more		
System Requi rements		Resolution: 1024 x 768 or higher		
		Internet Explorer 7.0 or newer		
	Software	Adobe Reader 9.0 or newer		
		Microsoft Word 2003 or newer		

Program Features and Specifications

	Language	Choose from 26 different languages		
	Brand Setting	Select Fujitsu or General for products specific to your region		
Preferences	Unit Naming	Choose default name for automatic naming of Indoor and		
1 references		Outdoor Units. i.e. Indoor = FCU, IU or AC. Outdoor = CU or OU		
	Measurement Unit Setting	Set your preferred measurement units for Temperature,		
	Measurement onit Setting	Unit and Piping Size, Weight, Capacity and Airflow		
	Automatic Selection for Indo	por Units, Outdoor Units, Piping and Wiring using the criteria you enter		
Model Selection Options	Manually select the units of your choice			
Widder Selection Options	Select from suggested Optional parts to suit your systems			
	Select from Controllers / Adapters / Convertors for your project			
System Design	Automatic creation of piping and wiring diagrams for the systems you designed			
System Design	Modify the piping and wiring diagrams to suit your specific installation			
	Materials List			
	Product Detail (Specifications, Options, Photographs)			
Project and Model Information	Piping and Wiring Diagrams			
	Additional Refrigerant Calculation automatic when piping lengths are entered			
	CAD Data for models specific to your project in 2D - DXF or 3D RFA formats			
	Word (RTF format)			
Report Export Formats	Excel (CSV format)			
	DXF format			
Update Options	Automatic Update via FTP through internet (AutoUpdate button)			
Opuate Options	Download the latest version of the program if Autoupdate is unavailable due to firewall etc			

Note: Models are added and updated constantly, specifications are subject to change without notice.

Update your system to ensure you have the latest information.

Optional Parts

Controllers

Wired Remote Controller (Touch Panel)

UTY-RNR*



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-YWC



For All Duct type

IR Receiver Unit

UTY-LRH*B1



Group Remote Controller

UTY-CGG*



Central Remote Controller

UTY-DCG*



For Cassette type

Touch Panel Controller

UTY-DTG*



System Controller Software

UTY-APGX



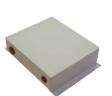
R*: RY (FUJITSU), RG (GENERAL) K*: KY (FUJITSU), KG (GENERAL) H*: HY (FUJITSU), HG (GENERAL) G*: GY (FUJITSU), GG (GENERAL)

Convertors / Adaptors



Network Convertor for LONWORKS®

UTY-VLGX



BACnet® Gateway Software

UTY-ABGX







DVD-ROM

Software Protection Key

Signal Amplifier UTY-VSGXZ1



External Switch Controller

UTY-TEKX



Others

Flange (Round)

UTD-RF204

For Low Static Pressure Duct type / Medium Static Pressure Duct type / Ceiling type



Flange (Square)

UTD-SF045T

For Low Static Pressure Duct type / Medium Static Pressure Duct type



Remote Sensor Unit

UTY-XSZX

For All Duct type

New amenity space can be offered by installing the Remote sensor



Long-Life Filter

UTD-LF25NA

For Low Static Pressure Duct type / Medium Static Pressure Duct type



Long-Life Filter

UTD-LF60KA

For High Static Pressure Duct type (ARXC36/45/60GATH)



Auto Louver Grille Kit

UTD-GXSA-W (for ARXD07/09/12/14GALH) UTD-GXSB-W (for ARXD18GALH) UTD-GXSC-W (for ARXD24GALH)

For Slim Duct type



Drain Pump Unit

UTZ-PX1BBA

For Low Static Pressure Duct type

UTZ-PX1NBA

For Low Static Pressure Duct type / Medium Static Pressure Duct type



Drain Pump Unit

UTR-DPB24T

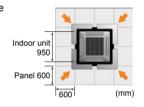
For Ceiling type



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

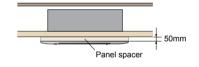
Shuts the air outlet when only using as 3 blow out.



Panel Spacer

UTG-BGYA-W

For Cassette type



Cassette Grille

UTG-UFYC-W UTG-UFGC-W



Cassette Grille

UTG-UGYA-W UTG-UGGA-W



Insulation Kit for High Humidity

UTZ-KXGA For Cassette type UTZ-KXGB For Slim Cassette type

UTZ-KXGC For Compact Cassette type



For Compact Cassette type



For Cassette type

Fresh Air Intake Kit

UTZ-VXGA



Fresh Air Intake Kit

UTZ-VXAA

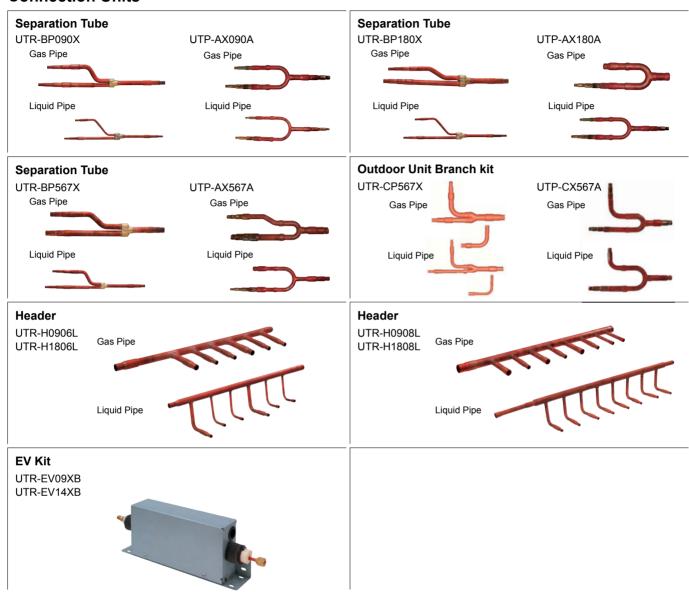


For Compact Cassette type

For Cassette type

Optional Parts

Connection Units



Specifications

Outdoor unit Branch kit

Model name		UTR-CP567X or UTP-CX567A	
Number of Outdoor unit	2 outdoor units	1	
Number of Outdoor unit	3 outdoor units	2	

Separation Tube

Model name	UTR-BP090X or UTP-AX090A	UTR-BP180X or UTP-AX180A	UTR-BP567X or UTP-AX567A
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
Wiodel Harrie	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*E07GACH AS*E09GACH	AS*E12GACH AS*E14GACH	

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

Applications

There are many applications for Airstage VRF systems including such markets as education, healthcare, hospitality, utilities, office buildings, apartment buildings, condominiums, and restaurants. Note: VRF Heat Recovery system provides simultaneous Heating and Cooling. System operates both Heating mode and Cooling mode.

Medical and Healthcare Facilities







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

INDIVIDUAL CONTROL

VRF gives each patient or each room individual control of their room temperature.

CLEAN AIR

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

CENTRAL CONTROL

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

MAINTENANCE

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

FRESH AIR

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

Applications

Educational and Religious Facilities

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

HEALTHIER FACILITY

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

CENTRAL CONTROL

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

ZONING

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

COMFORT

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









Office Buildings and Retail Spaces

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

QUIET

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

ZONING

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

CONTROL

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









EASE OF INSTALLATION

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

FLEXIBLE

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

COMFORT

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

FUJITSU GENERAL LIMITED

1116, Suenaga, Takatsu-ku, Kawasaki 213-8502, Japan http://www.fujitsu-general.com/





ISO 9001 ISO 14001 Certified number: 01 100 89394 Certified number: 01 104 92



ISO 9001 ISO 14001 Certified number: 01 100 79269 Certified number: 31010 Fujitsu General (Shanghai) Co., Ltd.



ISO 9001 ISO 14001
Certified number: 00608Q11061R2M Certified number: 00609E2045
Fujitsu General Central Air-conditioner (Wuxi) Co., Ltd



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The colors may be different from the actual colors because this catalog is printed matter.

Product specifications are subject to change without notice.

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