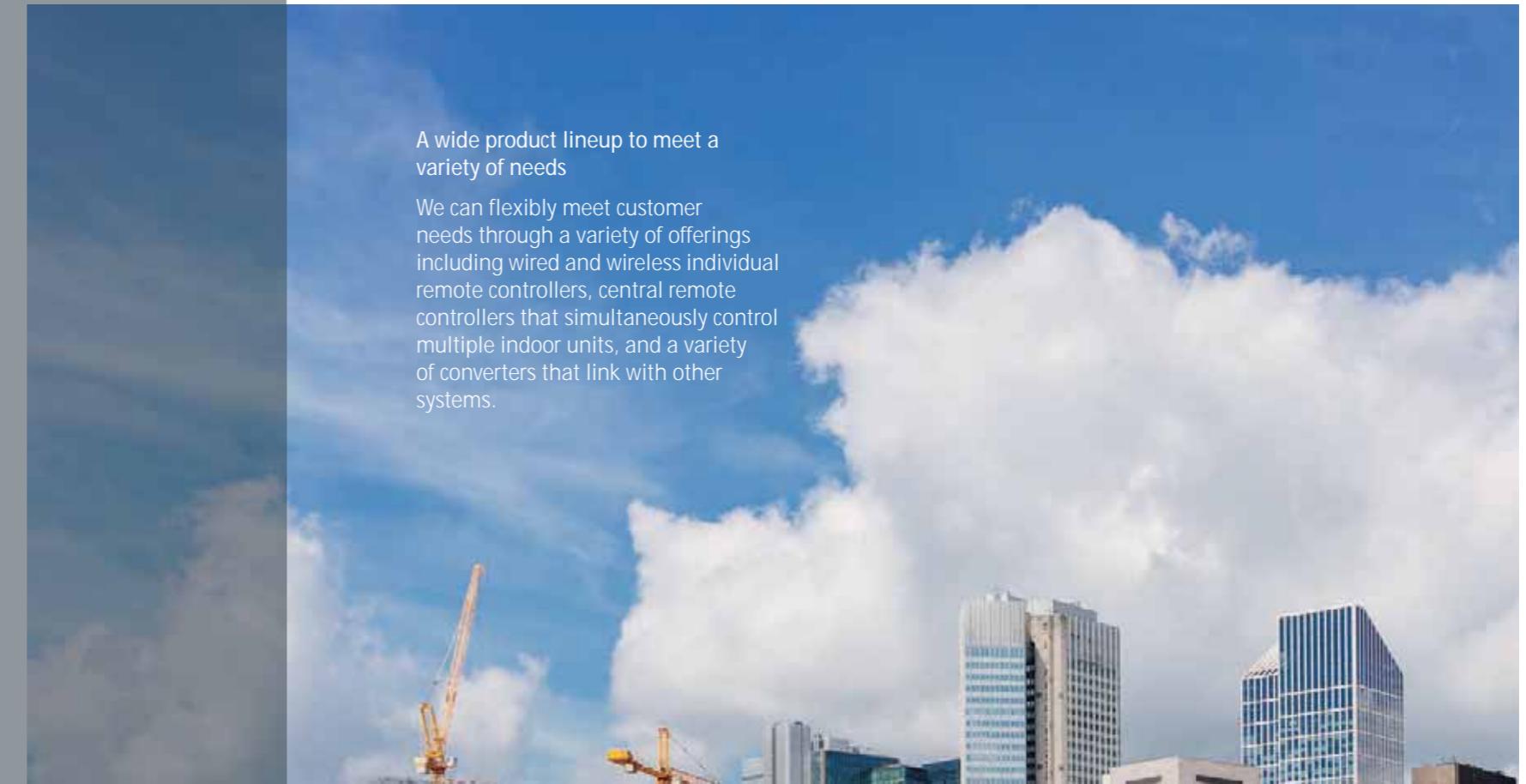
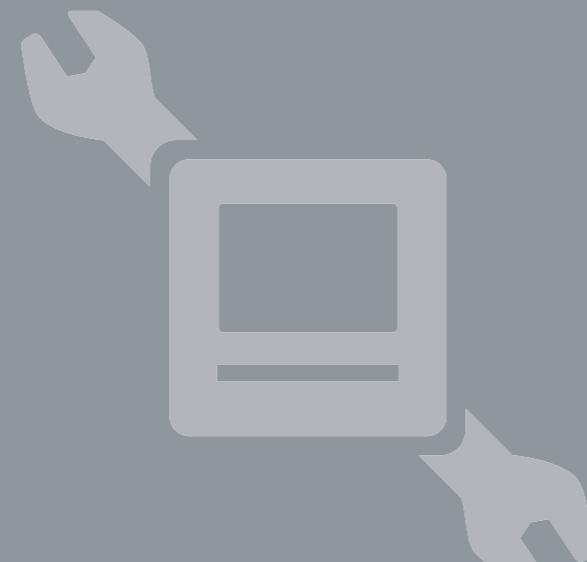


# Light Commercial & Commercial, Residential CONTROL SYSTEM & OPTIONAL PARTS

- C-002 Control System Overview
- C-006 Best Control Solution for Each Building Structure
- C-008 Comparison Table of Controllers
- C-054 Optional Parts Overview



A wide product lineup to meet a variety of needs

We can flexibly meet customer needs through a variety of offerings including wired and wireless individual remote controllers, central remote controllers that simultaneously control multiple indoor units, and a variety of converters that link with other systems.

## CONTROL SYSTEM



### INDIVIDUAL CONTROL

- C-010 Wired Remote Controller (with touch panel)
- C-011 Wired Remote Controller Compact Wired Remote Controller
- C-012 Simple Remote Controller

### CONVERTERS/ADAPTERS

- C-013 WLAN Adapter
- C-014 MODBUS® Converter KNX® converter
- C-015 External switch controller
- C-016 MODBUS® Interface
- C-017 KNX® Interface
- C-018 WLAN Adapter
- C-019 Multi-split Protocol WLAN Adapter
- C-020 BACnet® Gateway



### INDIVIDUAL CONTROL

- C-021 Wired Remote Controller
- C-022 Wireless Remote Controller
- C-023 IR Receiver Unit

### CENTRALIZED CONTROL

- C-024 Central Remote Controller

### CONVERTERS/ADAPTERS

- C-025 Network Converter for Single-Split Type



### INDIVIDUAL CONTROL

- C-026 Wireless Remote Controller IR receiver unit for Duct and Cassette type

### CENTRALIZED CONTROL

- C-028 Central Remote Controller
- C-030 Touch Panel Controller
- C-034 System Controller Software  
System controller Lite Software

### CONVERTERS/ADAPTERS

- C-038 BACnet® Gateway Software
- C-039 BACnet® Gateway Hardware  
Multiple protocol LAN adapter
- C-040 BACnet®/MODBUS® Router
- C-041 BACnet®/MODBUS® Cloud Device
- C-042 MODBUS® Converter
- C-043 KNX® Converter
- C-044 Signal Amplifier  
Network Converter for LONWORKS™

### C-046 Control System List

## Optional parts



- C-056 Silver Ion Filter
- C-057 Auto Louver Grille Kit



- C-058 Pressure Sensor Kit
- C-059 External Power Supply Unit

- 
- C-059 AIR BEAM  
Radiation air outlet unit
  - C-060 Optional Parts List
  - C-064 Function List
  - C-068 Separation Tube and other piping products



SPLIT



MULTI-SPLIT



VRF J Series



VRF V Series

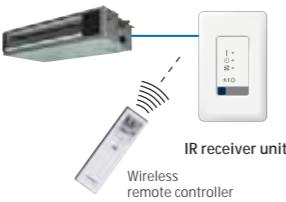
# Control System Overview

for Split & Multi-split

All indoor units\* are equipped with a wireless or wired remote controller as standard. Additional options are available, such as individual remote controllers and central remote controllers. The easy-to-operate central remote controller makes it simple to control the operation mode, temperature, airflow volume, timer, and other functions of each indoor unit from a single location.

\* Except for some products

### Air Conditioning Individual control

- Wired remote controller**  
A built-in thermo sensor monitors and controls room temperature accurately.
- Wireless remote controller**  
Simple and versatile operations with a choice of 4 different types of timers
- Simple remote controller**  
Compact remote controller with basic functionality
- For Ceiling type**  
  
IR receiver unit  
Wireless remote controller
- For Duct type**  
  
IR receiver unit  
Wireless remote controller
- For Cassette type**  
  
IR receiver unit  
Wireless remote controller
- IR receiver unit**  
This IR receiver unit enables a wireless remote controller to control a duct-type indoor unit.



### Air Conditioning Centralized control

Central remote controller for 5, 6 & 8-unit Multi-split type  
Enables individual and central control.

### Online Control (Wireless Control via Smartphone/Tablet)

With the WLAN adapter and the FGLair app, you can control the heating and cooling of your home anytime, anywhere.

**WLAN adapter**  
The dedicated WLAN adapter enables the air conditioner to be operated by smartphone or tablet computer from outside the home.

**FGLair™** [Download Free](#)

**Converters/Adapters**  
For external control via BMS/Home Automation Systems

- MODBUS® converter for indoor units UTY-VMSX** 
- MODBUS® interface for indoor units** 
- KNX® converter for indoor units UTY-VKSX** 
- KNX® interface for indoor units** 
- WLAN adapter** 
- Network converter**
  - DC power supply type UTY-VTGX 
  - AC power supply type UTY-VTGXV 

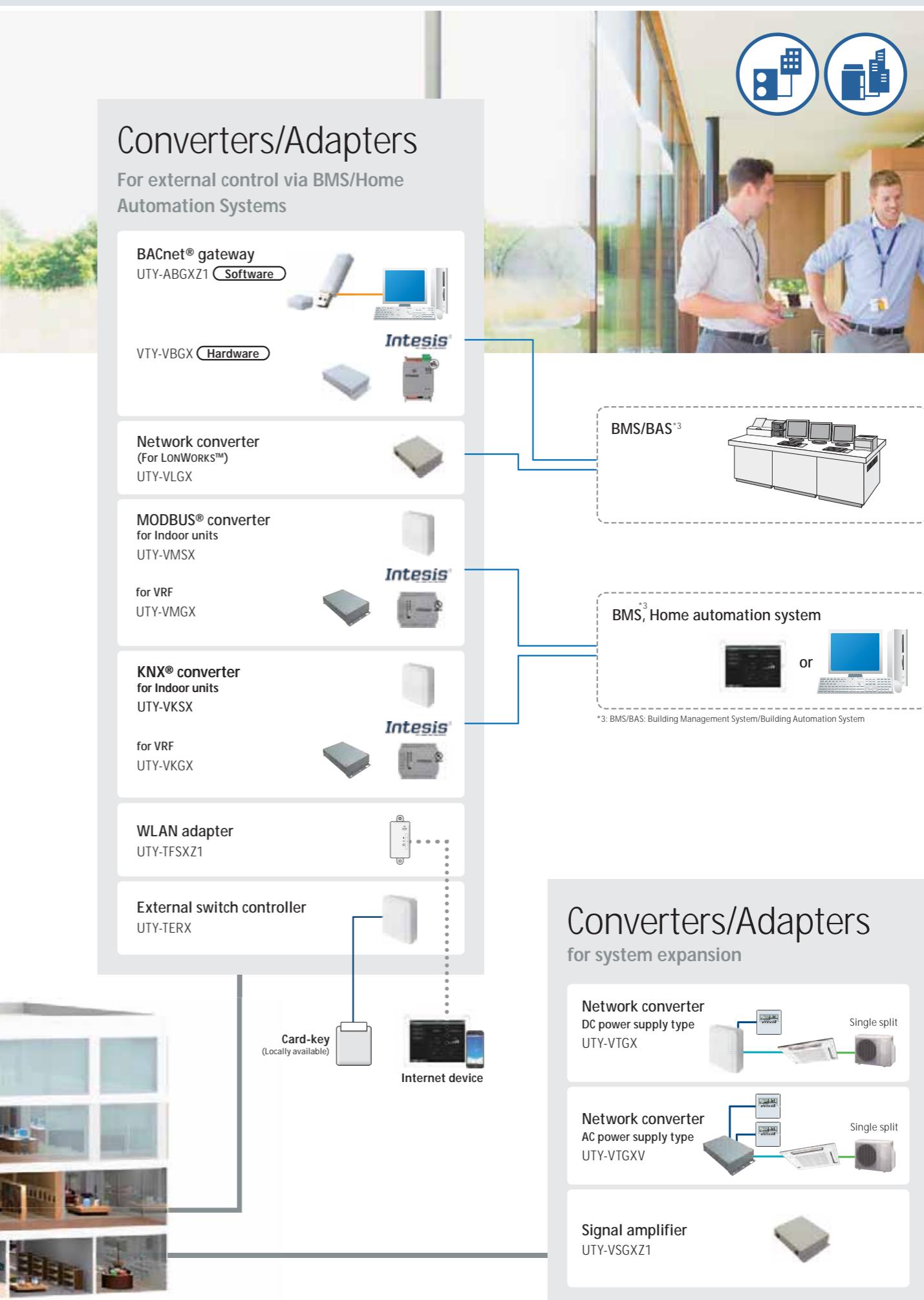
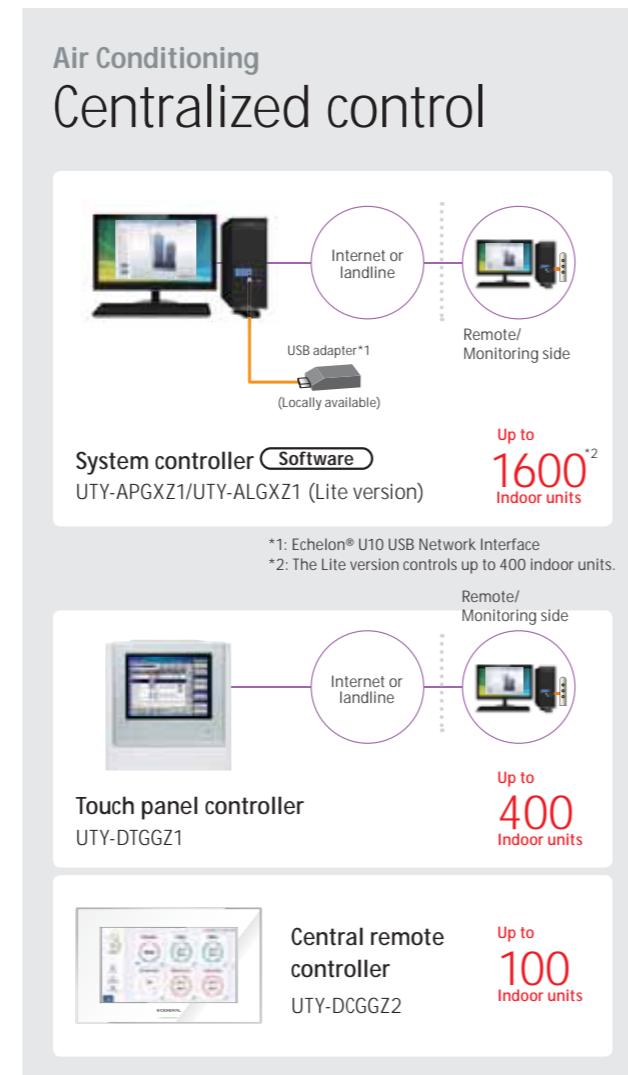
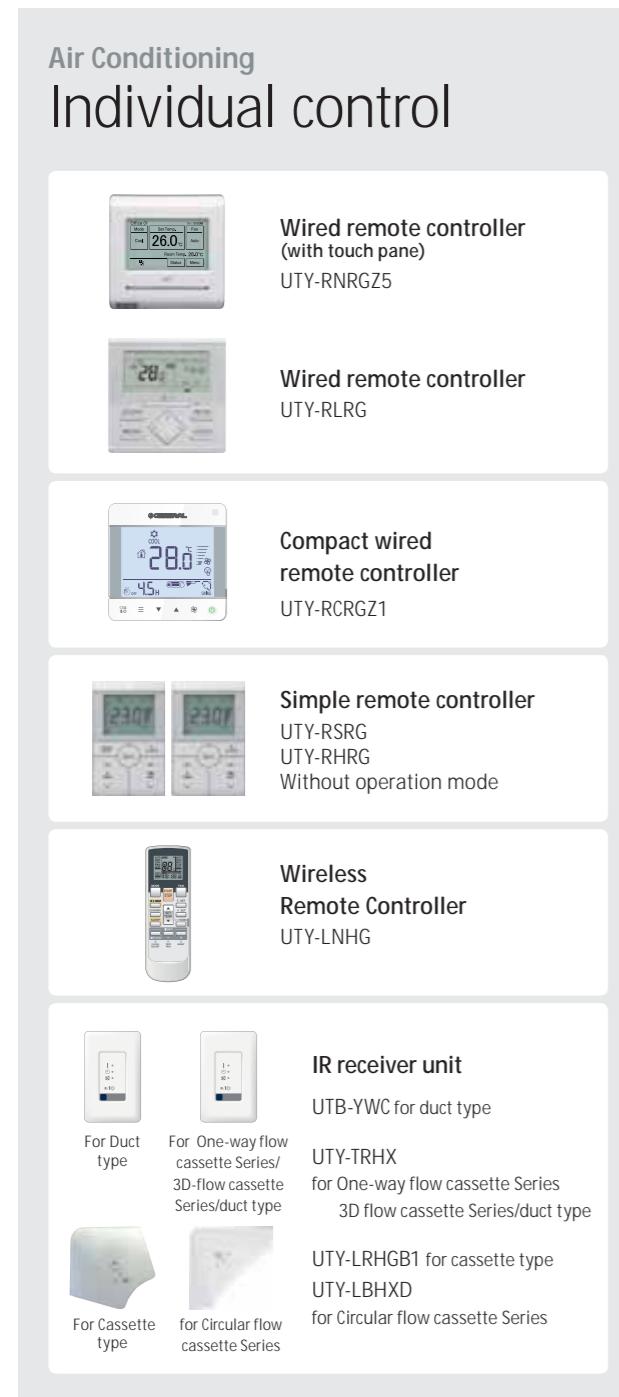
**Simple, user-friendly interface design**  
The designed screen display makes it easier than ever to operate.



# Control System Overview

for VRF

To meet the diverse needs of customers, we offer a variety of control options for our VRF systems, such as individual control, centralized control, and building management system (BMS) options.



# Best control solution for each building structure

Fujitsu General provides the best control solutions suitable for various building structures.

## SHOP

Type	Individual control	Centralized control				Integrating control (Interface)		
	Wired remote controller UTY-RNRGZ5 UTY-RLRG UTY-RVNGM UTY-RCRGZ1	Group remote controller UTY-CGGG	Central remote controller UTY-DCGGZ2	Touch panel controller UTY-DTGGZ1	System controller UTY-APGXZ1 UTY-ALGXZ1	Network converter for LonWorks™ UTY-VLGX	MODBUS® Converter UTY-VMGX	KNX® converter UTY-VKX
Automatic control of air conditioning (Schedule timer, Weekly timer, etc.)	•	•	•	•	•			
Controls limited to staff: Remote controller prohibition, Setting temperature range limitation, etc.			•	•	•	•	•	•
Group control		•	•	•	•			
Advanced energy saving: Peak cut, Operation of indoor unit rotation, etc.					•			
Remote monitoring management			•	•	•			
Manage multiple sites		•	•	•	•			
Monitor energy consumption					•			
Control third-party products					•			
Integrate Fujitsu General air conditioning into BMS						•	•	•

## HOTEL

Type	Individual control			Centralized control			Integrating control (Interface)			
	Wired remote controller UTY-RNRGZ5 UTY-RLRG UTY-RCRGZ1	Simple remote controller UTY-RSRG UTY-RHRC UTY-RSCGM	Wireless remote controller UTY-LNHG UTY-LNTG	Central remote controller UTY-DCGGZ2	Touch panel controller UTY-DTGGZ1	System controller UTY-APGXZ1 UTY-ALGXZ1	BACnet® gateway UTY-ABGXZ1 UTY-VBGX	Network converter for LonWorks™ UTY-VLGX	MODBUS® converter UTY-VMGX	KNX® converter UTY-VKX
Local control for hotel guests	•	•	•							
Centralized air conditioning control for common areas			•	•	•	•	•	•	•	
Limited control for hotel guests			•	•	•	•	•	•	•	
Remote monitoring management			•	•	•					
Advanced energy saving: Peak cut, Operation of indoor unit rotation, etc.					•	•				
Monitor energy consumption					•					
Control third-party products					•					
Integrate Fujitsu General air conditioning into BMS						•	•	•	•	
Interlock with window contact										•
Interlock with key card										•

## OFFICE

Type	Individual control			Centralized control			Integrating control (Interface)			
	Wired remote controller UTY-RNRGZ5 UTY-RLRG UTY-RSCGM	Simple remote controller UTY-RSRG UTY-RHRC UTY-RSCGM	Wireless remote controller UTY-LNHG UTY-LNTG	Central remote controller UTY-DCGGZ2	Touch panel controller UTY-DTGGZ1	System controller UTY-APGXZ1 UTY-ALGXZ1	BACnet® gateway UTY-ABGXZ1 UTY-VBGX	Network converter for LonWorks™ UTY-VLGX	MODBUS® converter UTY-VMGX	KNX® converter UTY-VKX
Local control for office staff	•	•	•	•						
Automatic control of air conditioning (Schedule timer, Weekly timer, etc.)	•			•	•	•	•	•		
Centralized air conditioning control for management					•	•	•	•	•	•
Controls limited to staff: Remote controller prohibition, Setting temperature range limitation, etc.				•	•	•	•	•	•	•
Advanced energy saving: Peak cut, Operation of indoor unit rotation, etc.					•		•			
Remote monitoring management						•	•	•		
Electricity charge apportionment						•	•	•		
Monitor energy consumption							•			
Control third-party products							•			
Integrate Fujitsu General air conditioning into BMS								•	•	•
Interlock with door contact										•
Interlock with Occupancy sensor for meeting room					•					•

# Comparison table of controllers

Item																
	Wired remote controller (with touch panel)	Wired remote controller	Wired remote controller	Compact wired remote controller	Simple remote controller	Simple Remote Controller			Simple remote controller*	Wireless remote controller	Wireless remote controller	Central remote controller (for 8-unit multi-split type)	Central remote controller	Touch panel controller	System controller Lite Software	System controller Software
Model name	UTY-RNRGZ5	UTY-RLRG	UTY-RVNGM	UTY-RCRGZ1	UTY-RSNGM	UTY-RSRG			UTY-RHRG	UTY-LNHG	UTY-LNTG	UTY-DMMGM	UTY-DCGGZ2	UTY-DTGGZ1	UTY-ALGX1	UTY-APGX1
Maximum number of controllable remote controller groups	1	1	1	1	1	1			1	1	1	1	100	400	400	1600
Maximum number of controllable indoor units	16	16	16	1	16	16			16	16	16	8	100	400	400	1600
Maximum number of controllable groups	—	—	—	—	—	—			—	—	—	—	50	400	400	1600
Air conditioning control functions	ON/OFF	●	●	●	●	●			●	●	●	●	●	●	●	●
	Operation mode setting	●	●	●	●	●			—	●	●	●	●	●	●	●
	Fan speed control	●	●	●	●	●			●	●	●	●	●	●	●	●
	Room temperature setting	●	●	●	●	●			●	●	●	●	●	●	●	●
	Setting temperature range limitation	●	●	●	●	—			●	—	—	—	●	●	●	●
	Test operation	●	●	●	●	●			●	●	●	—	—	●	—	—
	Vertical louver setting	●	●	●	●	●			●	●	●	—	●	●	●	●
	Horizontal louver setting	●	●	●	●	●			—	●	—	—	●	●	●	●
	Individual louver control	●	—	—	●	—			—	—	—	—	●	●	●	—
	Group setting	—	—	—	—	—			—	—	—	—	●	●	●	●
	Remote controller prohibition	—	—	—	—	—			—	—	—	—	●	●	●	●
	Anti-freeze setting	●	—	—	●	—			—	—	—	—	●	●	●	●
	Set temperature auto return	●	●	●	—	—			—	—	—	—	—	●	—	—
	Economy mode setting	●	●	●	●	●			—	●	●	●	●	●	●	●
	Occupancy sensor control	●	—	—	—	—			—	—	—	—	●	●	●	●
Displayed items	Error	●	●	●	●	●			●	—	—	●	●	●	●	●
	Defrosting	●	●	●	●	●			●	—	—	—	●	●	●	●
	Current time	●	●	●	●	—			—	●	●	●	●	●	●	●
	Day of week	●	●	●	●	—			—	—	—	—	●	●	●	●
	Remote controller prohibition	●	●	●	●	●			●	—	—	●	●	●	●	●
	Address display	●	●	●	●	●			●	—	—	—	—	●	●	●
	Room temperature	●	—	●	●	—			●	—	—	—	●	●	●	●
	Multiple language support	●	—	●	—	—			—	—	—	—	●	●	●	●
	Setting for daylight saving time	●	—	●	—	—			—	—	—	●	●	●	●	●
	Name registration	●	—	—	—	—			—	—	—	—	●	●	●	●
	Backlighting	●	—	●	●	●			●	—	—	●	●	●	—	—
	2D floor layout/3D building display	—	—	—	—	—			—	—	—	—	—	—	—	●
	Refrigerant leak detector	—	—	—	—	—			—	—	—	—	●	●	●	●
Timer	Period	Week	Week	Week	—	—			—	—	—	—	Week	Week	Year	Year
	ON/OFF, Temp, Mode, Times per day	8	4	8	—	—			—	—	—	4	20	20	144	144
	ON/OFF timer	●	●	●	●(OFF only)	—			—	●	●	—	—	—	—	—
	Sleep timer	—	—	—	—	—			—	●	●	—	—	—	—	—
	Program timer	—	—	—	—	—			—	●	●	—	—	—	—	—
	Auto-off timer	●	●	●	—	—			—	—	—	●	●	●	—	—
	Day off	●	●	●	—	—			—	—	—	●	●	●	●	●
	Minimum unit of timer setting (minutes)	10・30	30	30	—	—			—	5	5	5	10	10	10	10
	Remote monitoring management system	—	—	—	—	—			—	—	—	—	●	●	●	●
	Electricity charge apportionment	—	—	—	—	—			—	—	—	—	○	○	●	●
Control	Error history	●	●	●	—	—			—	—	—	—	●	●	●	●
	Emergency stop	—	—	—	—	—			—	—	—	—	●	●	—	—
	Remote monitoring management	—	—	—	—	—			—	—	—	—	●	●	○	●
	Energy-saving management	—	—	—	—	—			—	—	—	—	—	—	○	○
	E-mail notification in case of failure	—	—	—	—	—			—	—	—	—	●	●	●	●
	Key lock	●	Child lock	●	Child lock	●			—	—	—	Child lock	●	●	●	●
	Low noise mode	—	—	—	—	—			—	—	—	●	—	●	●	●

\*1 "Operation mode" setting not available.

\*2 Available only for external input control.

\*3 Monitoring sites can be set up.

The main unit side can only be operated to cancel the settings.

\*4 Available only when using Wired remote controller.

●: Supported ○: Optional function —: Unsupported

## Wired remote controller (with touch panel)

UTY-RNRGZ5



Up to  
16 indoor units  
Up to  
1 group

### Easy operation due to large high-resolution STN-LCD touch panel screen

- Touch screen LCD
- Built-in daily/weekly timer (ON/OFF, temperature, modes)
- Backlit screen for easy operation in the dark.
- Room temperature display
- Controls up to 16 indoor units
- Supports 12 languages: Chinese, Dutch, English, French, German, Greek, Italian, Polish, Portuguese, Russian, Spanish, and Turkish
- nonpolar 2-core type



### Accurate control for comfort

A thermo sensor built into the remote controller monitors room temperature accurately.

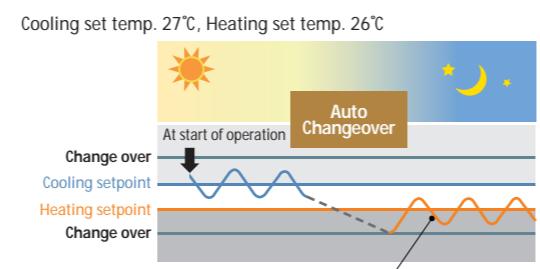


### Energy saving controls

#### Custom Auto

- Maintains 2 separate setpoints for heating and cooling operations.
- Automatically switches between heating and cooling modes.

\* Not available for some models



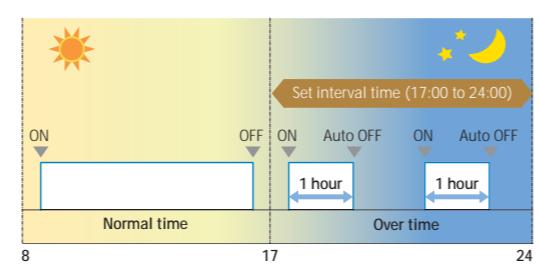
#### Auto-off timer

- While the Auto-timer is activated, if the set off time is specified as, for example, one hour, the power will automatically turn off one hour after the start of operation.
- A desired time frame can be specified for the Auto-off timer.
- The off-time can be set from 30 to 240 minutes.

#### 2-setting weekly timer

Set temperature auto return

Setting temperature range limitation



e.g.) Between 17:00 and 24:00 (over time hours), when the 1 hour set off time has elapsed, the system will automatically turn off the indoor unit as it

### Specifications

Model name	UTY-RNRGZ5
Power Source	DC 12 V
Dimensions (H × W × D) (mm)	120 × 120 × 20.4
Weight (g)	220

DC 12 V is supplied by the indoor unit.

## Wired remote controller

UTY-RLRG



Up to  
16 indoor units  
Up to  
1 group

### High performance and compact size

A single remote controller controls each connected indoor unit and provides a weekly timer function and a variety of energy-saving options.



### Visually intuitive operation

- The operation mode, set temperature, and fan speed are shown prominently on the top screen.
- Each function to be set is indicated by an icon.
- The control guide makes it simple and straightforward to operate a remote controller.



## Compact wired remote controller

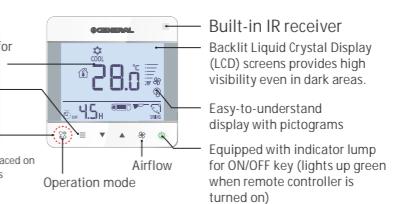
UTY-RCRGZ1



Up to  
1 indoor unit  
Up to  
1 group

### Simple design that matches stylish interiors

- The body of the controller, which is easy to install, is designed to conform to the European standard junction box.
- Can be operated both by wireless and wired remote controller.
- nonpolar 2-core type

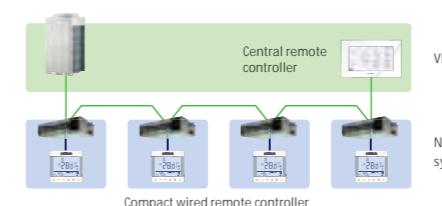


### Large screen and simple display

- Large screen but compact size
- Large, easy-to-read letters are used.
- The controls are simple and easy to understand.

### System overview

#### VRF connection



#### RAC connection



### Specifications

Model name	UTY-RLRG	UTY-RCRGZ1
Power source	12 V DC	12 V DC
Dimensions (H × W × D) (mm)	120 × 120 × 17	86 × 86 × 44
Weight (g)	170	135

12 V DC supplied by an indoor unit

## Simple remote controller

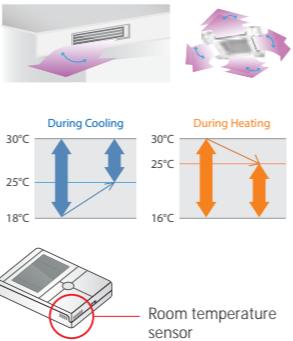
UTY-RSRG/UTY-RHKG (without operation mode)



Up to  
16 indoor units  
Up to  
1 group

### Compact remote controller with basic functionality

- 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.
- Simple design that matches stylish interiors
- Large LCD screen and easy-to-use control buttons
- Backlight: White backlight makes it easy to operate in the dark.
- nonpolar 2-core type



## Simple remote controller

UTY-RSNGM, UTY-RSKG/UTY-RHKG (without operation mode)



Up to  
16 indoor units  
Up to  
1 group

### Compact remote controller with basic functionality

- 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.
- Backlit screen for easy operation in the dark.
- polar 3-core type

### Easy-to-use operation

- Enables basic control of an indoor unit, such as ON/OFF, fan speed, operation mode select, and room temperature setting.
- A large ON/OFF button is located in the middle for quick access.
- Works with other individual control units.
- When something goes wrong, an error indicator will appear, and diagnostics can be performed with the remote controller.

#### Specifications

Model name	UTY-RSRG	UTY-RHKG	UTY-RSNGM, UTY-RSKG	UTY-RHKG
Power source	12 V DC	12 V DC	12 V DC	12 V DC
Dimensions (H × W × D) (mm)	120 × 75 × 19.4	120 × 75 × 19.4	120 × 75 × 19.4	120 × 75 × 14
Weight (g)	120	120	120	90
12 V DC supplied by an indoor unit				

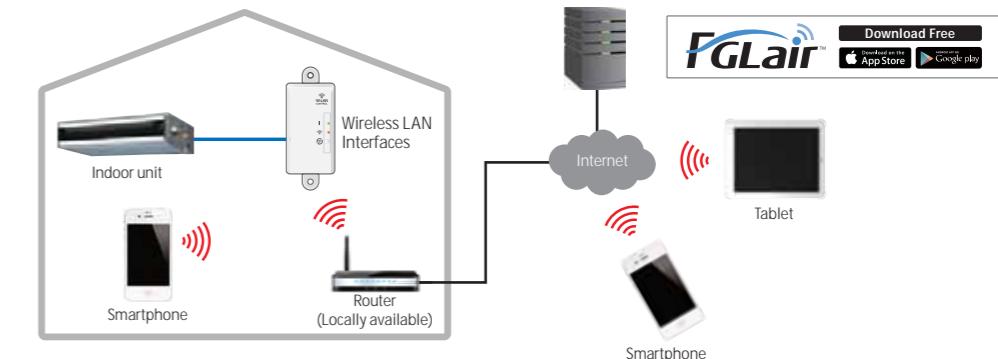
## WLAN adapter

UTY-TFNXZ1/UTY-TFSXZ1, UTY-TFSXF2

USB type for single-split models  
UTY-TFSXF2

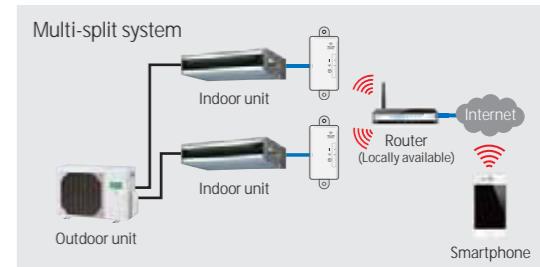
UTY-TFNXZ1  
(3-wire RC-line type)  
UTY-TFSXZ1  
(CN connector type)

Up to  
1 indoor unit



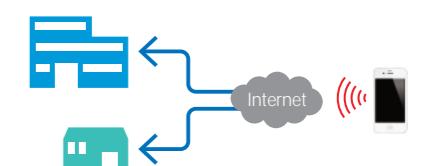
### Basic control

- Turning the units on and off
- Mode control (Heat, Cool, Dry, Auto, Fan)
- Fan speed control
- Louver position (airflow direction setting)
- Timer operation setting (Weekly timer)
- Economy mode setting



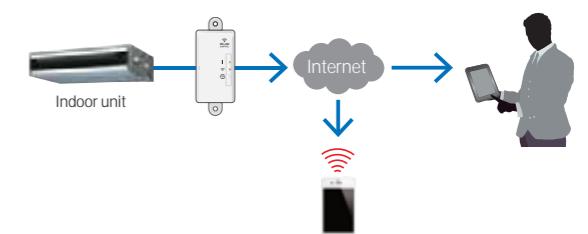
### Multiple air conditioning management

- Manage multiple air conditioning systems in different locations.



### Error alert and e-mail notice

- E-mail notification alerts
- Air conditioning malfunction alert
- Enables quick service response when errors occur.



### WLAN adapter (USB type)

UTY-TFSXF2

A compact USB type is available. No need for specialized installation.  
Easily installed on the indoor unit.



#### Specifications

Model name	UTY-TFNXZ1(3-wire RC-line type)	UTY-TFSXZ1(CN connector type)	UTY-TFSXF2
Dimensions (H × W × D) (mm)	71 × 38 × 15	71 × 38 × 15	56.7 × 34 × 9.72
Weight (g)	35	35	30

#### Specifications

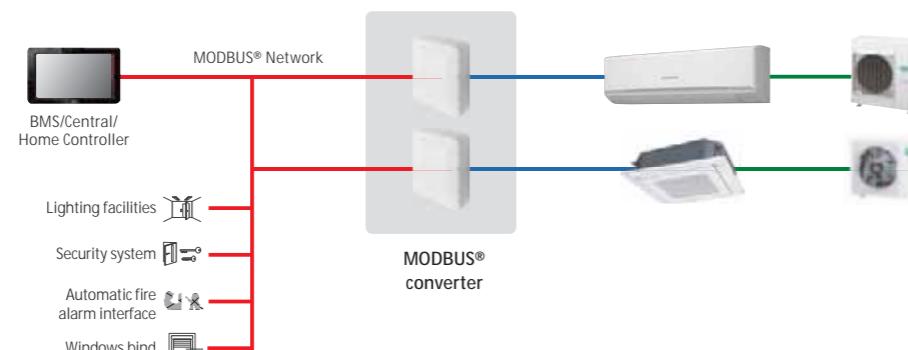
Model name	UTY-TFNXZ1(3-wire RC-line type)	UTY-TFSXZ1(CN connector type)	UTY-TFSXF2
Dimensions (H × W × D) (mm)	71 × 38 × 15	71 × 38 × 15	56.7 × 34 × 9.72
Weight (g)	35	35	30

## MODBUS® converter for Indoor unit

UTY-VMSX



Up to  
1 indoor unit

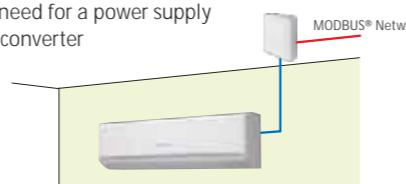


### Basic control

- Turning the units on and off
- Mode control (Heat, Cool, Dry, Auto, Fan)
- Fan speed control
- Louver position (airflow direction setting)
- Room temperature setting and display
- Economy mode setting
- Error status

### Easy Installation

Easy to install with minimal wiring and without the need for a power supply cable to the converter



## KNX® converter for indoor unit

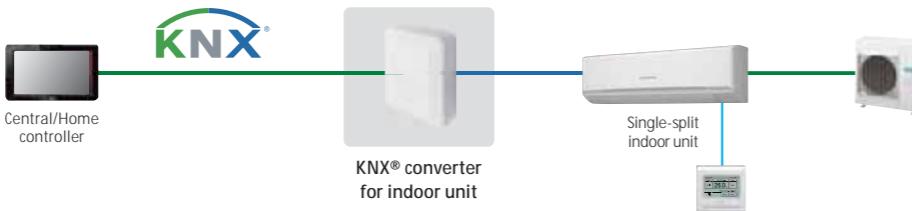
UTY-VKSX



Up to  
1 indoor unit

### KNX® Converter enables individual control of an indoor unit.

- The new KNX® converter connects a central or home controller and a Fujitsu General indoor unit.
- Compact and lightweight design



### Specifications

Model name	UTY-VMSX
Power supply	12 V DC
Input power (W)	Max. 1.2 W
Dimensions (H × W × D) (mm)	140 × 117 × 43
Weight (g)	200
Maximum number of connectable indoor units per MODBUS® converter	1

### Modbus communication specifications

Transfer mode	RTU mode
Communication speed	9600/19200 bps
Data bit	8
Parity	even/odd/none
Stop bit	1/2 (no parity)
Network	RS485
Maximum cable length	1000 m (3280 ft)

## External switch controller

UTY-TERX



Up to  
1 group

Air conditioner switching can be controlled by connecting this external switch controller to other sensor switches.

- In combination with a commercially available card-key switch or other sensors, this External switch controller enables the control of ON/OFF, room temperature, and fan speed of connected air conditioners as well as master control functions. This makes this product an ideal choice for use in hotel rooms.
- Card key or other sensor switches are locally available.
- The set temperature can be specified at two points each for cooling and heating operations (4 points in total).

### Installation example

Occupancy sensor monitors the movement of a person in a room. When it detects that the person has left the room, it switches the air conditioner to low-capacity mode. When a person returns to the room, the air conditioner returns to the previous operation mode.



Occupancy sensor equipment needs to be purchased separately. Occupancy sensor is not mounted on an External switch controller.

Other examples: interlocking with card keys



### Specifications

Model name	UTY-TERX
Power supply	6.5 to 16 V DC
Power consumption (W)	0.6
Dimensions (H × W × D) (mm)	140 × 117 × 43
Weight (g)	250

12 V DC supplied by an indoor unit

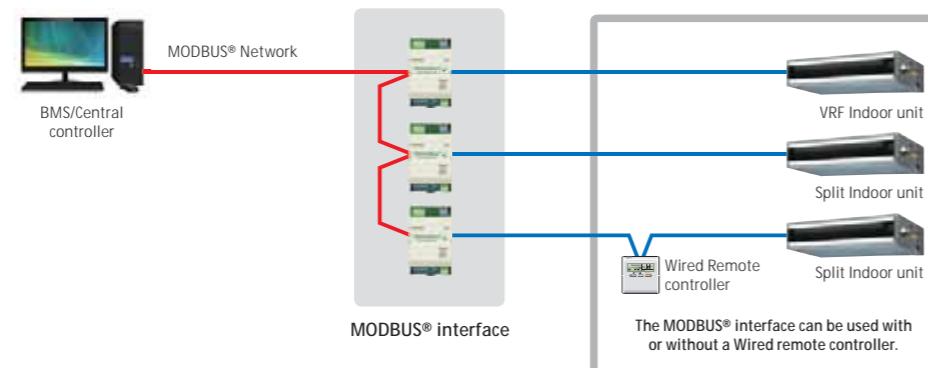
**MODBUS® interface**

FG-RC-MBS1Z1/FG-AC-MBS1Z1

**Intesis®**FG-RC-MBS1Z1  
(3-wire RC-line type)**Intesis®**FG-AC-MBS1Z1  
(CN connector type)

**MODBUS® interface** enables air conditioners to be fully integrated into a MODBUS® network.

- Small, compact, and easy to install on DIN rails.
- No separate external power supply required.
- MODBUS® interface enables central monitoring and control of air conditioners from BMS.

**Installation example**

Up to  
**1** indoor unit

**Specifications**

Model name	FG-RC-MBS1Z1 (3-wire RC-line type)	FG-AC-MBS1Z1 (CN connector type)
Number of controllable groups	1	1
Dimensions (H × W × D) (mm)	93 × 53 × 58	93 × 53 × 58
Weight (g)	85	85

**KNX® interface**

FG-RC-KNX1Z1/FG-AC-KNX1Z1/FG-IR-KNX1Z1

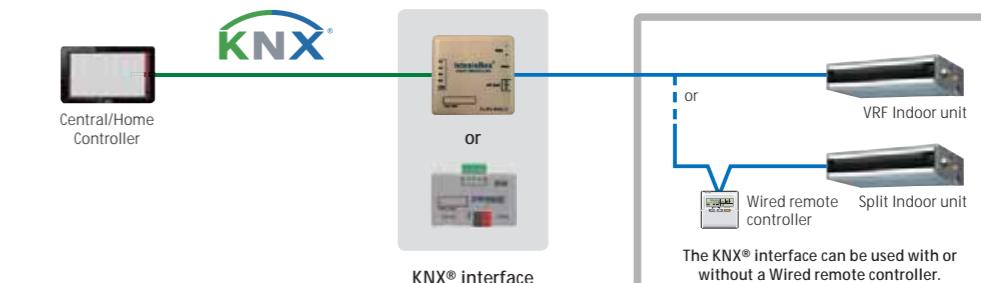
**Intesis®**FG-RC-KNX1Z1  
(3-wire RC-line type)**Intesis®**FG-AC-KNX1Z1  
(CN connector type)**Intesis®**FG-IR-KNX1Z1  
(IR type)

**KNX® interface** enables air conditioners to be fully integrated into a KNX® network system.

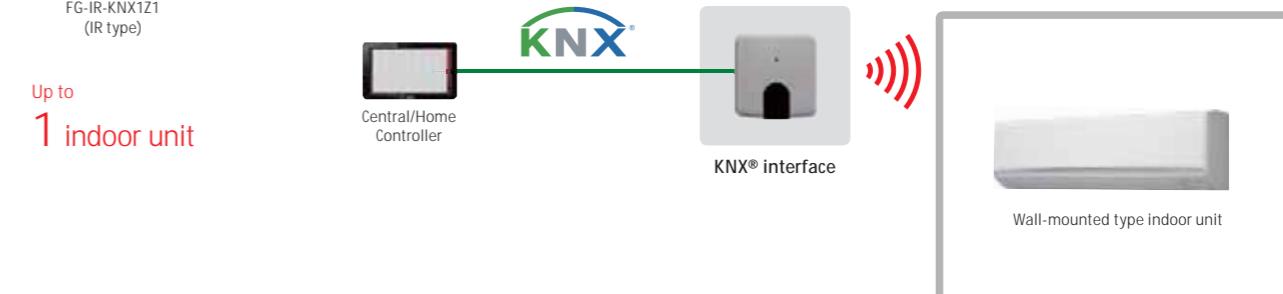
- Simple installation due to small and compact size.
- No separate external power supply required (only KNX® bus power required)

**Installation example**

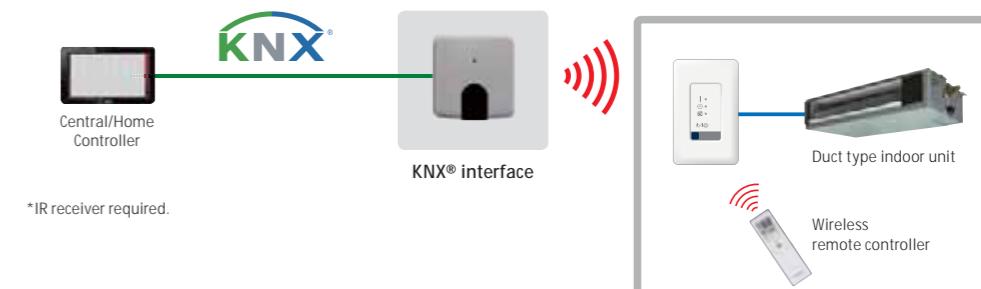
[3-wire RC-line type/CN connector type]



[IR type] Connection to wall-mounted type



[IR type] Connection to a product other than wall-mounted type

**Specifications**

Model name	FG-RC-KNX1Z1 (3-wire RC-line type)	FG-AC-KNX1Z1 (CN connector type)	FG-IR-KNX1Z1 (IR type)
Number of controllable groups	1	1	1
Dimensions (H × W × D) (mm)	70 × 70 × 28	45 × 59 × 21	81 × 78 × 28
Weight (g)	70	35	76

**WLAN adapter**

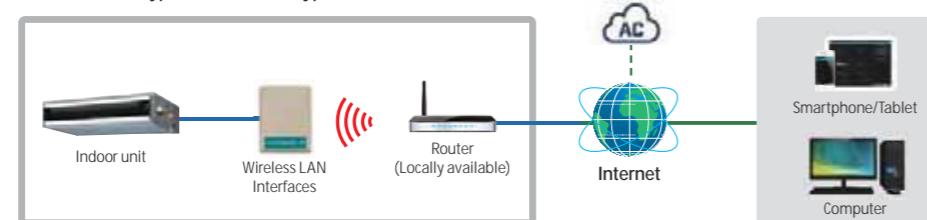
FG-RC-WIF1Z2/FG-IR-WIF1Z1/FG-AC-WIF1Z1

**Intesis®**  
BY HME NETWORKSFG-RC-WIF1Z2  
(3-wire RC-line type)**AC Cloud Control**

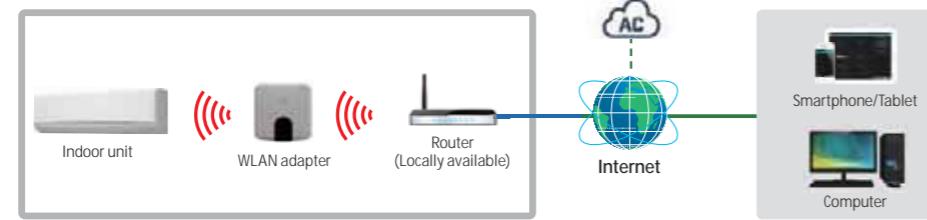
- This interface provides the most advanced solution for the remote management of an air conditioning system by using smartphones, tablets, and computers.
- No separate external power supply required

**Installation example**

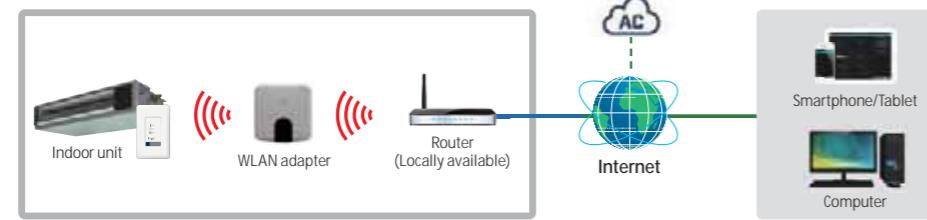
[3-wire RC-line type/CN connector type]

**Intesis®**  
BY HME NETWORKSFG-AC-WIF1Z1  
(CN connector type)**Intesis®**  
BY HME NETWORKSFG-IR-WIF1Z1  
(IR type)Up to  
**1** indoor unit

[IR type] Connection to wall-mounted type



[IR type] Connects to the product with the optional receiver kit



\*IR receiver required.

**Basic control**

- Turning air conditioner on and off
- Mode select (Heat, Cool, Dry, Auto, Fan)
- Louver position (airflow direction setting)
- Fan speed control
- Room temperature display
- Setting temperature
- Multiple language support
- One single scene is created.

**Advanced control (optional functions)**

- Climate-based operation modes (ECO, Comfort, and Powerful) (to be available in the future)
- Schedule functions (ON/OFF, modes, set temperature, fan speed, louver position)
- Setting temperature range limitation
- Multiple Scenes and Calendars are created.
- Smart Speaker compatibility
- Advanced internet service connections

**Notification and operation history**

- E-mail notification alerts
- Air conditioning malfunction alert
- Connectivity monitoring and alert
- Operation history (to be available in the future)

**Specifications**

Model name	FG-RC-WIF1Z2 (3-wire RC-line type)	FG-AC-WIF1Z1 (CN connector type)	FG-IR-WIF1Z1 (IR type)
Number of controllable groups	1	1	1
Dimensions (H × W × D) (mm)	108 × 70 × 28	81 × 78 × 28	127 × 50 × 17
Weight (g)	80	76	80

**Multiple protocol WLAN adapter**

FG-RC-WMP1Z1/FG-IR-WMP1Z1/FG-AC-WMP1Z1

**Intesis®**  
BY HME NETWORKSFG-RC-WMP1Z1  
(3-wire RC-line type)**AC Cloud Control**

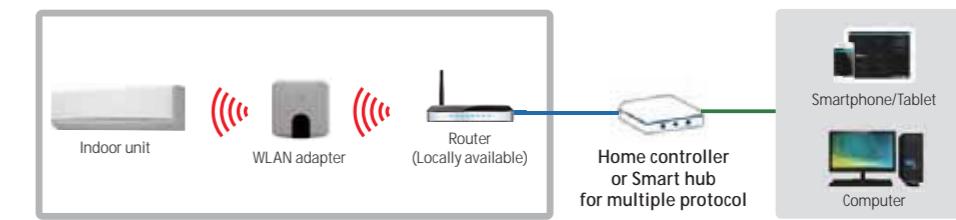
- Air conditioner control of Home Automation systems via wireless LAN connection.
- No separate external power supply required

**Installation example**

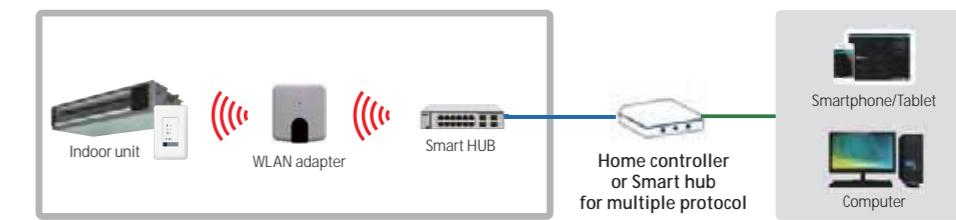
[3-wire RC-line type/CN connector type]

**Intesis®**  
BY HME NETWORKSFG-AC-WMP1Z1  
(CN connector type)**Intesis®**  
BY HME NETWORKSFG-IR-WMP1Z1  
(IR type)Up to  
**1** indoor unit

[IR type] Connection to wall-mounted type



[IR type] Connection to a product other than wall-mounted type



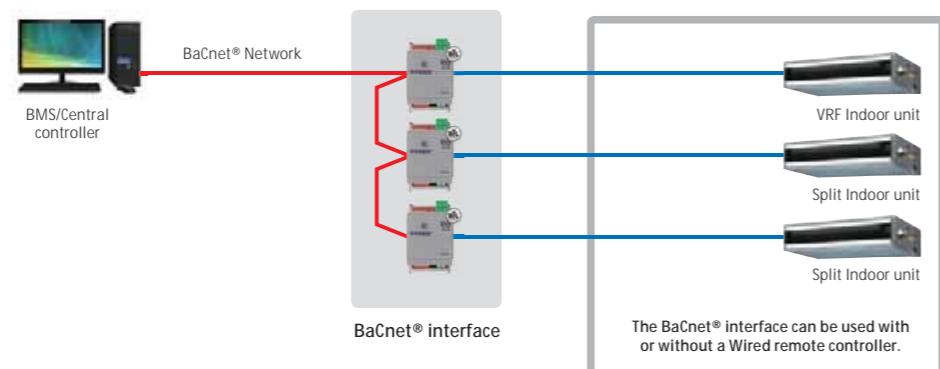
\*IR receiver required.

**Specifications**

Model name	FG-RC-WMP1Z1 (3-wire RC-line type)	FG-AC-WMP1Z1 (CN connector type)	FG-IR-WMP1Z1 (IR type)
Number of controllable groups	1	1	1
Dimensions (H × W × D) (mm)	70 × 100 × 28	127 × 50 × 17	81 × 78 × 28
Weight (g)	98	80	76

**BACnet® gateway**

FG-AC-BAC1Z1

**Intesis**  
BY MHS NETWORKSFG-AC-BAC1Z1  
(CN connector type)Up to  
**1 indoor unit****Installation example**

- BACnet® Gateway connects BMS and a Fujitsu General split/multi-split/VRF system.
- Compatible with BACnet® (ANSI/ASHRAE-135-2012) application-specific controller (B-ASC)
- Compatible with BACnet®/IP over Ethernet.

**Wired remote controller**

UTY-RVNYM



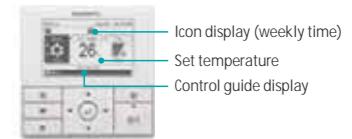
Up to  
**16 indoor units**  
Up to  
**1 group**

**Hi-grade individual control with a wide range of functions.**

- 3.7-inch backlit LCD screen.
- Supports energy-saving functions with simple operation.
- Supports 9 languages:  
English, French, German, Greek, Italian, Portuguese, Russian, Spanish, and Turkish

**Visually intuitive operation**

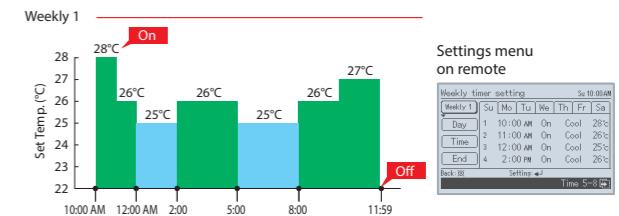
- Each function is displayed as an icon.
- Main functions are indicated by large icons: "Mode," "Set Temp," and "Fan"
- Easy operation with control guide display
- Simple operation with easy 4-way navigation pad

**High performance and compact size**

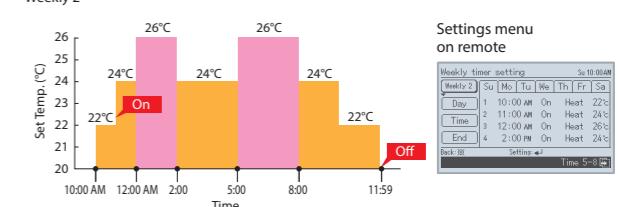
- A single remote controller controls each connected indoor unit and provides a variety of energy-saving options.

**Energy-saving controls****Weekly Timer**

- ON/OFF, mode and temperature can be set up to 8 times a day.
- 2 setting patterns are available (e.g., for Summer/Winter).

**Auto-off timer**

- Set temperature auto return
- Setting temperature range limitation

**Specifications**

Model name	FG-AC-BAC1Z1 (CN connector type)
Power supply	-
Dimensions (H × W × D) (mm)	93 × 53 × 58
Weight (g)	85

12 V DC supplied by an indoor unit

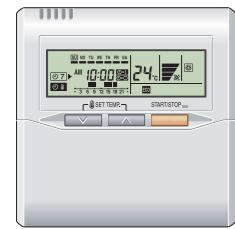
**Specifications**

Model name	UTY-RVNGM
Power source	12 V DC
Dimensions (H × W × D) (mm)	120 × 120 × 21.3
Weight (g)	220

12 V DC supplied by an indoor unit

## Wired remote controller

UTY-RNNGM

Up to  
16 indoor unitsUp to  
1 group

## Wireless remote controller

UTY-LNTG

Up to  
16 indoor unitsUp to  
1 groupUp to  
4 different daily timers

### Specifications

Model name	UTY-RNNGM	UTY-LNTG
Power source	12 V DC	1.5 V (R03/LR03/AAA)
Dimensions (H × W × D) (mm)	120 × 120 × 18	205 × 61 × 17
Weight (g)	160	125

12 V DC supplied by an indoor unit

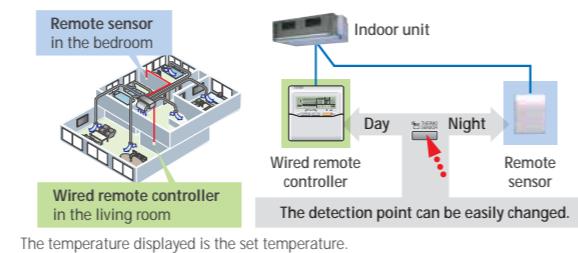


- Simple operation with Built-in Weekly/Daily Timer.
- Control up to 16 indoor units.
- Up to 2 Wired remote controllers can be connected to a single indoor unit.

### Accurate control for comfort

A thermo sensor built into the remote controller monitors room temperature accurately. The wired remote controller and an optional Remote sensor can be installed in any location to meet any requirement.

#### Examples of sensor changes



### Built-in timer

Weekly timer: ON/OFF time can be set to operate twice for each day of the week.  
 Temperature setback timer: Sets the time to change the temperature setting and the time to hold the setting for each day of the week.  
 At "Weekly timer" + "Temperature setback timer" setup



## IR receiver unit for duct type

UTY-LRHGM, UTY-LBTGM



The wireless remote controller controls duct type indoor units.



## IR receiver unit for Cassette

UTY-LRHGA2, UTY-LBTGC



Cassette type indoor unit can be controlled with a Wireless remote controller.



## IR receiver unit for ceiling type

UTY-LBTGH



The wireless remote controller controls ceiling type indoor units.

### Specifications

#### < Wireless Remote Controller >

Model name	UTY-LRHGM	UTY-LBTGM	UTY-LRHGA2	UTY-LBTGC	UTY-LBTGH
Battery	1.5 V (R03/LR03/AAA)				
Dimensions (H × W × D) (mm)	170 × 56 × 19	205 × 61 × 17	170 × 56 × 19	205 × 61 × 17	205 × 61 × 17
Weight (g)	85	125	85	125	125

#### < IR Receiver Unit >

Battery	DC5V	DC5V	DC5V	DC5V	DC5V
Dimensions (H × W × D) (mm)	145 × 90 × 30	145 × 90 × 30	—*	—*	—*
Weight (g)	150	150	140	140	100

DC 5 V is supplied the indoor unit.

\*It will replace the parts of the indoor unit to be connected.

## Central remote controller

UTY-DMMGM/UTY-DMMGM1



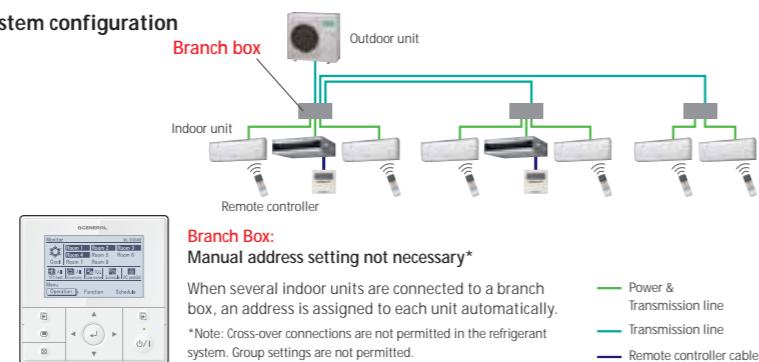
Up to  
1 multi-split system

Up to  
8 indoor units

### For 5-unit, 6-unit, 8-unit multi-split type

- Batched control of up to 8 indoor units For all indoor units connected to the remote controllers, the Central remote controller sets room temperature, airflow volume, and remote controller prohibition from other remote controllers at once.
- Supports 9 languages: English, French, German, Greek, Italian, Portuguese, Russian, Spanish, and Turkish.
- Large backlit LED screen
- Large, easy-to-see operation panel

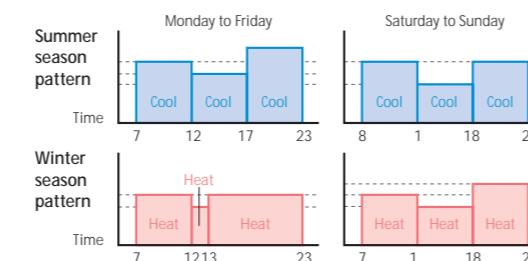
#### Example of system configuration



### Central remote controller

#### Weekly timer

Up to 4 ON/OFF settings can be programmed per day. Two weekly patterns can be set, one for the cooling season and the other for the heating season.



#### Low noise operation

You can choose from 4 low noise levels depending on the installation environment. ON/OFF timing of low noise mode can be set with the timer.

#### 10 °C heat operation

When you leave the house, the air conditioner runs a minimum heating operation to maintain the room temperature at 10°C.

\*Consult your dealer for conditions of use.

#### Economy operation

When you select energy-saving economy mode, the temperature setting for the indoor unit increases (during cooling operation) or decreases (during heating operation) by 1°C and the maximum electric value of the outdoor unit is suppressed.

#### Prohibiting local control, including settings such as child lock

The Central Remote Controller is equipped with a lock function to prevent unauthorized operation from the remote controllers of the indoor unit in each room. The central remote controller is equipped with a child lock to prevent children from accidentally turning the air conditioner on or off or changing its settings.

#### Specifications

Model name	UTY-DMMGM/UTY-DMMGM1
Power source	12 V DC
Dimensions (H × W × D) (mm)	120 × 120 × 21.3
Weight (g)	220

12 V DC supplied by an indoor unit

## Network converter for single-split type

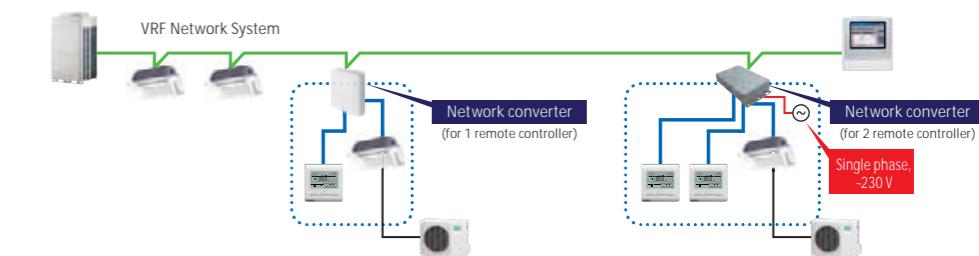
UTY-VTGX/UTY-VTGXV

UTY-VTGX  
DC power supply typeUTY-VTGXV  
AC power supply type

- A network converter is required when connecting a single-split system to a VRF network system.
- Compact and lightweight design
- Connectable to both nonpolar 2-core and polar 3-core remote controllers

### Installation example

- A 1-remote-controller type and a 2-remote-controller type are available.
- Power supply (220 to 240 V AC, 50/60 Hz) is required for the 2-remote-controllers type.

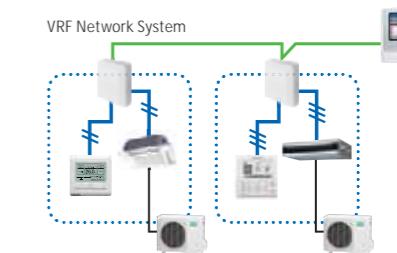


Up to  
16 single indoor units

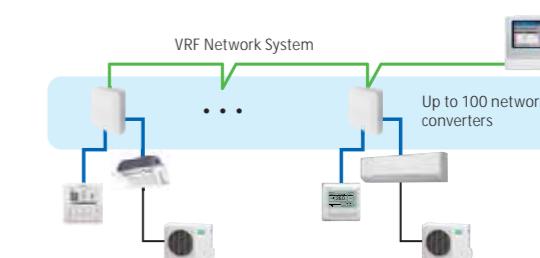
Up to  
1 group

Up to  
100 Network Converters

- Both nonpolar 2-core and polar 3-core type Wired remote controllers can be connected.



- Central control can be provided for single-split systems. (Up to 100 network converters can be connected in a VRF network system)



#### Specifications

Model name	UTY-VTGX		UTY-VTGXV
Power supply	polar 3-core 12 V DC	nonpolar 2-core DC 12 V	Single phase -220 to 240 V 50/60 Hz
Input power (W)	Max. 1.2 W		Max. 3
Dimensions (H × W × D) (mm)	140 × 117 × 43		54 × 260 × 150
Weight (g)	250		1,100

## Wireless remote controller

UTY-LNHG

Up to  
**16** indoor unitsUp to  
**1** groupUp to  
**4** different daily timers

**Simple and versatile operations with a choice of 4 different types of timers**

- Controls up to 16 indoor units.

### Built-in timer

4 timer programs: ON/OFF/Program/Sleep

Program timer: Sets ON/OFF time once for every 24 hours.

Sleep timer: Adjusts the set temperature automatically while the sleep timer is on.

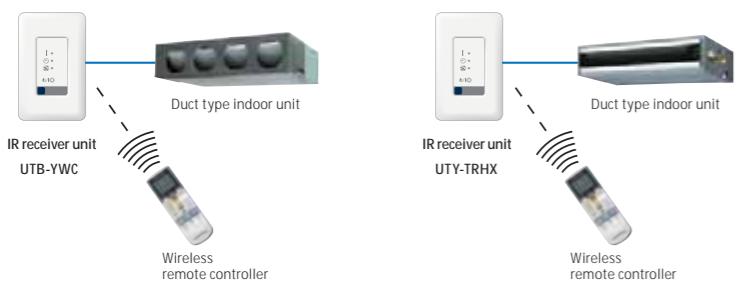
### Easy installation and operation

Different codes can be assigned to up to 4 indoor units to prevent a mix-up.

Wide and precise transmitting range

## IR receiver unit for duct type

UTB-YWC, UTY-TRHX



**The wireless remote controller controls duct type\* indoor units.**

\*Large airflow duct types do not work with this IR receiver unit.

\*A separate wireless remote control (model: UY-LNHG) is required.

## IR receiver unit for Cassette

UTY-LRHGB1, UTY-LBHXD, UTY-TRHX



**Cassette type indoor unit can be controlled with a Wireless remote controller.**

\*A separate wireless remote control (model: UY-LNHG) is required.

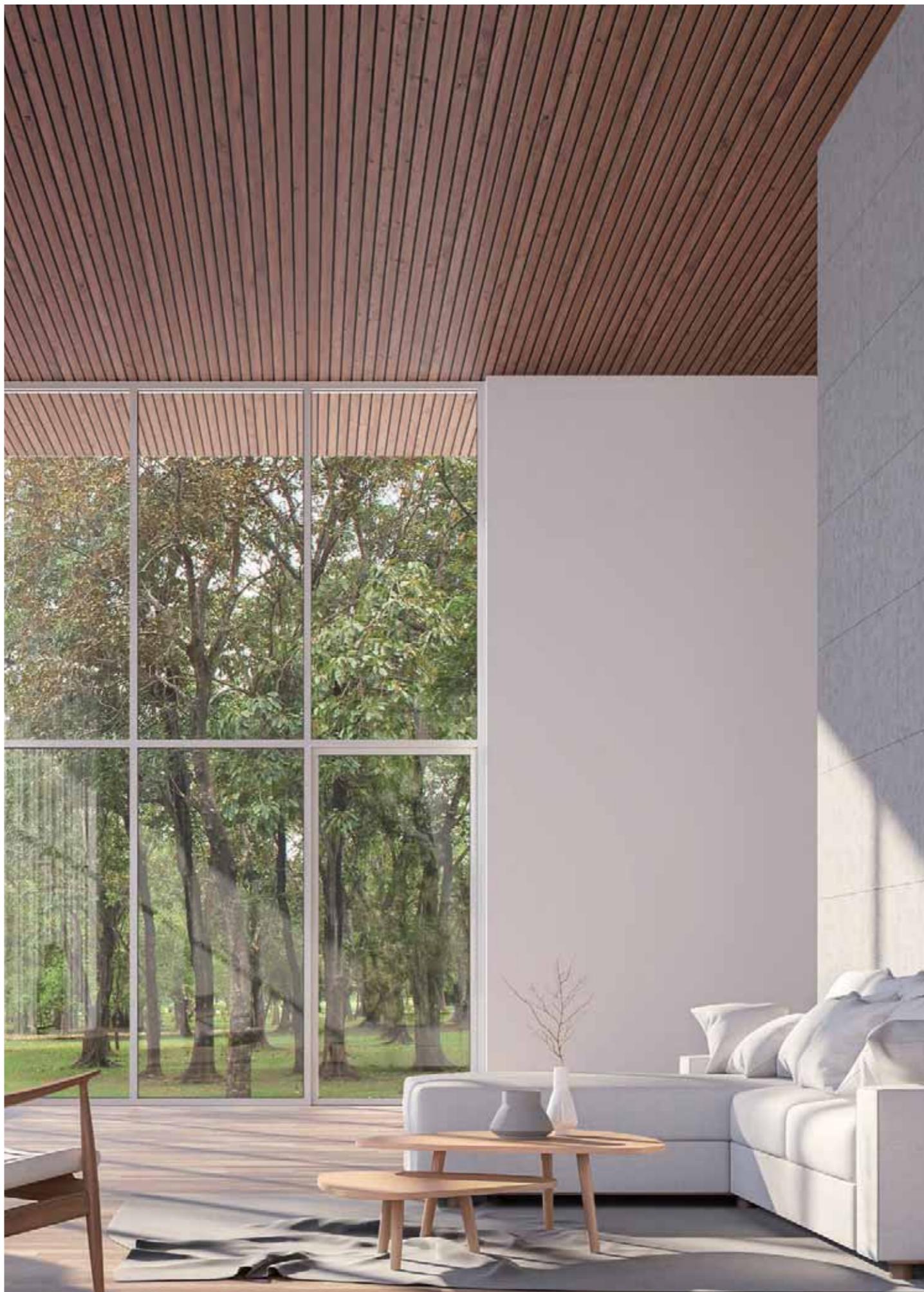
### Specifications

&lt; Wireless Remote Controller &gt;

Model name	UTY-LNHG	UTB-YWC	UTY-LRHGB1	UTY-LBHXD	UTY-TRHX
Battery	1.5 V (R03/LR03/AAA)				
Dimensions (H × W × D) (mm)	170 × 56 × 19	170 × 56 × 19	170 × 56 × 19	170 × 56 × 19	170 × 56 × 19
Weight (g)	85	85	85	85	85
< IR Receiver Unit >					
Battery	-	DC5V	DC5V	DC5V	DC5V
Dimensions (H × W × D) (mm)	-	145 × 90 × 30	-*	-*	145 × 90 × 30
Weight (g)	-	150	140	140	150

DC 5 V is supplied the indoor unit.

\*It will replace the parts of the indoor unit to be connected.



# Central Remote Controller

UTY-DGGZ2



NEW

Up to  
100 indoor unitsUp to  
50 groups

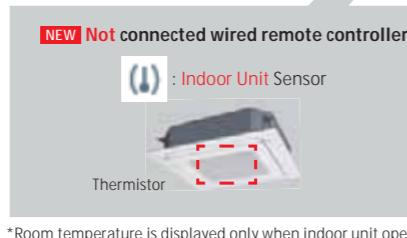
## For tenants in small to midsize commercial premises

- Individual control and monitoring of up to 100 indoor units
- 7.0inch TFT color screen
- Visually intuitive operation
- Room temperature display by indoor unit sensor & remote controller sensor
- 50 Remote Controller Groups Display & remote controller group rename
- Supports 12 languages: Chinese, Dutch, English, French, German, Greek, Italian, Polish, Portuguese, Russian, Spanish, and Turkish

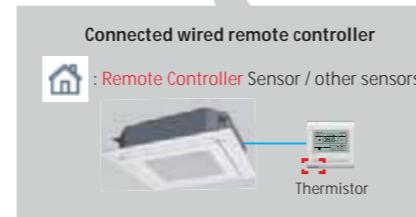
## Easy Operation

### Air conditioning management by detecting room temperatures of each room

The room temperature detected with indoor unit sensor or remote controller sensor can be displayed. New model can detect the room temperature by indoor units sensors even if wired remote controllers are not connected to the indoor units.



\*Room temperature is displayed only when indoor unit operates.



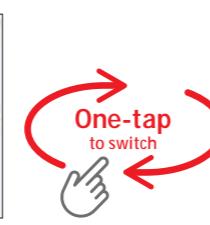
### NEW 50 Remote Controller Groups Display

The group display and the 50 remote controller groups display can be switched easily. Users can choose which display is better, depending on the situation.

#### Group Display



Manage & Monitor  
by each Groups



#### 50 Remote Controller Groups Display



Manage & Monitor  
by 50 Remote Controller Groups

### NEW Remote Controller Groups Rename

The remote controller group names can be changed. Users can know easily where the air conditioning is located by changing the remote controller group names.



## Features: Central Remote Controller

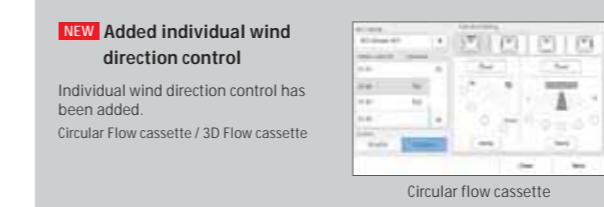
- Easy intuitive operation from the touch panel display.
- All functions can be accessed through the monitoring screen showing a pop-up window for detailed operation.



Monitoring screen

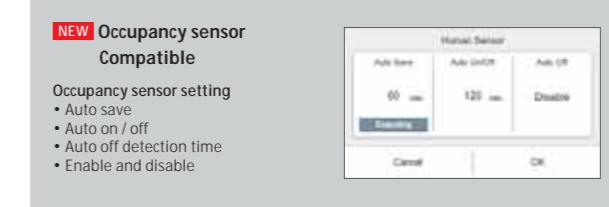


Individual setting



### NEW Added individual wind direction control

Individual wind direction control has been added.  
Circular Flow cassette / 3D Flow cassette



### NEW Occupancy sensor Compatible

Occupancy sensor setting
 

- Auto save
- Auto on / off
- Auto off detection time
- Enable and disable



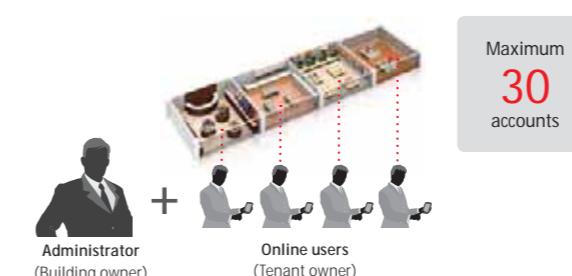
## Remote Management

### Remote monitoring / Remote operation

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

When the central remote controller manages the indoor units of some tenants, air conditioning of each tenant can be managed separately online.

### NEW Increased the Number of Accounts



Maximum  
**30**  
accounts

### Trouble support function

Display error details  
Display descriptive explanation when an error occurs



All indoor unit  
groups display

Display error details
 

- Indoor unit error
- Outdoor unit error
- Central remote controller error

### Sensor value monitoring function

Monitor sensor data of indoor unit / outdoor unit, send mail

### Notify room temperature by email\*

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

\*:This function is available only when using wired remote controller.

## Specifications

Model name	UTY-DGGZ2
Power Supply	100-240 V 50/60 Hz
Dimensions (H × W × D) (mm)	134.6 × 216.2 × 37.9
Weight (g)	800

# Touch panel controller

UTY-DTGGZ1



Up to  
400 indoor units

Up to  
100 outdoor units

Up to  
400 groups

- Large 7.5-inch TFT color LCD screen
- Touch screen operation
- Stylish design to fit nicely into any room environment
- Controls up to 400 indoor units.
- Icon or list view can be selected in monitoring mode.
- Supports 7 languages: Chinese, English, French, German, Polish, Russian, and Spanish.
- Mounted with LAN adapter for remote control & operation, external input/output with emergency stop and batch ON/OFF

## Easy operation

- Wide range of simple-to-understand icons
- Operate by pressing the icons on the screen with your finger or a stylus.
- The color on the back identifies the current control operation; blue is for monitoring and green is for operational control.



## Easy maintenance

- The flat touch panel can be easily cleaned.
- Touch panel controller with non-glare coating to prevent finger marks
- Front cover for easy removal.

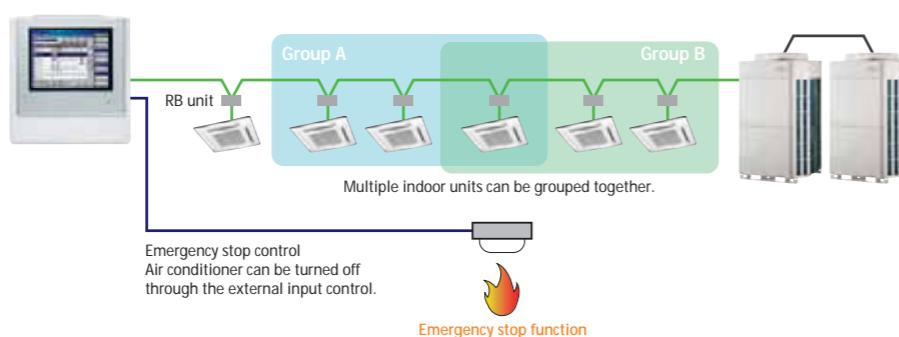


## Easy installation

- The touch panel controller can be mounted on a wall.
- Flat back surface enables easy installation anywhere on a wall.
- No additional parts or components required for installation



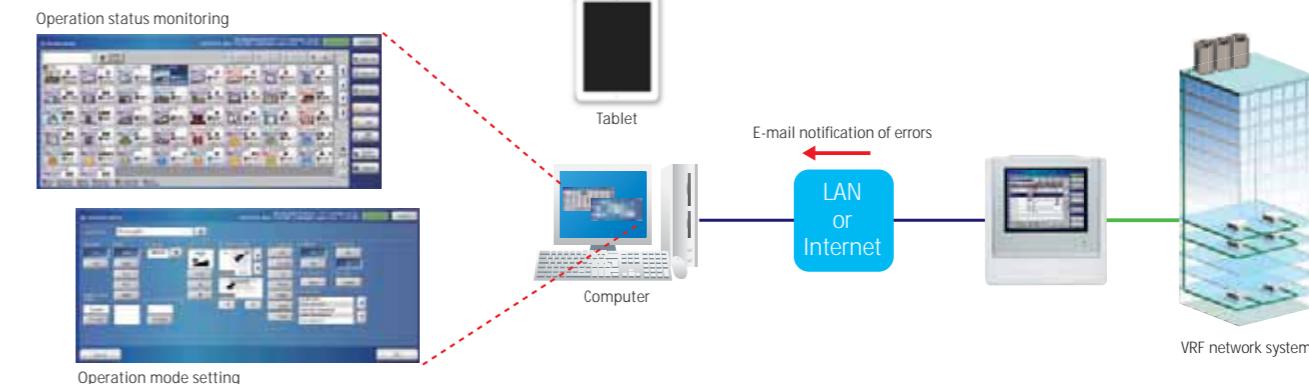
## Controls up to 400 indoor units.



## Features:

### Control & monitoring

- Control and monitor Fujitsu General air conditioners via LAN or internet.
- Users and tenants can manage their assigned equipment from anywhere by computer or tablet.
- When something goes wrong, an error notice is sent by e-mail for prompt troubleshooting.



#### Smartphone

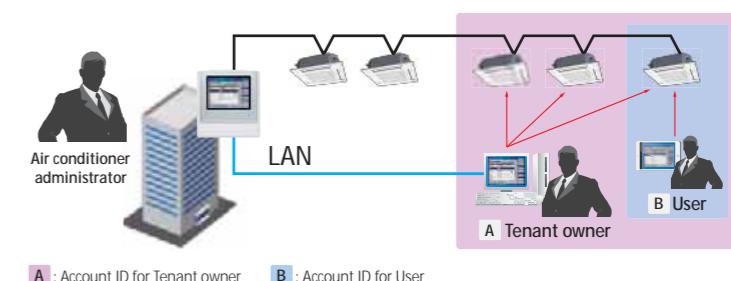
Model name	Browser
Nexus 6P (Android 7.1.1)	Google Chrome 5.5
iPhone 7 (iOS 10.1)	Safari 10

#### Tablet

Model name	Browser
iPad Pro 9.7 inch (iOS 10.2.1)	Safari 10

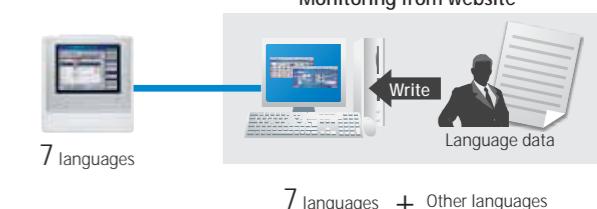
## Flexible access permissions can be granted to users at each point level.

The administrator can register multiple users and permit them to access any indoor unit and any functions.



## Additional languages

Supports 7 languages as standard: Chinese, English, French, German, Polish, Russian, and Spanish.  
Create a language database to integrate additional languages into the remote device.  
The added languages will only be displayed on the remote device and cannot be added to the Touch panel controller.

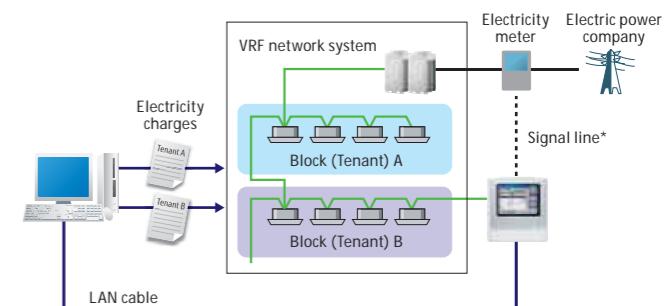


## Electricity charge apportionment

(Option: UTY-PTGXA)

- Energy cost can be calculated and allocated to each billing user in proportion to the amount of energy used for air conditioning.

- Apportionment charge/bill calculation
- Tenant (block) setting
- Common facilities apportionment setting
- Rated power consumption allotment setting
- Individual calculations for cooling and heating
- Electricity meter supported



\* An electricity usage meter can be connected to an external input connector of the Touch panel controller. In that case, the meter cannot be connected to an outdoor unit at the same time.

## Features:

**Automatic setting for daylight saving time**

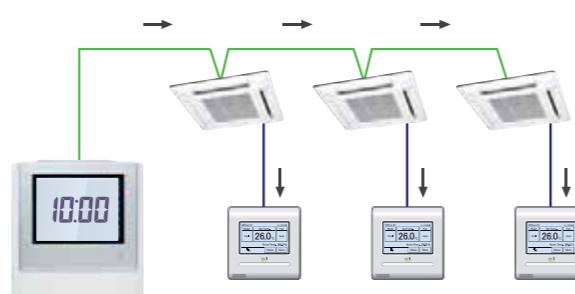
## Functions provided

1) Schedule setting for daylight saving time

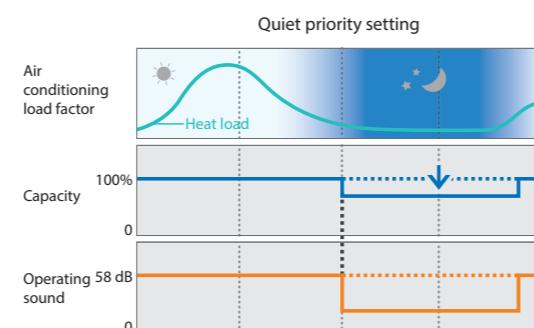
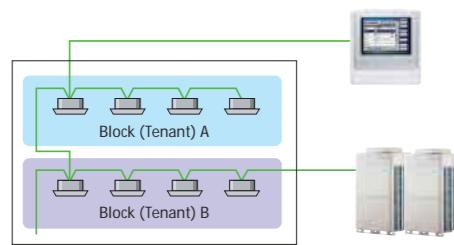
- It prevents the user from forgetting to set daylight saving time. In addition, it saves time and effort for the user.

**Automatic clock adjustment**

2) Time can be set for all controllers in a batch automatically.

**Outdoor unit low noise operation**

You can choose from 4 low noise levels depending on the installation environment.  
ON/OFF timing of low noise mode can be set with the timer.

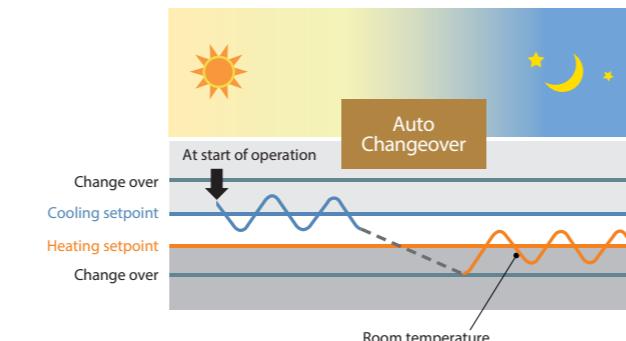
**Energy-saving controls****Custom Auto**

- Maintains 2 separate setpoints for heating and cooling operations.
- Automatically switches between heating and cooling modes.

\* Not available for some models



Cooling set temp. 28°C, Heating set temp. 18°C

**Refrigerant leak detector**

Refrigerant leakage status is indicated by the management equipment. A pop-up message is displayed to notify the user, and the refrigerant is shut off.

**FUNCTIONS SUMMARY**

	UTY-DTGGZ1	Monitoring side
<b>Air conditioning control functions</b>		
ON/OFF	●	●
Operation mode setting*	●	●
Fan speed control	●	●
Room temperature setting	●	●
Setting temperature range limitation	●	●
Test operation	●	●
Vertical louver setting	●	●
Horizontal louver setting	●	●
Individual louver control	●* <sup>1</sup>	●
Group setting	●	●
Remote controller prohibition	●	●
Anti-freeze setting	●	●
Set temperature auto return	–	●
Energy-saving controls	–	●
Economy mode setting	●	●
Occupancy sensor control	–	●
<b>Displayed items</b>		
Error	●	●
Defrosting	●	●
Current time	●	●
Day of week	●	●
Remote controller prohibition	●	●
Cooling/heating priority	●	●
Address display	●	●
Room temperature	●* <sup>3</sup>	●* <sup>3</sup>
Multiple language support	●	●
Setting for daylight saving time	●	●
Time zone setting	●	●
Name registration	●	●
Backlighting	●	●
Language setting	7	7+other
Filter sign reset	●	●
Memory operations	●	●
Refrigerant leak detector	●	●

●: Supported ○: Optional function –: Not supported

\*1 Only setting cancellation can be operated.

\*2 Only available for external input control.

\*3 Available only when using a Wired remote controller.

	UTY-DTGGZ1	Monitoring side
<b>Timer</b>		
Schedule timer	Period ON/OFF, Temp, Mode, Times per day	Year 20 20
ON/OFF timer	–	–
Sleep timer	–	–
Program timer	–	–
Auto-off timer	–	●
Day off	●	●
Minimum unit of timer setting (minutes)	10	10
<b>Control</b>		
Remote monitoring management system	●	●
Electricity charge apportionment	○	○
Error history	●	●
Emergency stop	●* <sup>2</sup>	●* <sup>2</sup>
Remote monitoring management	–	●
Energy-saving management	–	–
E-mail notification in case of failure	–	●
Key lock	●	–
Low noise mode	●	●

## System controller

UTY-APGXZ1 Software

Up to  
4 VRF network systemsUp to  
400 outdoor unitsUp to  
1,600 indoor units

System controller enables advanced integrated monitoring and control of VRF network systems operating in small to large buildings.

- Up to 1,600 indoor units and 400 outdoor units on up to 4 VRF network systems can be controlled.
- To accommodate facility management needs, the system controller offers—in addition to precise air conditioning control—remote central control, electricity charge apportionment, schedule management, and energy-saving options for VRF network systems.
- Supports 7 languages: Chinese, English, French, German, Polish, Russian, and Spanish.

## System controller Lite

UTY-ALGXZ1 Software

Up to  
1 VRF network systemUp to  
100 outdoor unitsUp to  
400 indoor units

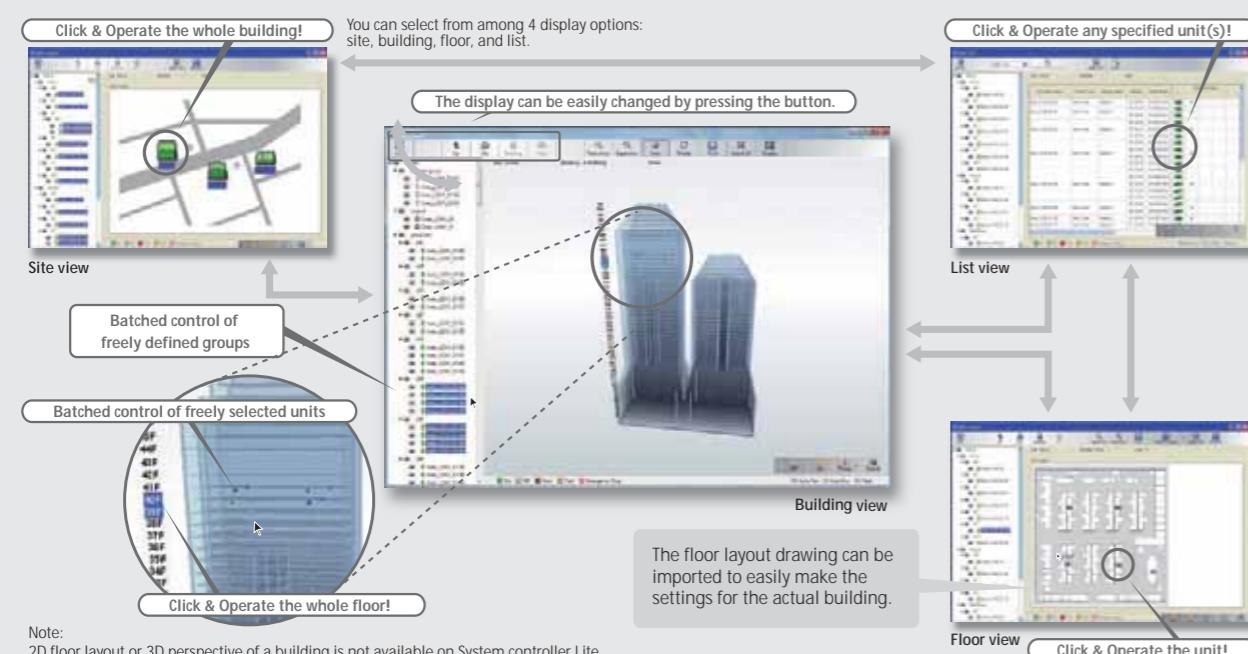
System controller Lite offers a set of standard functions to manage air conditioners operating in a small or midsize building.

- Up to 400 indoor units and 100 outdoor units on a VRF network system can be controlled.
- In addition to precise air conditioning control, a variety of applications are available as options to offer a wider range of control.
- Supports 7 languages: Chinese, English, French, German, Polish, Russian, and Spanish.

## Visually intuitive operation

**Click & Operate:** The visual representation of the property is shown on the screen from the perspective most suitable for operation (Click & Operate). You can select from among 4 display options: site, building, floor, and list.

**Freely define groups for batched control:** Indoor units can be grouped for simplified batch control from the tree menu. They can be grouped by organizational hierarchy, such as by division, department, and section.

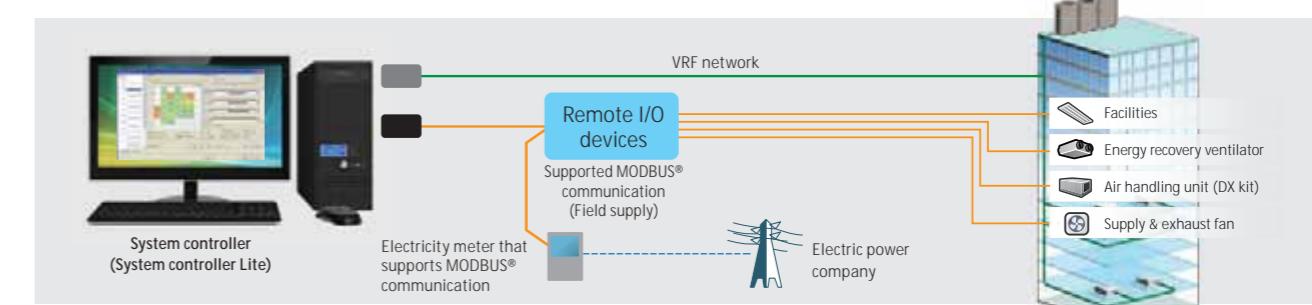


## Features:

### Third-party devices connected via MODBUS® can be controlled.

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

When a MODBUS® adapter (locally available) is connected to a computer, electrical equipment and devices supported by MODBUS® can be monitored and controlled centrally from the computer. The central control can reduce wasted energy throughout an entire building resulting from a failure to turn equipment off during or after work, as well as reduce the need for on-site patrols.



## Wide-ranging operation and data management

**Standard** System controller and System controller Lite

### Schedule management

- An annual schedule can be arranged for each remote controller group or user-defined group.
- ON/OFF, operation mode, remote controller prohibition, and temperature settings can be programmed for up to 143 times per day at 10-minute intervals and for up to 101 configurations for each remote controller group.
- Settings can be programmed for a period that spans midnight.
- Allows for the programming of special settings for weekends, holidays, and store closings throughout the year.
- Low noise operation of outdoor units can be scheduled.



### Wide-ranging control of indoor and outdoor units

- The operation status and mode of each indoor unit are displayed.
- Turn on and off each indoor unit and switch its operation mode.
- Setting temperature range limitation
- Low noise setting of outdoor units

### Remote controller prohibition

Prohibits the operation mode, temperature setting, or ON/OFF of an indoor unit.

### Error alert and e-mail notice

When something goes wrong, an error message is shown in a popup on a computer display with a chime, and an e-mail notice is sent. Errors of the past one year are logged and can be reviewed.

### Operation and control history

A history of operation status and control can be maintained and retrieved.

### Importing and exporting databases

Only an administrator is authorized to import and export registration, layout, and image data.

### Automatic clock adjustment

Time can be set for all controllers in batch automatically.

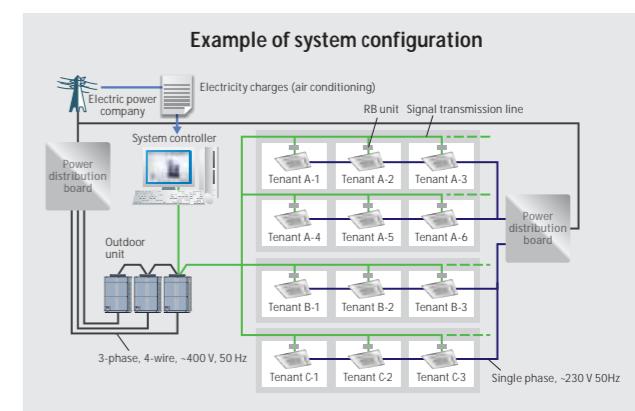
## Electricity charge apportionment

**Standard** on System controller  
**Option** System controller Lite UTY-PLGXA2

### Electricity charge apportionment method

This is a method to calculate monthly energy costs to be allocated to each tenant based on the amount of energy used by their air conditioners. The first step is to determine exactly how much energy is consumed by air conditioners in each tenant space. The second step is to divide the total energy charge billed by an electric power company based on the amount of energy used by each tenant to determine the energy cost to be allocated to each of them. (See figure on right)

The calculation takes into consideration such factors as the number of unused rooms and nighttime electricity rate, which are shown in detail on an energy cost allocation schedule.



**Features:****Remote monitoring management**

**Standard** on System controller  
**Option** System controller Lite UTY-PLGX2

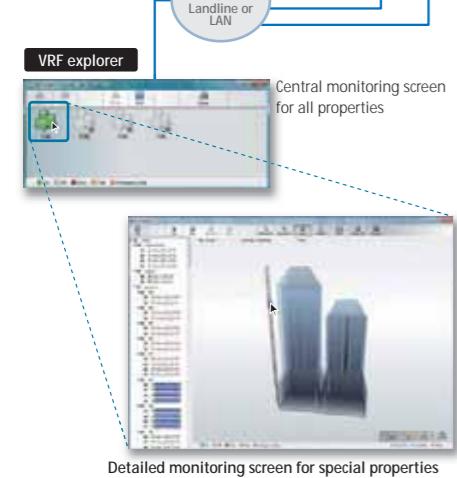
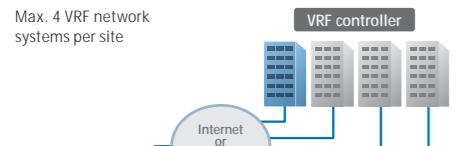
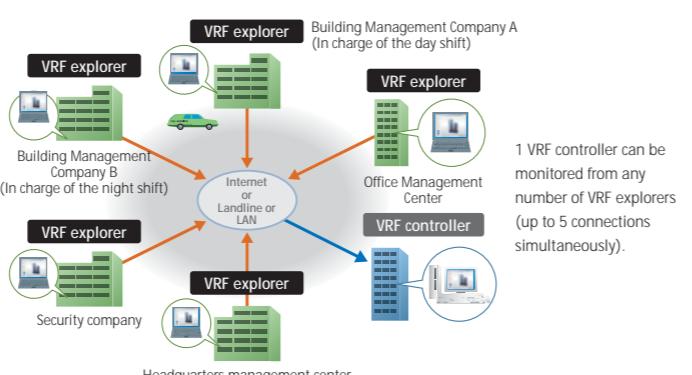
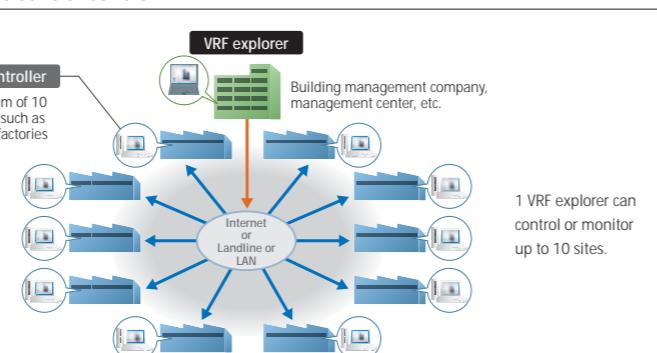
The System controller can be used on site or remotely over networks for remote central control.

The System controller requires 2 software programs working together: The VRF controller runs on site and communicates with the VRF system;

The VRF explorer, which runs at a remote location, provides a user interface and communicates with the VRF controller.

The VRF controller and the VRF explorer run on a single computer or on different computers connected on a network.

A computer running VRF explorer can centrally control up to 10 VRF system sites having up to 20 buildings each.

**On site central control****Remote central control****Energy-saving management**

**Option** System controller UTY-PEGX1  
**Option** System controller Lite UTY-PLGXE2

A variety of energy-saving options can be selected depending on the season, weather, and time of day. Excellent energy-saving operation is performed while keeping users comfortable.



Main screen for energy-saving management

Energy saving graph data: This chart compares the energy consumption for the current month with the previous month and with the same month of the previous year to keep track of the energy-saving performance.

**Indoor unit rotation**

Indoor units can be automatically rotated to operate within a group in accordance with a predetermined annual schedule to reduce power consumption while keeping users comfortable. The operation stoppage rate can be selected for an indoor unit.

**Peak-cut mode**

The system controller monitors the connected power meter and controls the energy to maintain the target power consumption set for each time period by changing the set temperature of the indoor units or turning off the thermostat so as to keep the users comfortable. Indoor units to be controlled can be grouped in many ways, and the control level can be set for each group.

**Capacity saving for outdoor unit**

The upper limit on the capacity of an outdoor unit can be adjusted to reduce power consumption during a hot summer or cold winter by averaging out the power-saving performance of each refrigerant system. The upper limit on capacity can be set at 50% of the rated capacity or more.

**Summary of functions**

Functions	Type	System controller		System controller Lite			
		UTY-APGXZ1	Option UTY-PEGXZ1	UTY-ALGXZ1	Option UTY-PLGX2	Option UTY-PLGA2	Option UTY-PLGX2
Specifications		Max. number of VRF networks supported	4	–	1	–	–
		Max. number of indoor unit and remote controller groups per VRF network	400	–	400	–	–
		Max. number of outdoor units per VRF network	100	–	100	–	–
		Max. number of indoor units and remote controller groups per System controller	1600	–	400	–	–
		Max. number of outdoor units per System controller	400	–	100	–	–
Site supervision		Multiple site display	10	–	10	–	–
		Number of buildings per site	20	–	–	–	–
		Number of floors per site	200	–	–	–	–
		Number of floors per building	50	–	–	–	–
Error management		3D graphical layout view	●	–	–	–	–
		2D graphical layout view	●	–	–	–	–
		List display	●	–	●	–	–
		Tree display	●	–	●	–	–
History		Group display	–	–	●	–	–
		Error notification	●	–	●	–	–
		Audible alarm	–	–	–	–	–
		E-mail notification of errors	–	–	–	–	–
		Error history	–	–	–	–	–
		Operation history	●	–	●	–	–
		Control history	–	–	–	–	–
Individual control		ON/OFF	●	–	–	–	–
		Operation mode*	–	–	–	–	–
		Room temperature	●	–	–	–	–
		Fan speed	–	–	–	–	–
		Airflow direction	–	–	–	–	–
		Economy mode	–	–	–	–	–
		Setting temperature range limitation	●	–	●	–	–
		Anti-freeze	–	–	–	–	–
		Low noise setting of outdoor units	–	–	–	–	–
Individual management		Remote controller prohibition	●	–	–	–	–
		Setting temperature range limitation	–	–	–	–	–
		Filter sign reset	–	–	–	–	–
		Memory operations	●	–	–	–	–
		Pattern operations	–	–	–	–	–
Schedule		Annual Schedule	●	–	–	–	–
		Setting for a specific date	–	–	–	–	–
		ON/OFF per day	72	–	72	–	–
		ON/OFF per week	504	–	504	–	–
		Day off	●	–	●	–	–
		Minimum unit of timer setting (minutes)	10	–	10	–	–
		Weekly schedule for low noise mode	●	–	●	–	–
Remote monitoring management		Web Operation	●	–	–	–	–
		Remote monitoring	–	–	●	–	–
		Remote operation control	●	–	●	–	–
		Remote function setting	–	–	–	–	–
Electricity charge apportionment		Apportionment charge/bill calculation	–	–	–	–	–
		Tenant (block) setting	●	–	–	●	–
		Common facilities apportionment setting	●	–	–	●	–
		Rated power consumption allotment setting	●	–	–	●	–
		Individual calculations for cooling and heating	–	–	●	●	–
		Electricity meter supported	–	–	–	●	–
Energy-saving management		Indoor unit rotation	–	–	–	–	–
		Peak cut control	–	–	–	●	–
		Capacity saving for outdoor unit	–	–	–	●	–
		Record of energy-saving operation	–	–	–	●	–
		Information on energy saving	–	–	–	●	–
		Power consumption monitor	–	–	–	●	–
		Electricity meter supported	–	–	–	●	–
Control of external devices		Monitor	●	–	–	–	–
		Control	–	–	–	–	●
		Importing and exporting databases	●	–	–	–	–
		Automatic clock adjustment	●	–	●	–	–
Others		Multiple language support	7 languages	–	7 languages	–	–
		Refrigerant leak detector	●	–	●	–	–
		Power shutdown	●	–	●	–	–

●●: Available –: Not available

**Computer requirements**

The specifications required for the computer are shown in the table below:

	System controller	System controller Lite
Operating system	<ul style="list-style-type: none"> <li>Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1</li> <li>Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit)</li> <li>Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit)</li> </ul> Supports 7 languages: English, Chinese, French, German, Russian, Spanish, and Polish	
CPU	Intel® Core™ i3 2 GHz or higher	
Memory	<ul style="list-style-type: none"> <li>2 GB or more (for Windows® 7 [32-bit])</li> <li>4 GB or more (for Windows® 7 [64-bit], Windows® 8.1, and Windows® 10)</li> </ul>	
HDD	40 GB or more of free space	
Displayed items	1024 x 768 or higher resolution	
Interfaces	<ul style="list-style-type: none"> <li>Ethernet port (for getting access to the internet using LAN) or a modem (for getting access to the internet via landline)</li> <li>Up to 6 USB ports (Only required for a server computer working as a VRF controller)           <ul style="list-style-type: none"> <li>Maximum of 2 USB ports are required to connect to a White-USB-key/WibuKey</li> <li>Up to 4 USB ports required to connect to an Echelon® U10 USB network interface</li> </ul> </li> <li>* Maximum number of required USB ports depends on the applicable system configuration.</li> </ul>	<ul style="list-style-type: none"> <li>Ethernet port (for getting access to the internet using LAN) or a modem (for getting access to the internet via landline)</li> <li>Up to 6 USB ports (Only required for a server computer working as a VRF controller)           <ul style="list-style-type: none"> <li>Maximum of 4 USB ports are required to connect to a White-USB-key/WibuKey</li> <li>1 USB port is required for an Echelon® U10 USB Network interface</li> </ul> </li> <li>* The maximum number of required USB ports depends on the applicable system configuration.</li> </ul>
Graphic accelerator	Microsoft® DirectX® 9.0c compatible	
Software	Adobe® Acrobat Reader® 9.0 or later	
	• Echelon® U10 USB Network interface - TP/FT-10 Channel (Model name: 75010R) (Required for each VRF Network)	

**Packing list**

Type	For System controller		For System controller Lite				
	System controller	Option Energy manager	System controller Lite	Remote access	Electricity charge apportionment	Energy saving	Centralized control
Model name	UTY-APGXZ1	UTY-PEGXZ1	UTY-ALGXZ1	UTY-PLGX2	UTY-PLGA2	UTY-PLGXE2	UTY-PLGXX2
White-USB-key	1	1	1	1	1	1	1

\*1: Software protection key to be inserted in a USB slot running System controller or System controller Lite.  
 System controller or System controller Lite may only run on a PC with a WHITE-USB-KEY. However, a WHITE-USB-KEY is not required for remote VRF explorer software.

## BACnet® gateway

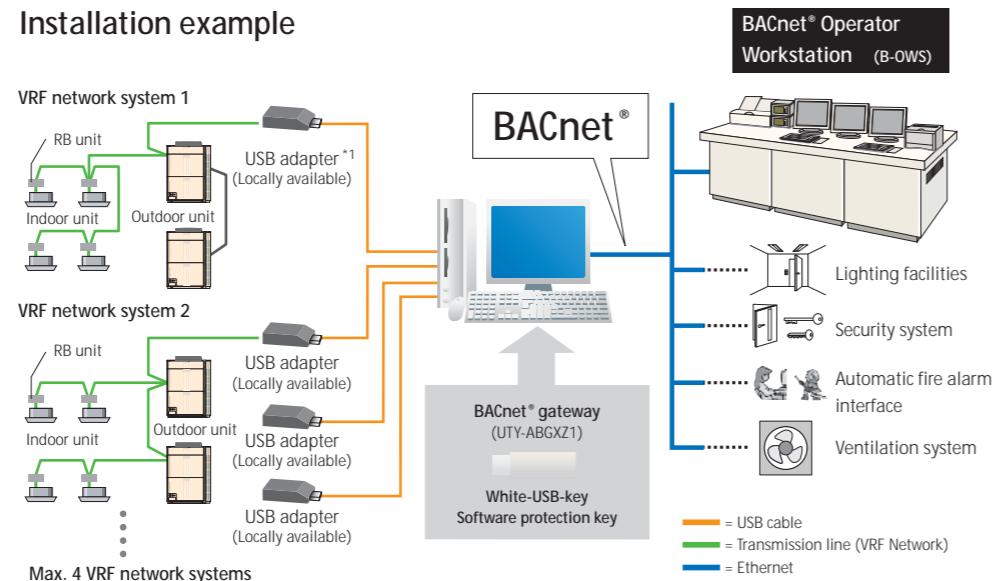
UTY-ABGXZ1 Software

White-USB-key  
(Software Protection Key)

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Up to  
4 VRF network systems  
Up to  
400 outdoor units  
Up to  
1,600 indoor units

## Installation example



## Computer requirements

	UTY-ABGXZ1
Operating system	<ul style="list-style-type: none"> <li>Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1</li> <li>Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit)</li> <li>Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit)</li> </ul> Supported languages: Chinese, English, French, German, Polish, Russian, and Spanish
CPU	Intel® Core™ i3 2 GHz or higher
Memory	<ul style="list-style-type: none"> <li>2 GB or more [for Windows® 7 (32-bit)]</li> <li>4 GB or more [for Windows® 7 (64-bit), Windows® 8.1, and Windows® 10]</li> </ul>
HDD	40 GB or more of free space
Displayed items	1024 x 768 or higher resolution
Interfaces	<ul style="list-style-type: none"> <li>Ethernet port (for getting access to the internet using LAN)</li> <li>Up to 5 USB ports               <ul style="list-style-type: none"> <li>1 USB port required to connect to a White-USB-key/WibuKey</li> <li>Up to 4 USB ports required to connect to an Echelon® U10 USB network interface</li> </ul> </li> </ul> <p>*The maximum number of required USB ports varies depending on the applicable system configuration.</p>
Software	Adobe® Acrobat Reader® 9.0 or later

\*Echelon® U10 USB Network interface – TP/FT-10 Channel (Model name: 75010R) (Required for each VRF Network)

## Packing list

Name and shape	Quantity	Application
White-USB-key	1	Includes the software, user's manual, and license for BACnet® gateway.

## BACnet® gateway

UTY-VBGX Hardware



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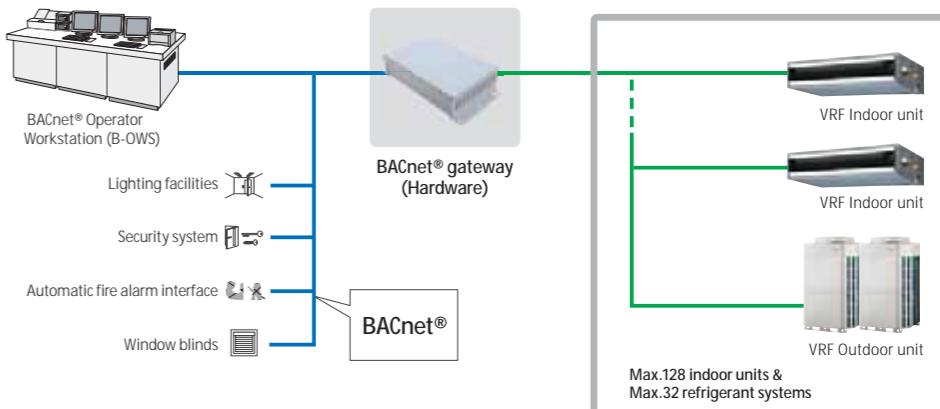
Up to  
1 VRF network system

Up to  
32 refrigerant systems

Up to  
128 indoor units

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

## Installation example



## Specifications

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

Model name	UTY-VBGX
Power supply	Single phase, 100-240 V, 50/60 Hz
Power consumption (W)	4.6 (max.)
Dimensions (H x W x D) (mm)	59.6 x 270.4 x 176
Weight (g)	1200

## Multiple protocol LAN adapter

FG-TL-MBS16Z1

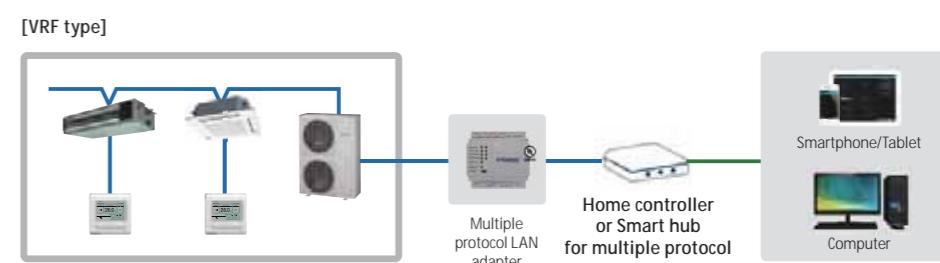


Up to  
16 indoor units

## No separate external power supply required

- Can be used for 16 indoor units.

## Installation example



## Specifications

Model name	FG-TL-MBS16Z1 (VRF type)
Power supply	9 to 36 V DC, Max.: 140 mA or 24 V AC 50/60 Hz, Max.: 127 mA.*
Input power (W)	1.7
Dimensions (H x W x D) (mm)	90 x 88 x 56
Weight (g)	330

\*24 V DC power supply is recommended.

**BACnet®/MODBUS® Router**

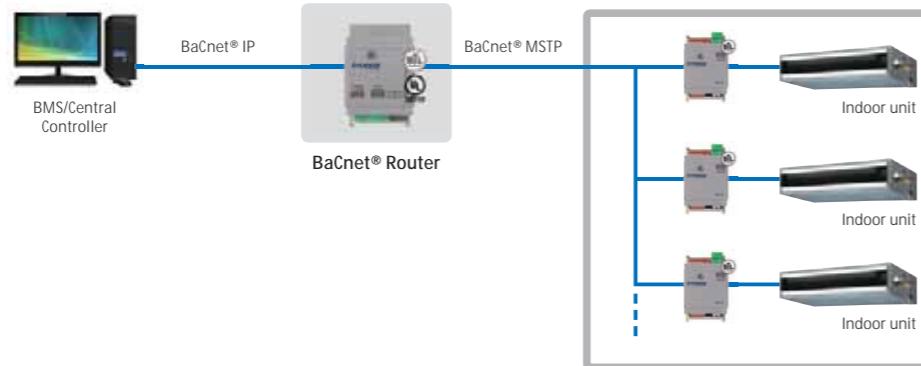
FG-RTR-BAC32Z1/FG-RTR-MBS32Z1

**Intesis®**  
BY HMS NETWORKSFG-RTR-BAC32Z1  
(BAC net)**Intesis®**  
BY HMS NETWORKSFG-RTR-MBS32Z1  
(MODBUS®)**Routing between BaCnet® MS/TP and BaCnet® IP networks**

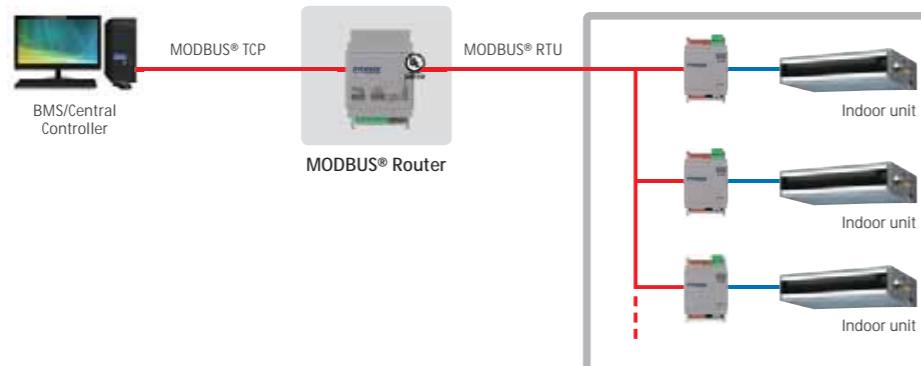
- Routing between BaCnet® MS/TP and BaCnet® IP networks
- Routing between MODBUS® RTU and MODBUS® TCP networks

**Installation example**

[BaCnet® type]



[MODBUS® type]

**BACnet®/MODBUS® Cloud Device**

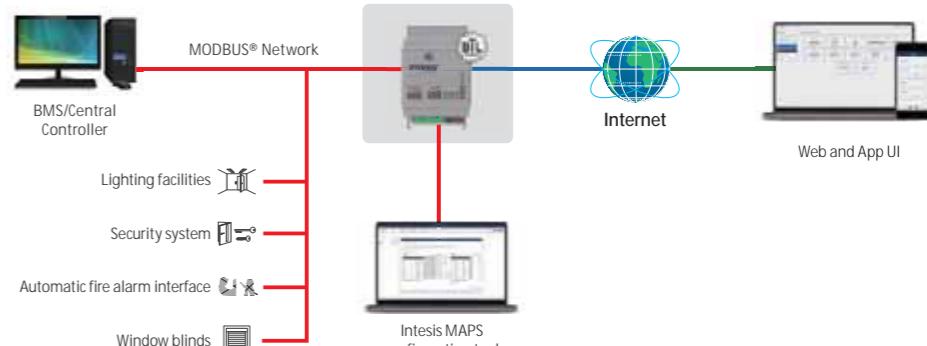
FG-CLD-BMG4Z1/FG-CLD-BMG8Z1/FG-CLD-BMG16Z1/FG-CLD-BMG32Z1

**Intesis®**  
BY HMS NETWORKS

FG-CLD-BMG4/8/16/32Z1

- The most powerful configuration tool common to all BACnet® gateways provides the system integrators with the power to configure and monitor their systems in an easy and reliable manner.

- A simple, easy-to-use description for the ST Cloud Web and App User Interface, with all widgets customizable to the user's needs, enabling system integrators to easily offer the best user experience to customers who are in control of their BaCnet® or MODBUS® devices.

**Installation example**

\*BMS: Building Management System

**Gateway features**

- BaCnet® IP/MSTP or MODBUS® TCP/RTU connectivity
- Up to 32 devices can be connected to each gateway.
- Up to 12 widgets per device
- Easy device configuration with Intesis MAPS

**Next-generation services**

- Industrial-grade connectivity now for building automation
- Fast and scalable real-time edge connectivity over HMS HubTM
- Full data control and protection
- Secure and remote updates during the application lifetime

**System Features**

- Monitor and control all devices in an intuitive way
- Comes with a native iOS and Android app and a web interface
- Create scenes and interact with multiple concurrent devices
- Calendar that shows the daily planned installation commands
- Notifications keep you updated about system status
- Device sharing and usage permissions management
- Multiple site management from a common dashboard

**Specifications**

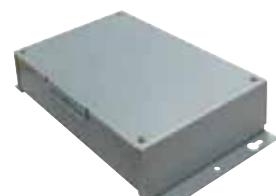
Model name	FG-RTR-BAC32Z1 (MS/TP to IP)	FG-RTR-MBS32Z1 (RTU to TCP)
Number of routable devices (max.)	32	32
Power supply	9 to 36 V DC, Max.: 140 mA or 24 V AC 50/60 Hz, Max.: 127 mA	9 to 36 V DC, Max.: 140 mA or 24 V AC 50/60 Hz, Max.: 127 mA
Power consumption (W)	1.7	1.7
Dimensions (H × W × D) (mm)	93 × 53 × 58	93 × 53 × 58
Weight (g)	150	150

**Specifications**

Model name	FG-CLD-BMG4Z1	FG-CLD-BMG8Z1	FG-CLD-BMG16Z1	FG-CLD-BMG32Z1
Number of connectable BaCnet® (IP/MSTP) or MODBUS® (TCP/RTU) devices	4	8	16	32
Power supply	9 to 24 V DC, 50/60Hz			
Power consumption (W)	1.7	1.7	1.7	1.7
Dimensions (H × W × D) (mm)	93 × 53 × 58	93 × 53 × 58	93 × 53 × 58	93 × 53 × 58
Weight (g)	150	150	150	150

## MODBUS® converter for VRF

UTY-VMGX/FG-TL-MBS16Z1



UTY-VMGX

Up to  
9 units per VRF system

Up to  
100 outdoor units

Up to  
128 indoor units

**Intesis®**

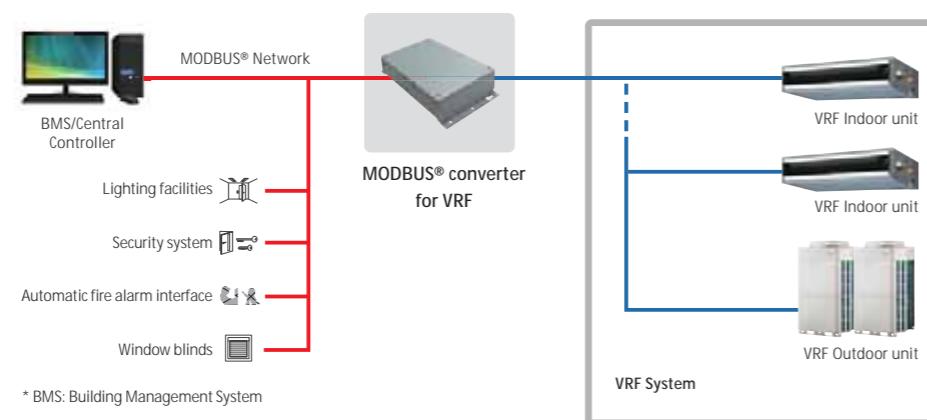


FG-TL-MBS16Z1

MODBUS® converter enables air conditioners to be fully integrated into a MODBUS® network.

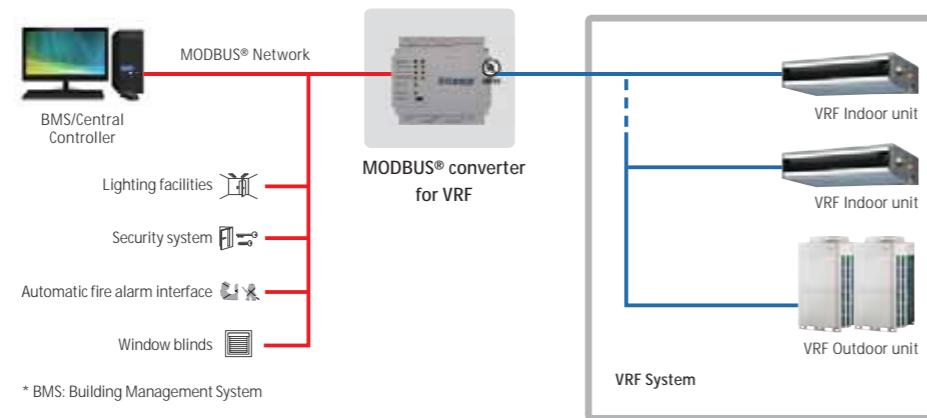
- Compact and lightweight design
- Direct connection to MODBUS® network
- MODBUS® converter enables central monitoring and control of air conditioners from BMS or a central controller.
- Up to 9 converters can be connected to a VRF network (UTY-VMGX). Simultaneous control, such as Power ON/OFF and temperature setting, can be performed for each zone.
- If a connection error occurs after installation work is completed, the source of the error can be located easily.

### Installation example



Up to  
16 indoor units

Up to  
16 outdoor units



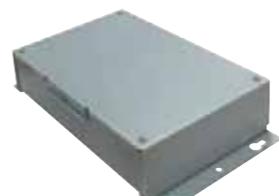
### Specifications

Model name	UTY-VMGX	FG-TL-MBS16Z1
Power supply	Single phase ~220 to 240 V 50/60 Hz	9 to 36 V DC, Max.: 140 mA or 24 V AC 50/60 Hz, Max.: 127 mA.*
Input power (W)	Max. 2	1.7
Dimensions (H × W × D) (mm)	54 × 260 × 150	90 × 88 × 56
Weight (g)	1,100	330

\*24 V DC power supply is recommended.

## KNX® converter for VRF

UTY-VKGX/FG-TL-KNX16Z1



UTY-VKGX

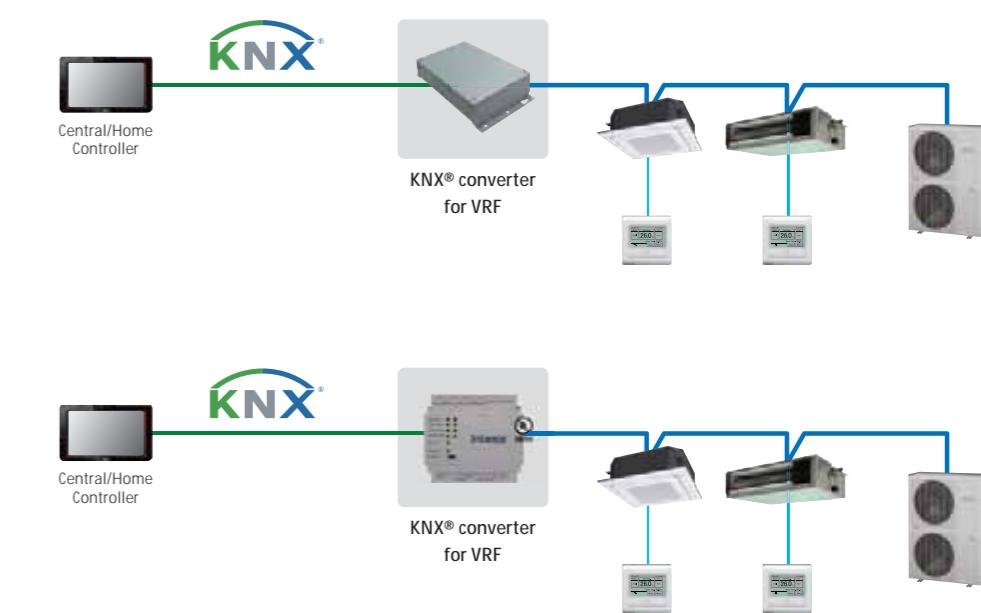
Up to  
100 outdoor units

Up to  
128 indoor units

KNX® converter enables centralized control of a system.

- KNX® converter connects a central or home controller and a Fujitsu General VRF system.
- Up to 128 indoor units and 100 outdoor units can be connected to a single KNX® converter. (UTY-VKGX)

### Installation example



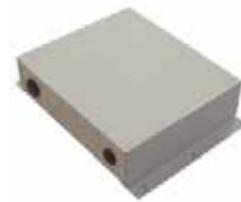
### Specifications

Model name	UTY-VKGX	FG-TL-KNX16Z1
Power supply	Single phase ~220 to 240 V 50/60 Hz	9 to 36 V DC, Max.: 140 mA or 24 V AC 50/60 Hz, Max.: 127 mA.*
Input power (W)	1.5	1.6
Dimensions (H × W × D) (mm)	54 × 260 × 150	90 × 88 × 56
Weight (g)	1,200	340

\*24 V DC power supply is recommended.

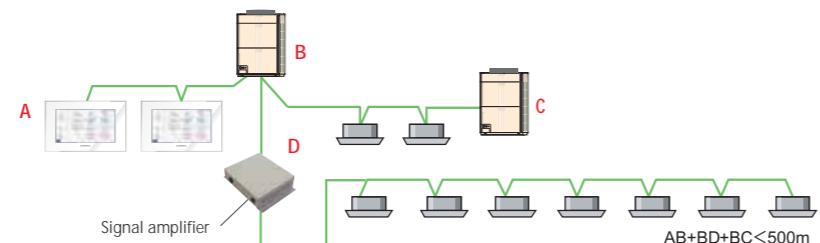
## Signal amplifier

UTY-VSGXZ1



- The transmission line can be extended up to 3,600 m using multiple Signal amplifiers.
- Up to 8 Signal amplifiers can be added in a VRF network system.
- A Signal amplifier is required.
  - When the total wiring length of the transmission line exceeds 500 m.
  - When the total number of units on the transmission line exceeds 64.

### Installation example



### Specifications

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

## Network converter for LONWORKS™

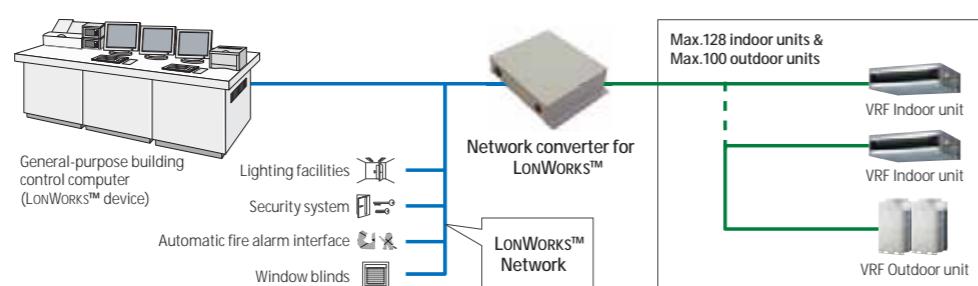
UTY-VLGX



- Connects the VRF network system to a LONWORKS™ open network to manage small and midsized BMS and VRF network system.
- The UTY-VLGX enables centralized monitoring and control of VRF network system from a BMS via a LONWORKS™ interface.
- Up to 128 Indoor units can be connected to one network converter for LONWORKS™

Up to  
4 units to BMSUp to  
100 outdoor unitsUp to  
128 indoor units

### Installation example

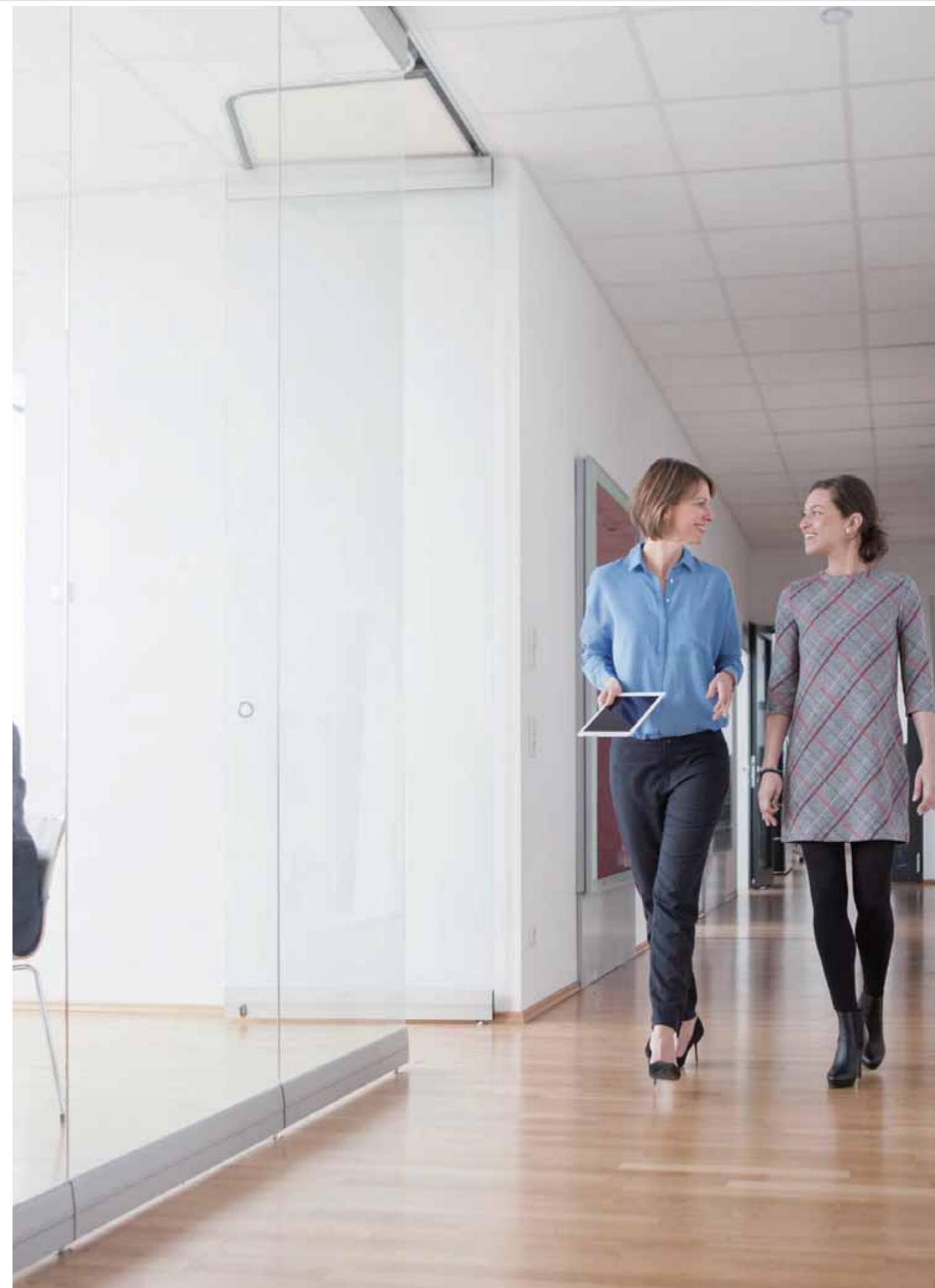


### Specifications

Model name	UTY-VLGX
Power supply	Single phase -208 to 240 V 50/60 Hz
Power consumption (W)	4.5
Dimensions (H × W × D) (mm)	67 × 288 × 211
Weight (g)	1,500

### Transmission specifications (BMS side)

Transmission speed	78 kbps
Transceiver	FT-X1 (available from Echelon® Corporation)
Transmission line form	Free topology
Terminal resistor	(converter to be attached at the terminal of a network)



## Controller system list (available) for Split/Multi-split

Controller Options/Accessories:



Type	Refrigerant	Indoor unit														Indoor unit						Multi-split				Outdoor unit		
		Wall-mounted						Cassette		Duct						Duct				Floor		Ceiling		Multi-split				Single phase
		Flagship Series	Designer Series		Standard Series			ECO Series	Compact 4-way flow Series	Circular flow Series	Slim	Medium static pressure (Compact)	Medium static pressure (Standard)	High static pressure			BIG	Floor	Ceiling	Wall-mounted	Compact cassette	Mini duct	Slim duct	5/6/8-unit multi-split				
Controller	R32	ASHG 12KXCA	ASHG 07/09/12/14 KGTE	ASHG 07/09/12/14 KETE, KETE-B	ASHG 07/09/12/14 KMCE	ASHG 18/24KMTE	ASHG 30/36KMTA	ASHG 07/09/12 KPCF	AUXG 09/12/14/18 KVLA	AUXG 18/22/24/30/36/45/54 KRLB	ARXG 09/12/14/18 KLLAP	ARXG 12/14/18/22/24/30/36/45/54 KHTAP	ARXG 24/30/36/45 KMLA	45/54KHTB				AGHG 09/12/14 KVCA	ABHG 18/22/24/30/36/45/54 KRTA	ASHG 22KMTE	AUXG 07KVLA	ARXG 07KLLAP	AOHG36KBTA5					
	R410A														ARHG 60LHTA	ARHG 72/90LHTA									AOHG45LBLA6 AOHG45LBTA5			
Wired remote controller																												
Simple remote controller	nonpolar 2-core type	polar 3-core type																										
Central remote controller																												
																									UTY-DMMGM1*3 (KBTA5) UTY-DMMGM1*3 (LBLA6, LB18)			
Wireless remote controller																												
IR receiver unit with Wireless remote controller	For Duct type	For Cassette type																										
	For Duct type	For Cassette type																										
	For Duct type	For Cassette type	For Ceiling type																									

\*1: Available only when the WLAN adapter (UY-TFSXF2) is removed. \*2 Available only when the WLAN adapter (UY-TFSXZ1) is removed.  
\*3 Consult your dealer for conditions of use.

## Controller system list (available) for Split/Multi-split

Controller Options/Accessories:



Type	Refrigerant	Indoor unit																Indoor unit						Outdoor unit	
		Wall-mounted								Cassette		Duct		Duct				Floor		Ceiling		Multi-split		Single phase	
		Flagship Series	Designer Series		Standard Series			ECO Series		Compact 4-way flow Series	Circular flow Series	Slim	Medium static pressure (Compact)	Medium static pressure (Standard)	High static pressure		BIG			Wall-mounted	Compact cassette	Mini duct	Slim duct	5-unit multi-split	
	R32	ASHG 07KXCA	ASHG 07/09/12/14 KGT	ASHG 07/09/12/14 KETE, KETE-B	ASHG 07/09/12/14 KMCE	ASHG 18/24KMTE	ASHG 30/36KMTA	ASHG 07/09/12 KPC	ASHG 18/24KLCA	AUXG 09/12/14/36/45/54 KRLB	AUXG 09/12/14/36/45/54 KLLAP	ARXG 12/14/18/22/24/30/36/45/54 KHTAP	ARXG 22KMLB, ARXG 24/30/36/45 KMLA	45/54KHTB					AGHG 09/12/14 KVCA	ABHG 18/22/24/30/36/45/54 KRTA	ASHG 22KMTE	AUXG 07KVL	ARXG 07/09/14/18 KSLAP	ARXG 07KLLAP	AOHG36KBTA5
	R410A																ARHG 60LHTA	ARHG 72/90LHTA							
Interfaces	MODBUS® Converter		UTY-VMSX								UTY-VMSX								UTY-VMSX	UTY-VMSX*2	UTY-VMSX	UTY-VMSX*1	UTY-VMSX		
	MODBUS® interface		FG-AC-MBS1Z1								FG-RC-MBS1Z1 FG-AC-MBS1Z1								FG-AC-MBS1Z1	FG-RC-MBS1Z1 FG-AC-MBS1Z1	FG-AC-MBS1Z1		FG-RC-MBS1Z1 FG-AC-MBS1Z1		
KNX® interface	KNX® converter		UTY-VKSX								UTY-VKSX								UTY-VKSX	UTY-VKSX*2	UTY-VKSX	UTY-VKSX*1	UTY-VKSX		
	KNX® interface		FG-AC-KNX1Z1								FG-RC-KNX1Z1 FG-AC-KNX1Z1								FG-AC-KNX1Z1	FG-RC-KNX1Z1 FG-AC-KNX1Z1	FG-AC-KNX1Z1		FG-RC-KNX1Z1 FG-AC-KNX1Z1		
WLAN adapter		Accessory									UTY-TFSXZ1								UTY-TFNXZ1	UTY-TFSXZ1			UTY-TFSXZ1		
			UTY-TFSXF2																		UTY-TFSXF2				
			FG-AC-WIF1Z1								FG-RC-WIF1Z2 FG-AC-WIF1Z1								FG-AC-WIF1Z1	FG-RC-WIF1Z2 FG-AC-WIF1Z1	FG-AC-WIF1Z1		FG-RC-WIF1Z2 FG-AC-WIF1Z1		
			FG-IR-WIF1Z1								FG-IR-WIF1Z1+ UTY-LBTGC FG-IR-WIF1Z1+ UTY-LBTGM								FG-IR-WIF1Z1+ UTY-LBTGM	FG-RC-WIF1Z1+ UTY-LRHGM	FG-IR-WIF1Z1	FG-IR-WIF1Z1+ UTY-LBTGH	FG-IR-WIF1Z1	FG-IR-WIF1Z1+ UTY-LRHGM	
			FG-AC-WMP1Z1								FG-RC-WMP1Z1 FG-AC-WMP1Z1								FG-AC-WMP1Z1	FG-RC-WMP1Z1 FG-AC-WMP1Z1	FG-AC-WMP1Z1		FG-RC-WMP1Z1 FG-AC-WMP1Z1		
			FG-IR-WMP1Z1								FG-IR-WMP1Z1+ UTY-LBTGC FG-IR-WMP1Z1+ UTY-LBTGM								FG-IR-WMP1Z1+ UTY-LBTGM	FG-IR-WMP1Z1+ UTY-LRHGM	FG-IR-WMP1Z1	FG-IR-WMP1Z1+ UTY-LBTGH	FG-IR-WMP1Z1	FG-IR-WMP1Z1+ UTY-LRHGM	
External switch controller			UTY-TERX+UTY-TWRXZ2		UTY-TERX+UTY-TWRXZ2		UTY-TERX+UTY-TWRXZ2			UTY-TERX		UTY-TERX						UTY-TERX+UTY-TWRXZ3	UTY-TERX	UTY-TERX+UTY-TWRXZ2		UTY-TERX			
Network converter for single-split type			UTY-VTGX+UTY-TWRXZ2 or UTY-VTGXV+UTY-TWRXZ2		UTY-VTGX+UTY-TWRXZ2 or UTY-VTGXV+UTY-TWRXZ2		UTY-VTGX+UTY-TWRXZ2 or UTY-VTGXV+UTY-TWRXZ2			UTY-VTGX		UTY-VTGX						UTY-VTGX+UTY-TWRXZ3 UTY-VTGXV+UTY-TWRXZ3	UTY-VTGX	UTY-VTGX+UTY-TWRXZ2 or UTY-VTGXV+UTY-TWRXZ2		UTY-VTGX			

\* There are no optional parts for the KL Series.

\*1: Available only when the WLAN adapter (UY-TFSXF2) is removed. \*2: Available only when the WLAN adapter (UY-TFSXZ1) is removed.

# Controller System List (available) for VRF

Controller Options:



Type	Refrigerant	Indoor unit																		Indoor unit																	
		Cassette						Duct						Duct						Floor			Ceiling/Floor	Wall-mounted													
		One-way flow	3D flow	Compact Grid type/ Standard type	Slim type	Large type	Low static pressure duct			Medium static pressure			High static pressure			-	External EEV	Ceiling	-	External EEV	-	External EEV	-	-													
					Circular flow		Mini (With drain pump)	Slim (With drain pump)		Normal	Normal		Normal																								
	R410A	AUXV 004/007/009/ 012/014/018/ 024GLEH	AUXS 018/024 GLEH	AUXB 004/007/009/ 012/014/018/ 024GLEH	AUXM 018/024/030 GLEH	AUXK 018/024/030/ 034/036/045/ 054GLEH	ARKX 004/007/009/ 012/014/018/ 024GLCH	ARXD 04GALH	ARXD 007/009/012/ 014/018/024 GLEH	ARXA 024/030/ 036/045 GLEH	ARXC 036/072/ 090/096 GTEH	ARXC 045/060GTEH	AGHA 004/007/ 009/012/014 GCGH	AGHE 004/007/009/ 009/012/014 GCEH	ABHA 012/014/ 018/024 GTEH	ABHA 030/036/ 045/054 GCEH	ASHA 004/007/009/ 012/014/018 GCGH	ASHA 004/007/009/ 012/014/018 GCEH	ASHA 012/014GCGH	ASHA 012/014GCEH	ASHA 18/24GBCH	ASHA 030/034GTEH															
Controllers																																					
Wired remote controller																																					
Simple remote controller																																					
Wireless remote controller																																					
IR receiver unit																																					
Central remote controller																																					
Touch panel controller																																					
System controller, System controller Lite																																					

## Controller System List (available) for VRF

## Controller Options:



Type	Refrigerant	Indoor unit														Indoor unit																		
		Cassette					Duct					Duct			Floor		Ceiling/Floor	Ceiling	Wall-mounted															
		One-way flow	3D flow	Compact Grid type/ Standard type	Slim type	Large type	Low static pressure duct		Medium static pressure		High static pressure		-	external EEV																				
				Circular flow			Mini (With drain pump)		Slim (With drain pump)		Normal																							
		AUXV 004/007/009/ 012/014/018/ 024GLEH	AUXS 018/024 GLEH	AUXB 004/007/009/ 012/014/018/ 024GLEH	AUXM 018/024/030 GLEH	AUXK 018/024/030/ 034/036/045/ 054GLEH	ARXK 004/007/009/ 012/014/018/ 024GLGH	ARXD 04GALH	ARXD 007/009/012/ 014/018/024 GLEH	ARXA 024/030/ 036/045 GLEH	ARXC 036/072/ 090/096 GTEH	ARXC 045/060GTEH	AGHA 004/007/ 090/096 GCEH	AGHE 004/007/ 099/012/014 GCEH	ABHA 012/014/ 018/024 GTEH	ABHA 030/036/ 045/054 GTEH	ASHA 004/007/009 GCEH	ASHE 004/007/009 GCEH	ASHA 012/014GGH	ASHE 012/014GCEH	ASHA 18/24GBCH	ASHA 030/034GTEH												
Interfaces	BAControl® gateway			UTY-ABGXZ1, UTY-VBGX														UTY-ABGXZ1, UTY-VBGX																
				FG-AC-BAC1Z1				FG-AC-BAC1Z1				FG-AC-BAC1Z1																						
Network converter for LonWorks™	Network converter for LonWorks™			UTY-VLGX														UTY-VLGX																
				UTY-VMSX				UTY-VMSX				UTY-VMSX																						
MODBUS® Converter	MODBUS® Converter			UTY-VMGX				FG-TL-MBS16Z1				UTY-VMGX																						
				FG-AC-MBS1Z1				FG-RC-MBS1Z1		FG-AC-MBS1Z1		FG-AC-MBS1Z1																						
MODBUS® interface	MODBUS® interface			UTY-VKSX				UTY-VKSX				UTY-VKSX																						
				UTY-VKGX				FG-TL-KNX16Z1				UTY-VKGX																						
KNX® converter	KNX® converter			FG-AC-KNX1Z1				FG-RC-KNX1Z1		FG-AC-KNX1Z1		FG-AC-KNX1Z1																						
				UTY-TFSXZ1				UTY-TFSXZ1				UTY-TFSXZ1																						
KNX® interface	KNX® interface			FG-IR-KNX1Z1+UTY-TRHX				FG-IR-KNX1Z1		FG-IR-KNX1Z1+UTY-TRHX		FG-IR-KNX1Z1																						
				FG-IR-WIF1Z1				FG-AC-WIF1Z1				FG-IR-KNX1Z1+UTY-TRHX																						
WLAN adapter	WLAN adapter			FG-IR-WIF1Z1+UTY-TRHX				FG-RC-WIF1Z2		FG-AC-WIF1Z1		FG-AC-WIF1Z1																						
				FG-IR-WIF1Z1+UTY-TRHX				FG-IR-WIF1Z1+UTY-TRHX				FG-IR-WIF1Z1+UTY-TRHX																						
External switch controller	External switch controller			FG-IR-WMP1Z1+UTY-TRHX				FG-IR-WMP1Z1				FG-AC-WMP1Z1																						
				FG-IR-WMP1Z1+UTY-TRHX				FG-IR-WMP1Z1				FG-IR-WMP1Z1+UTY-TRHX																						

# Optional parts overview

## For Split & Multi-split, VRF

A variety of optional parts are available to enable installation of the selected indoor unit properly according to the environment.

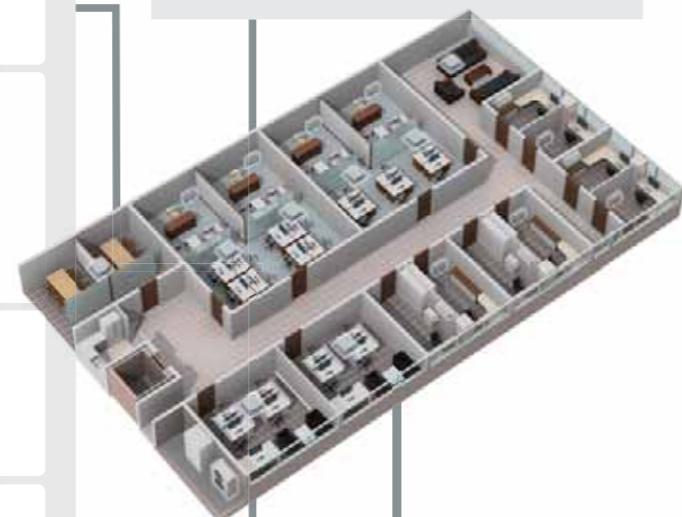
### Optional Parts For Cassette

	<b>Occupancy sensor kit</b> A built-in thermo sensor monitors and controls room temperature accurately.
	<b>Cassette grille</b> A lineup of cassette grilles that match a variety of interiors. A grid ceiling-type cassette grille has been added to the lineup.
	<b>Silver ion filter</b> The Silver ion filter helps to keep indoor air free from viruses, bacteria and molds.*
	<b>Fresh air intake kit</b> Fresh air can be taken in by a fan connected to an external control unit.
	<b>Insulation kit for high humidity</b> for Compact cassette type/Cassette type Insulation kit for high humidity is used when the installation location is in a high humidity environment.
	<b>Air outlet shutter plate</b> Airflow directions can be changed to 3 directions using the Air outlet shutter plate depending on the installation location.
	<b>Wide Panel</b> When a cassette type is installed in a narrow space in the ceiling, the wide panel fills in that space.  Indoor unit 950 Panel 600 (mm) 600 (mm)
	<b>Panel spacer</b> If the ceiling space is tight and the main body protrudes from the ceiling surface, a panel spacer can be used as a decorative trim.  242 mm Panel spacer

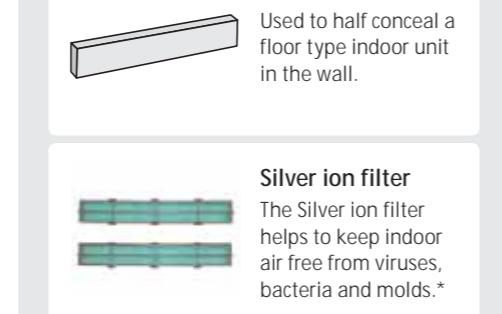
### Optional Parts For V-IV



**Pressure sensor kit**  
The height difference of the pressure sensor kit can be extended up to 110 m.



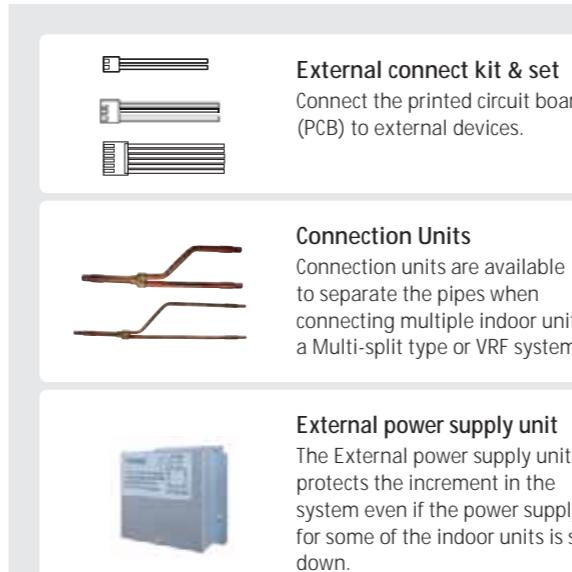
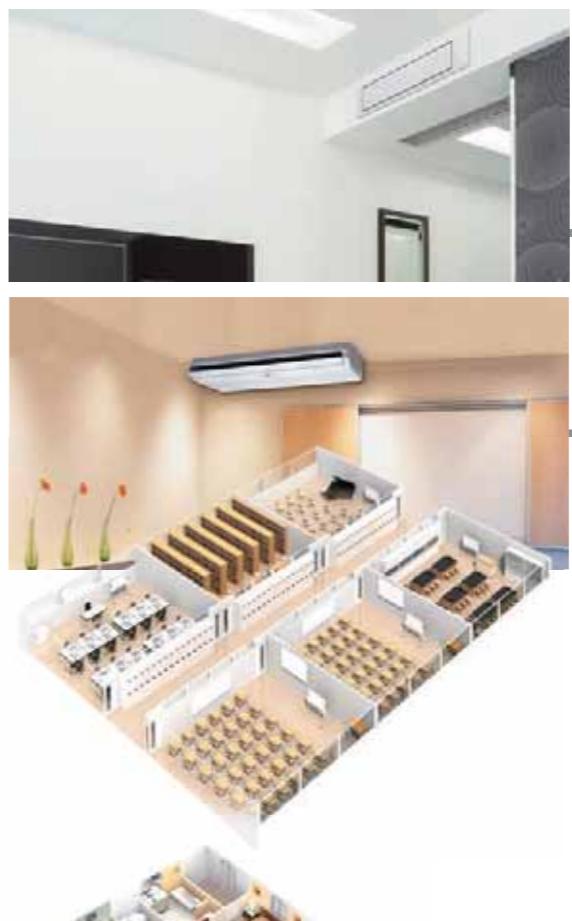
### Optional Parts For Floor



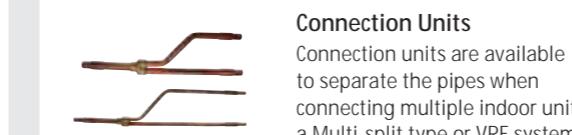
**Half concealed kit**  
Used to half conceal a floor type indoor unit in the wall.



**Silver ion filter**  
The Silver ion filter helps to keep indoor air free from viruses, bacteria and molds.\*



**External connect kit & set**  
Connect the printed circuit board (PCB) to external devices.



**Connection Units**  
Connection units are available to separate the pipes when connecting multiple indoor units in a Multi-split type or VRF system.



**External power supply unit**  
The External power supply unit protects the increment in the system even if the power supply for some of the indoor units is shut down.

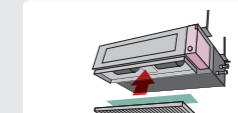
### Optional Parts For Duct & Ceiling



**Auto louver grille kit**  
The optional clean-looking flat Auto louver grille blends into any interior and provides a comfortable airflow.



**Remote sensor unit**  
The remote sensor provides additional convenience.



**Silver ion filter**  
The Silver ion filter helps to keep indoor air free from viruses, bacteria and molds.\*



**Long-life filter**  
Captures grit and dust. Long-life design with consideration of running costs.



**Flange**  
Flanges are used when connecting a medium static pressure duct type and a ceiling type with air intake and exhaust ducts.



**Drain pump unit**  
Drains water that has accumulated during operation.

### Connection Parts



**Communication kit**  
Required for a wall-mounted type when the External connect kit set or a Wired remote controller is connected to the indoor unit.



**External input and output PCB**  
For Wall-mounted, Duct, or Cassette type, these parts are required when the external input and output function is used.



**Connection Units**  
Connection units are available to separate the pipes when connecting multiple indoor units in a Multi-split type or VRF system.



**External power supply unit**  
The External power supply unit protects the increment in the system even if the power supply for some of the indoor units is shut down.



**External input and output PCB box & bracket**  
Box and bracket for installing the External input and output PCB.

## Silver Ion Filter

UTR-FA16-5 / UTR-FA13-3 / UTR-FA03-5 / UTD-HFAA / UTD-HFRA / UTD-HFTA / UTD-HFTB / UTD-HFTC / UTD-HFNC / UTD-HFNB / UTD-HFNA / UTD-HFND / UTD-HFKB / UTD-HFKA



NEW



For Wall mounted / Floor  
UTR-FA16-5 / UTR-FA13-3  
UTR-FA03-5

For Cassette  
UTD-HFAA / UTD-HFRA

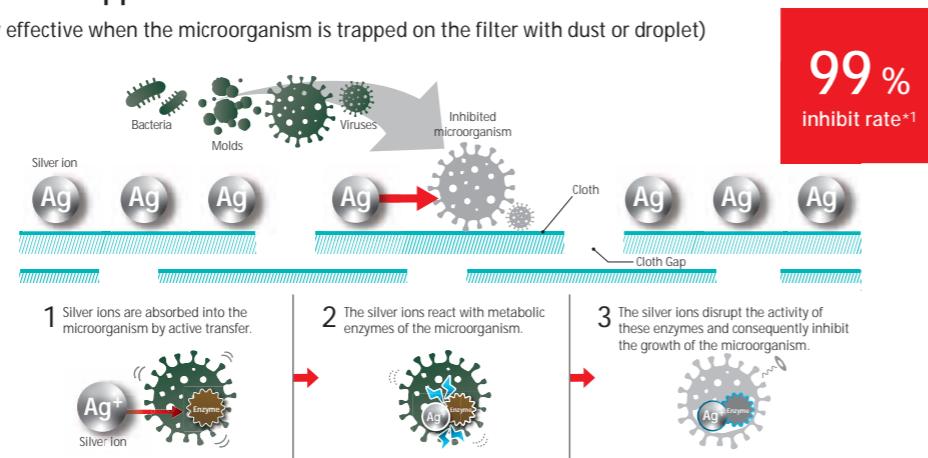
For Duct  
UTD-HFTA / UTD-HFTB  
UTD-HFTC / UTD-HFNC  
UTD-HFNB / UTD-HFNA  
UTD-HFND / UTD-HFKB  
UTD-HFKA

The Silver ion filter helps to keep indoor air free from viruses, bacteria and molds.

(Not a result of experiments in an actual use environment. Silver ion filter inhibits activity or growth of microorganism, but do not prevent infection.)

The silver ion filter inhibits the activities of viruses<sup>\*1</sup>, bacteria<sup>\*2</sup> and molds<sup>\*3</sup> trapped on the filter.

(Only effective when the microorganism is trapped on the filter with dust or droplet)



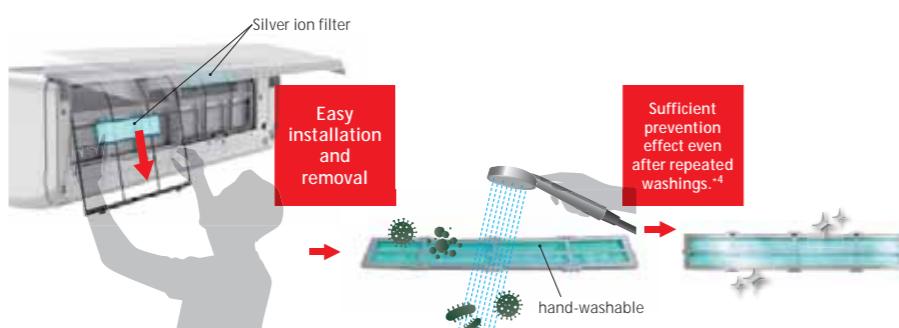
<sup>\*1</sup> [Testing organization] Kitasato Research Center for Environmental Science [Test Report] No. 2020\_0408 [Test virus] Escherichia coli phage Obeta NBRC 20012 (1 type) [Test Method] Based on the antiviral test method for textile products (JIS L 1922)  
[Test results] Inhibited by at least 99% in 24 hours. Not tested to prevent transmission of SARS-CoV-2.

<sup>\*2</sup> [Testing organization] Kitasato Research Center for Environmental Science [Test Report] No. 2020\_0409 [Test bacteria] Escherichia coli NBRC 3972 (1 type)  
[Test Method] Based on the determination of antibacterial activity and efficacy of textile products (JIS L 1902)  
[Test results] The growth of the test bacteria was inhibited by 24 hours testing

<sup>\*3</sup> [Testing organization] Kitasato Research Center for Environmental Science [Test Report] No. 2020\_0410 [Test fungi] Aspergillus Niger NBRC 105649 and other fungi (3 types) [Test Method] Based on the test for fungus resistance (JIS Z 2911)  
[Test results] The growth of the fungus was inhibited by 28 days testing

The filter is easily removable\* and hand-washable.

(\*Wall mounted and floor models only)



\*4 Hand-washing or vacuuming by 3 months is recommended. Cleaning frequency varies depending on the environment of use.

### Specifications

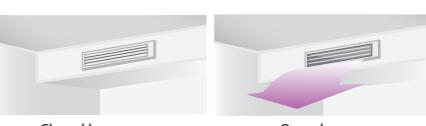
Model name	For Wall mounted / Floor					for Cassette									
	UTR-FA16-5	UTR-FA13-3	UTR-FA03-5	UTD-HFAA	UTD-HFRA	UTD-HFTA	UTD-HFTB	UTD-HFTC	UTD-HFNC	UTD-HFNB	UTD-HFNA	UTD-HFND	UTD-HFKB	UTD-HFKA	
Net Dimension (H × W × D)	mm	35 × 210 × 6	50 × 364 × 6	43 × 272 × 6	350 × 125 × 6	550 × 136 × 6									
Weight	g	2	2	2	7	23									
Quantity		2	2	2	1	1									
for Duct															
Net Dimension (H × W × D)	mm	290 × 70 × 6	390 × 70 × 6	290 × 70 × 6 390 × 70 × 6	620 × 88 × 6	420 × 88 × 6	620 × 88 × 6	500 × 79 × 6	420 × 125 × 6	620 × 108 × 6					
Weight	g	6	8	10	8	10	16	12	16	20					
Quantity		2	2	3	1	2	2	2	2	2					

## Auto louver grille kit

UTD-GXTA-W/UTD-GXTB-W/UTD-GXTC-W

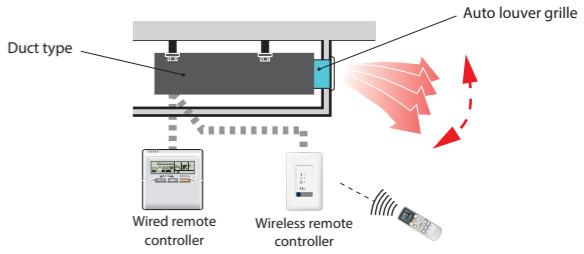


The optional clean-looking flat Auto louver grille kit blends into any interior and provides a comfortable airflow.

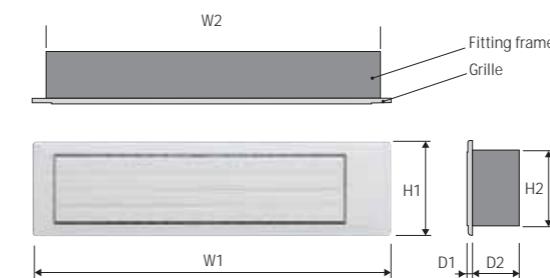


### Flexible Control

- The Auto louver grille of the indoor unit can be operated in conjunction with the remote control of the indoor unit.
- Vertical auto swing**
  - Auto airflow direction and auto swing
  - 4 steps selectable
- Auto-closing louver**  
The louvers will automatically close when the indoor unit stops operating.



### Dimensions



Unit: mm						
Model name	W1	W2	H1	H2	D1	D2
UTD-GXTA-W	683	645				
UTD-GXTB-W	883	845	180	148	9	84
UTD-GXTC-W	1,083	1,045				

### Specifications

Model name		UTD-GXTA-W	UTD-GXTB-W	UTD-GXTC-W
Applicable indoor unit		ARHG07/09LLTA ARHG12/14LLTB ARXG09/12/14KLLAP ARHG07/09/12/14LSLAP ARXD007/009/012/014GLEH (for VRF) ARXK004/007/009/012/014GLEH (for VRF) ARXD04GALH (for VRF)	ARHG18LLTB ARXG18KLLAP ARHG18LSLAP ARXD018GLEH (for VRF) ARXK018GLEH (for VRF)	ARXD024GLEH (for VRF) ARXK024GLEH (for VRF)
Power supply		Connecting with Control box of indoor unit		
Fixing Auto louver grille		Screwed to Flange or Square duct		
Extension Square duct limit		1.0 m (Max. duct length between indoor unit and Auto louver grille)		
Net Dimensions (H × W × D)	mm	180 × 683 × (84 + 9)	180 × 883 × (84 + 9)	180 × 1,083 × (84 + 9)
Weight	Net kg (lbs)	2.0 (4.4)	2.5 (5.6)	3.0 (6.7)
	Gross	3.0 (6.7)	3.5 (7.8)	4.0 (8.9)
Color		White		
Louver motor		Stepping motor		
Accessories		Fitting Flame, etc.		
Operating range	Cooling	°C	18 to 32	
	% RH		80 % or less	
	Heating	°C	16 to 30	

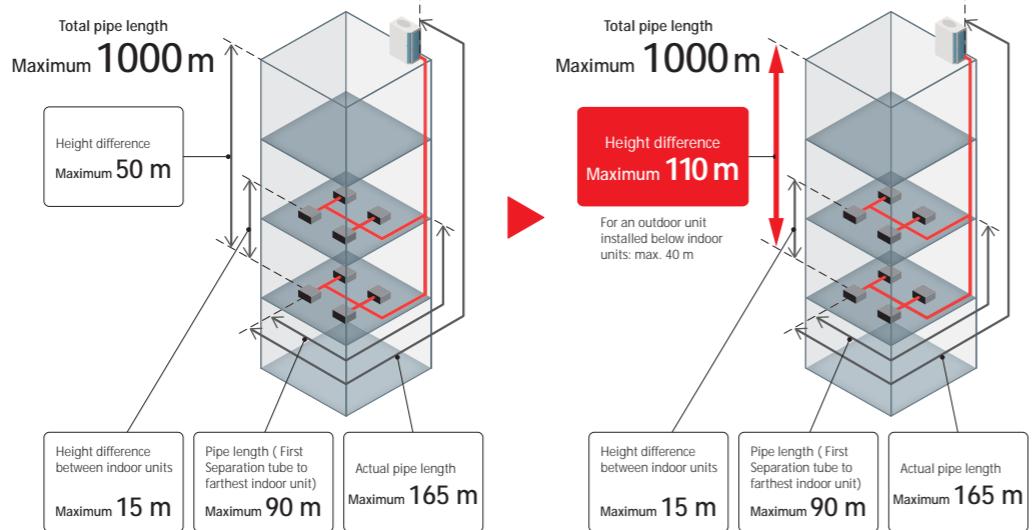
## Pressure sensor kit

UTY-SPWX

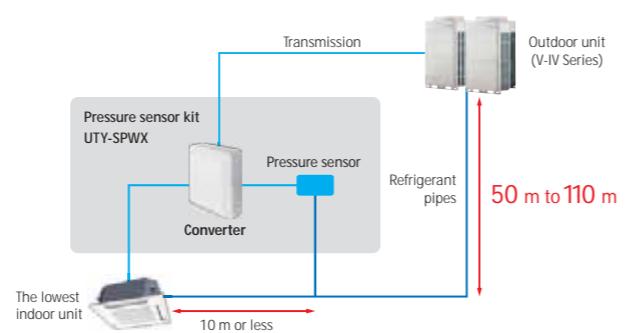


### Design flexibility

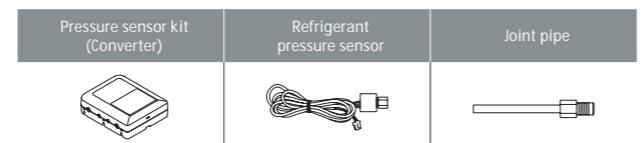
The height difference between the outdoor unit and the indoor unit is normally 50 m for the V-IV Series, but can be extended to 110 m by installing the Pressure sensor kit.  
(Can only be connected to the V-IV Series. Also, it can only be connected to outdoor units using outdoor unit software compatible with the product.)



### System overview



### Pressure sensor kit



### Specifications

Model name	UTY-SPWX
Power supply	9 to 16 V DC
Dimensions (H × W × D) (mm)	140 × 117 × 43
Weight (g)	200

## External power supply unit

UTZ-GXXA / UTZ-GXXC

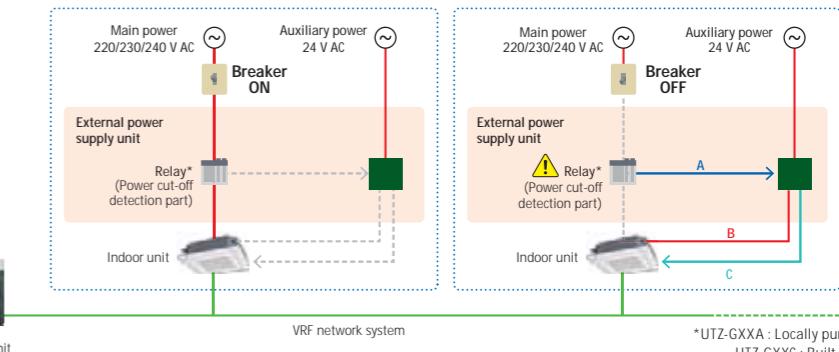


The External power supply unit protects the increment in the system even if the power supply for some of the indoor units is shut down.

Connects to the External power supply unit to supply power to the indoor unit from the auxiliary power supply. This allows for continuous operation without system errors. Built-in relays reduce installation time and cost. The UTZ-GXXC has a built-in relay, which reduces installation time and cost.

### High reliability

- A: Interruption of the main power supply is detected by the power cut-off detection part.
- B: Supplies power for driving the expansion valve of the indoor unit. (12 V or 5 V DC)
- C: Gives notification of the power supply from the External power supply unit.



### Note

- When changing the power supply voltage to 24 V AC, use a power transformer with an insulated structure that complies with the regulations\* of the installation region.
- A powered-off indoor unit driven by the External power supply unit is treated in the same way as an operation-off unit in the electricity charge appointment function. If standby power is generated, the result of the electricity charge appointment may not be zero.

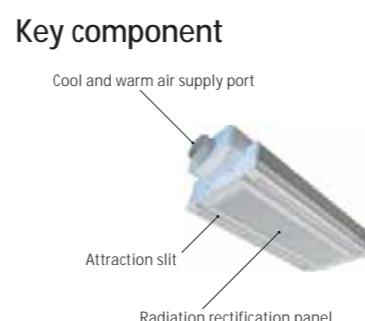
\* UL Class II or IEC 61558 Class III, for example.

### Specifications

Model name	UTZ-GXXA	UTZ-GXXC
Power supply	24 V AC 50/60 Hz	
Dimensions (H × W × D) (mm)	97 × 200 × 178	
Weight (g)	800	

## AIR BEAM Radiation air outlet unit

\*Production by order  
Contact us for more details.



Airflow rate (m³/h)	180 (160-215)	270 (240-325)
Grid	600 × 2	600 × 3
AIR BEAM For system ceiling (Integrated type)	KS-180	KS-270

## Optional parts list for Split/Multi-split



Type	Refrigerant	Indoor unit								Indoor unit					Multi-split			
		Cassette		Duct				Big	Floor	Ceiling	Wall-mounted	Multi-split						
		4-way flow Compact	Circular flow	Slim	Medium static pressure (Compact)	Medium static pressure (Standard)	High static pressure					4-way flow Compact cassette	Mini duct	Slim duct	Floor ceiling			
	R32	AUXG 09/12/14/ 18/22/24 KVLA	AUXG 18/22/24/ 30/36/45/54 KRLB	ARXG 09/12/14/18 KLLAP	ARXG 12/14/18/22/ 24/30/36/45/54 KHTAP	ARXG 22/24/30/36/45 KMLA	ARXG45/54KHTB		AGHG 09/12/14 KVCA	ABHG 18/22/24/30/ 36/45/54 KRTA	ASHG 07/09/12 KPCE	AUXG07KVLA	ARXG 07/09/12/14/18 KSLAP	ARXG07KLLAP				
	R410A						ARHG60LHTA	ARHG72/90LHTA				AUHG07/09LVLA	ARHG07/09LSAP	ARHG07/09LLTA	ABHG14LVTA			
Occupancy sensor kit			● UTY-SHZXC															
Remote sensor unit		The remote sensor provides additional convenience.			● UTY-XSZX			● UTY-XSZX					● UTY-XSZX					
Cassette grille		● UTG-UFGF-W  ● UTG-UKGA-W  ● UTG-UFQD-W  ● UTG-UKGC-W  ● UTG-UKGA-B	● UTG-UFGF-W	● UTG-UKGA-W, UTG-UKGC-W, UTG-UKGA-B								● UTG-UFGF-W (KVLA), UTG-UFQD-W (LVLA)						
Auto louver grille kit				● UTD-GXTA-W (09/12/14) UTD-GXTB-W (18)									● UTD-GXTA-W (07/09/12/14), UTD-GXTB-W (18)					
Long-life filter					● UTD-LFNA (36/45/54) UTD-LFNB (18/22/24/30) UTD-LFNC (12/14)	● UTD-LF25NA	● UTD-LF60KA (45/54)		● UTD-LFKA									
Flange						● UTD-SF045T UTD-RF204												
Drain pump unit						● UTZ-PX1NBA		● UTZ-PX1NAB		● UTZ-PX1NAB		● UTR-DPB24T						
Wide Panel			● UTG-AKXA-W															
Panel spacer				● UTG-BKXA-W														
Fresh air intake kit	For Compact cassette For Cassette type	● UTZ-VXAA	● UTZ-VXRA									● UTZ-VXAA						
Air outlet shutter plate	For Compact cassette For Cassette type	● UTR-YDZB	● UTR-YDK									● UTR-YDZB						
Insulation kit for high humidity	For Compact cassette Series/ Cassette type	● UTZ-KXGC	● UTZ-KXRA									● UTZ-KXGC						
Half concealed kit	Used to half conceal a floor type indoor unit in the wall.							● UTR-STA										
L-type piping kit		● J							● UTP-FX24A (18/22/24) UTP-FX35A (30/36/45/54)									

## Optional parts list for VRF



Type	Refrigerant	Indoor unit														Indoor unit						Outdoor unit V-IV Series
		Cassette				Duct						Duct		Floor		Wall-mounted						
		One-way flow	3D flow	Compact grid type/ Standard type	Slim type	Large type	Low static pressure duct		Medium static pressure	High static pressure		-	external EEV	Floor/Ceiling	Ceiling	-	external EEV	-	-	-		
	AUXV 004/007/009/ 012/014/018/ 024GLEH	AUXS 018/024GLEH	AUXB 004/007/009/ 012/014/018/ 024GLEH	AUXM 018/024/030 GLEH	AUXK 018/024/030/ 034/036/045/ 054GLEH	ARXK 004/007/009/ 012/014/018/ 024GLGH	ARXD 007/009/012/ 014/018/024 GLEH	ARXD 04GALH	ARXA 024/030/ 036/045 GLEH	ARXC 036/045/060 GTEH	ARXC 072/090/096 GTEH	AGHA 004/007/ 009/012/014 GCGH	AGHE 004/007/ 009/012/014 GCEH	ABHA 012/014/ 018/024 GTEH	ABHA 030/036/ 045/054 GTEH	ASHA 004/007/009/ 012/014 GCH	ASHE 004/007/009/ 012/014 GCEH	ASHA 18/24GBCH	ASHA 030/034GTEH	AJH 072/090/108/ 126/144/162 LALDH		
Occupancy sensor kit						UTY-SHZXC																
Remote sensor unit							UTY-XSZX			UTY-XSZX												
Cassette grille		UTG-USGA-W UTG-UNGA-W UTG-UKGC-W UTG-UFGC-W UTG-UKYA-B UTG-UFCC-W	UTG-USGA-W UTG-UNGA-W UTG-UKGC-W																			
Auto louver grille kit							UTD-GXTA-W, UTD-GXTB-W (18), UTD-GXTC-W (24)															
Long-life filter										UTD-LF25NA	UTD-LF60KA											
Flange										UTD-SF045T UTD-RF204									UTD-RF204			
Drain Pump Unit										UTZ-PX1NBA										UTR-DPB24T		
Wide Panel						UTG-AKXA-W																
Panel spacer						UTG-VXAA		UTG-VXRA														
Fresh air intake kit*1				UTZ-VXAA		UTZ-VXRA																
Air outlet shutter plate:				UTR-YDZB		UTR-YDK																
Insulation kit for high humidity				UTZ-KXGC		UTZ-KXRA																
Half concealed kit																UTR-STA						
External power supply unit						UTZ-GXA UTZ-GXC						UTZ-GXA UTZ-GXC									UTZ-GXA UTZ-GXC	
Pressure sensor kit																						UTZ-SPWX

# Function list for Split/Multi-split



External input and output function/External connect kit/communication kit

Type	Refrigerant	Indoor unit										Indoor unit				Multi-split				Outdoor unit												
		Wall-mounted				Cassette		Duct				High static pressure		Big		Floor	Ceiling	Wall-mounted	Mini duct	Slim duct	Compact cassette	Single split	Single phase	Simultaneous multi-split								
		Designer Series		Standard Series		ECO Series		Compact 4-way flow Series	Circular flow	Slim	Medium static pressure (Compact)	Medium static pressure (Standard)	AUXG 0/9/18/24/30/36/45/54KVA	ARXG 0/9/18/22/24/30/36/45/54KVA	ARHG 22KMLB 12/14/18/22/24/30/36/45/54KHLB	ARHG 45/48KHTB	ARHG 0/9/12/14 KVCA	ARHG 12/14/18/22/24/30/36/45/54KRTA	ASHG 0/9/12/14 KVCE	ARXG 0/9/12/14 KSLAP	ARHG 0/9/12/14 KHLA	AUXG 0/9/12/14 KVLB	ARHG 0/9/12/14 KRTA	AUHG 36/45/54 KRTA	AUHG 36/45/54 KHLA	AUHG 36/45/54 KHLB	AUHG 36/45/54 KHTB	AUHG 36/45/54 KTA				
Indoor	R32	ASHG 07/09/12/14 KGTE	ASHG 07/09/12/14 KEIE	ASHG 07/09/12/14 KMCE	ASHG 18/24KMT	ASHG 30/36KMTB	ASHG 07/09/12 KPC	ASHG 18/24KLCA	AUXG 0/9/18/24/30/36/45/54KVLB	AUXG 0/9/18/22/24/30/36/45/54KRLB	ARXG 09/12/14/18 KVLB	ARXG 24/30/36/45/54KRLA	ARHG 22KMLB 12/14/18/22/24/30/36/45/54KHLB	ARHG 45/48KHTB	ARHG 60LHTA	ARHG 72/90LHTA	UTD-ECSA	UTY-XCSX	UTY-XCSX	UTY-XCSX	UTY-XCSX	UTY-XCSX	UTY-XCSX	UTY-XCSX	UTY-XCSX	UTY-XCSX	UTY-XCSX	UTY-XCSX	UTY-XCSX	UTY-XCSX		
Indoor	R410A																															
Indoor	Operation/Stop	● ○ UTY-XCSXZ2+ UTY-XWZX		● ○ UTY-XCSXZ2+ UTY-XWZX5							PCB Terminal or ○ UTY-XCSX+ UTY-GXRA	PCB Terminal or ○ UTY-XCSX+ UTY-GXRA	PCB Terminal	PCB Terminal or ○ UTY-XCSX+ UTY-GXNA	PCB Terminal	PCB Terminal or ○ UTY-XCSX+ UTY-GXA	● ○ UTD-ECSA	● ○ UTY-XCSX	● ○ UTY-XCSX	● ○ UTY-XCSX	● ○ UTY-XCSX	● ○ UTY-XCSX	● ○ UTY-XCSX	● ○ UTY-XCSX	● ○ UTD-ECSA	● ○ UTY-XCSA	● ○ UTY-XCSA	● ○ UTY-XCSA	● ○ UTY-XCSA	● ○ UTY-XCSA	● ○ UTY-XCSA	● ○ UTY-XCSA
Indoor	Group stop																											● ○ UTY-XWZX3				
Indoor	Forced stop	● ○ UTY-XCSXZ2+ UTY-XWZX		● ○ UTY-XCSXZ2+ UTY-XWZX5						PCB Terminal	PCB Terminal	PCB Terminal	PCB Terminal	PCB Terminal	PCB Terminal	PCB Terminal	● ○ UTD-ECSA	● ○ UTY-XCSA	● ○ UTY-XCSA	● ○ UTY-XCSA	● ○ UTY-XCSA	● ○ UTY-XCSA	● ○ UTY-XCSA	● ○ UTY-XCSA	● ○ UTD-ECSA	● ○ UTY-XCSA	● ○ UTY-XCSA	● ○ UTY-XCSA	● ○ UTY-XCSA	● ○ UTY-XCSA	● ○ UTY-XCSA	
Indoor	Emergency stop																											● ○ UTY-XWZX3				
Indoor	Forced Thermostat off	● ○ UTY-XCSXZ2+ UTY-XWZX	● ○ UTY-XCSXZ2+ UTY-XWZX5		● ○ UTY-XCSXZ2+ UTY-XWZX5					● ○ UTY-XCSX+ UTY-GXRA	● ○ UTY-XCSX+ UTY-GXRA	● ○ UTY-XCSX		● ○ UTY-XCSX+ UTY-GXA		● ○ UTD-ECSA	● ○ UTY-XCSX	● ○ UTY-XCSX	● ○ UTY-XCSX	● ○ UTY-XCSX	● ○ UTY-XCSX	● ○ UTY-XCSX	● ○ UTY-XCSX									
Indoor	Low noise mode operation																											● ○ UTY-XWZX3				
Indoor	Cooling/Heating priority																											● ○ UTY-XWZX3				
Indoor	Outdoor unit operation peak control																											● ○ UTY-XWZX2				
Outdoor	Operation status	○ UTY-XCSXZ2+ UTY-XWZX	○ UTY-XCSXZ2+ UTY-XWZX5	● ○ UTY-TWBXF2+ UTY-XWZX2	● ○ UTY-XCSXZ2+ UTY-XWZX5					● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXRA	● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXRA	● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXNA	● ○ UTY-XWZXZG	● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXA	● ○ UTD-ECSA	● ○ UTY-XWZXZG or ○ UTY-XCSX	● ○ UTY-XWZXZ	● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXA	● ○ UTD-ECSA	● ○ UTY-XWZXZG	● ○ UTD-ECSA	● ○ UTY-XWZXZG	● ○ UTD-ECSA	● ○ UTY-XWZXZG								
Outdoor	Error status	○ UTY-XCSXZ2+ UTY-XWZX	○ UTY-XCSXZ2+ UTY-XWZX5	● ○ UTY-TWBXF2+ UTY-XWZX5	● ○ UTY-XCSXZ2+ UTY-XWZX5					● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXRA	● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXRA	● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXNA	● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXA	● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXA	● ○ UTD-ECSA	● ○ UTY-XWZXZG or ○ UTY-XCSX	● ○ UTY-XWZXZ	● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXA	● ○ UTD-ECSA	● ○ UTY-XWZXZG or ○ UTY-XCSX	● ○ UTY-XWZXZ	● ○ UTY-XWZXZG or ○ UTY-XCSX	● ○ UTY-XWZXZ	● ○ UTY-XWZXZG or ○ UTY-XCSX	● ○ UTY-XWZXZ	● ○ UTY-XWZXZG or ○ UTY-XCSX	● ○ UTY-XWZXZ	● ○ UTY-XWZXZG or ○ UTY-XCSX				
Outdoor	Compressor status																											● ○ UTY-XWZXZ				
Indoor	Indoor unit fan operation status	○ UTY-XCSXZ2+ UTY-XWZX	○ UTY-XCSXZ2+ UTY-XWZX5		● ○ UTY-XCSXZ2+ UTY-XWZX5					● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXRA	● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXRA	● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXNA	● ○ UTY-XWZXZG	● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXA	● ○ UTD-ECSA	● ○ UTY-XWZXZG or ○ UTY-XCSX	● ○ UTY-XWZXZ	● ○ UTY-XWZXZG or ○ UTY-XCSX+ UTY-GXA	● ○ UTD-ECSA	● ○ UTY-XWZXZG or ○ UTY-XCSX	● ○ UTY-XWZXZ	● ○ UTD-ECSA	● ○ UTY-XWZXZG or ○ UTY-XCSX	● ○ UTY-XWZXZ	● ○ UTY-XWZXZG or ○ UTY-XCSX	● ○ UTY-XWZXZ	● ○ UTY-XWZXZG or ○ UTY-XCSX	● ○ UTY-XWZXZ				
Indoor	Setpoint attainment status																															
Indoor	Auxiliary heater output																															
Indoor	Base pan heater																											● ○ UTY-XWZX4				

\*1: Included in Fresh air intake kit (UTZ-VXA or UTZ-VXRA) \*2: Functionality for installation in a server room

●: Dry Contact ○: Apply Voltage

## For SPLIT/MULTI-SPLIT/SIMULTANEOUS MULTI-SPLIT

Communication kit	External input and output PCB	External input and output PCB box	External input and output PCB bracket
UTY-TWBXF2 UTY-TWRX2 UTY-TWRX3 UTY-TWRX UTY-XWNX UTY-XCBXZ2	UTY-XCSX1 (wire length 280 mm) UTY-XCSX2 (wire length 80 mm) for Wall-mounted type	UTY-XCSX UTZ-GXXB	UTZ-GXRA (for Cassette) UTZ-GXEA (for Ceiling)
	UTY-XCSX for Duct and Cassette types		UTZ-GXNA

## Communication system

External connect kit
For indoor unit
UTY-XWZX UTY-XWZX5 UTY-XWZXZG
UTY-XWZXZ2 UTY-XWZXZ3 UTY-XWZXZ4

External control set
For indoor unit

# Function list for VRF



## External input and output function/External connect kit

Type	Refrigerant	Indoor unit														Indoor unit					Outdoor unit					controller	Other	
		Cassette				Duct				Floor				Wall-mounted				Floor/Ceiling				J-IVL	J-IV	J-IVS	V-IV	VR-IV	Central remote controller	RB unit
		One-way flow	3D flow	Compact grid type/ Standard type	Slim type	Large type	Low static pressure	Medium static pressure	High static pressure	-	EEV external	Floor/Ceiling				-	EEV external	Floor/Ceiling				J-IVL	J-IV	J-IVS	V-IV	VR-IV	Central remote controller	RB unit
R410A	AUXV 064/007/009/ 012/014/018/ 024GLEH	AUXS 018/024 GLEH	AUXB 004/007/009/ 012/014/018/ 024GLEH	AUXM 018/024/030 GLEH	AUXK 018/024/030/ 034/04/045/ 054GLEH	ARXX 007/009/012/ 014/018/024/ 034/04/045/ 054GLEH	ARXD 007/009/012/ 014/018/024/ 034/04/045/ 054GLEH	ARXA 024/030/ 034/045/ 054GLEH	ARXC 036/045/060 072/090/096 GTEH	AGHA 004/007/ 009/012/014 GCEH	AGHE 004/007/ 009/012/014 GCEH	ABHA 012/014/018/ 024GTEH	ABHA 030/036/045/ 054GTEH	ASHA 004/007/009/ 012/014 GCH	ASHA 018/24GBCH	ASHA 030/034GTEH	AH 072/090/098/ 126/144/162 LELDH	AJH 040/045/054/ 040/045/054 LCLDH	AJH 040/045/054/ 040/045/054 LCLDH	AH 072/090/098/ 126/144/162 LADH	AH 072/090/098/ 126/144 GALDH	072/090/098/ 126/144/162 LADH	072/090/098/ 126/144/162 LADH	UTY-DGGZ2	UTP-RX01AH UTP-RX01CH UTP-RX02AH UTP-RX02CH UTP-RX08AH UTP-RX12AH			
Indo	Operation/Stop	<ul style="list-style-type: none"> <li>● UTY-XWZXZD</li> <li>○ UTY-XWZXZB</li> </ul>														<ul style="list-style-type: none"> <li>● UTY-XWZXZD</li> <li>○ UTY-XWZXZB</li> </ul>												
	All On/All Off																									● UTY-XWZXZ7 ○ UTY-XWZXZ8		
	Group stop																									● UTY-XWZXZ6		
	Forced stop	<ul style="list-style-type: none"> <li>● UTY-XWZXZD</li> <li>○ UTY-XWZXZB</li> </ul>														<ul style="list-style-type: none"> <li>● UTY-XWZXZD</li> <li>○ UTY-XWZXZB</li> </ul>												
	Emergency stop	<ul style="list-style-type: none"> <li>● UTY-XWZXZD</li> <li>○ UTY-XWZXZB</li> </ul>														<ul style="list-style-type: none"> <li>● UTY-XWZXZ6</li> </ul>				<ul style="list-style-type: none"> <li>● UTY-XWZXZ7 ○ UTY-XWZXZ8</li> </ul>								
	Forced thermostat off	<ul style="list-style-type: none"> <li>● UTY-XWZXZE</li> <li>○ UTY-XWZXZ7</li> </ul>														<ul style="list-style-type: none"> <li>● UTY-XWZXZE</li> <li>○ UTY-XWZXZ7</li> </ul>												
	Low noise mode operation																								● UTY-XWZXZ6			
	Cooling/ Heating priority																								● UTY-XWZXZ6 ○ UTY-XWZXZB			
	Outdoor unit operation peak control																								● UTY-XWZXZ6			
	Power usage information from electricity meter																								● UTY-XWZXZF			
Outd	Operation status	<ul style="list-style-type: none"> <li>● UTY-XWZXZC</li> </ul>														<ul style="list-style-type: none"> <li>● UTY-XWZXZC</li> </ul>				<ul style="list-style-type: none"> <li>○ UTY-XWZXZ6</li> </ul>				○ UTY-XWZXZA				
	Error status	<ul style="list-style-type: none"> <li>● UTY-XWZXZC</li> </ul>														<ul style="list-style-type: none"> <li>● UTY-XWZXZC</li> </ul>				<ul style="list-style-type: none"> <li>○ UTY-XWZXZ6</li> </ul>				○ UTY-XWZXZA				
	Indoor unit fan operation status	<ul style="list-style-type: none"> <li>● UTY-XWZXZC</li> </ul>														<ul style="list-style-type: none"> <li>● UTY-XWZXZC</li> </ul>												
	Auxiliary heater output						<ul style="list-style-type: none"> <li>● UTY-XWZXZC</li> </ul>																					
	Base pan heater																								● UTY-XWZXZ9 ● UTY-XWZXZ9			

\*2: The Touch panel controller has the functions of dry contact and voltage application, but the external connection kit described above is not necessary because the touch panel controller has an external input terminal block.

● Dry Contact ○ Apply Voltage

## Communication system

### External connect kit

For indoor unit	For outdoor unit	For RB unit	Central remote controller	For Touch panel controller
UTY-XWZXZ7	UTY-XWZXZD	UTY-XWZXZ6	UTY-XWZXZ7	UTY-XWZXZA
UTY-XWZXZB	UTY-XWZXZE	UTY-XWZXZ9	UTY-XWZXZ8	UTY-XWZXZA
UTY-XWZXZC	UTY-XWZXZF	UTY-XWZXZB	UTY-XWZXZA	UTY-XWZXZA

# Separation tube

## For SPLIT/MULTI-SPLIT/SIMULTANEOUS MULTI-SPLIT

Separation tube	Branch box
UTP-SX236A/UTP-SX254A For 3-phase simultaneous multi-split	UTP-SX354A For 3-phase simultaneous multi-split
UTP-SX272A For Simultaneous multi-split Twin/ Triple/Double Twin	UTP-SX372A For Simultaneous multi-split Twin/ Triple/Double Twin



## for VRF

Separation tube	UTP-AX054A	UTP-AX090A	UTP-AX180A	UTP-AX567A
Gas pipe				
Liquid pipe				
UTP-BX090A	UTP-BX180A	UTP-BX567A	UTP-LX180A For DX kit	
Suction Gas pipe				
Discharge Gas pipe				
Liquid pipe				



## for VRF

EV kit
Model name $\leq 09$ : UTR-EV09XB Model name $\geq 12$ : UTR-EV14XB for compact wall-mounted type



## RB unit

UTP-RX01AH/UTP-RX01BH/ Single type	UTP-RX04BH Multi-split type	UTP-RX08AH Multi-split type	UTP-RX12AH Multi-split type
UTP-RX01CH			
Single type			

## Specifications

### Separation tube

Model name	UTP-AX054A	UTP-AX090A	UTP-AX180A	UTP-AX567A
Total cooling capacity of indoor unit (kW)	19.6 or less	28.0 or less	28.1 to 56.0	56.1 or more

### Header

Model name	3-6 Branches	UTR-H0906L	UTR-H1806L
3-8 Branches		UTR-H0908L	UTR-H1808L
Total cooling capacity of indoor unit (kW)		28.0 or less	28.1 to 56.0
Model name	3-6 Branches	UTP-J0906A	UTP-J1806A
Model name	3-8 Branches	UTP-J0908A	UTP-J1808A
Total cooling capacity of indoor unit (kW)		28.0 or less	28.1 to 56.0

### Outdoor unit branch kit

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

### EV kit

Model name	UTR-EV09XB		UTR-EV14XB	
Application model	ASHE004GCEH ASHE007GCEH ASHE009GCEH	AGHE004GCEH AGHE007GCEH AGHE009GCEH	ASHE012GCEH ASHE014GCEH	AGHE012GCEH AGHE014GCEH

### RB unit

Type	Single type			Multi-split type		
Model name	UTP-RX01AH	UTP-RX01BH	UTP-RX01CH	UTP-RX04BH	UTP-RX08AH	UTP-RX12AH
Power source	V/Ø/Hz			230/1/50		
Input power	W	17	24	31	96	136
Number of branches		1	1	1	4	8
Maximum capacity of connectable indoor units (Q)	kW	$Q \leq 8.0$	$Q \leq 18.0$	$Q \leq 28.0$	$Q \leq 56.1^*$	$Q \leq 72.0$
Maximum capacity of connectable indoor units per branch (Q)	kW	$Q \leq 8.0$	$Q \leq 18.0$	$Q \leq 28.0$	$Q \leq 18.0$	$Q \leq 8.0$
Maximum Connectable Indoor Units per Branch		3	8	8	8	7
Dimensions (H × W × D)	mm	198 × 298 × 268			260 × 658 × 428	298 × 660 × 618

\*1: When two RB units are connected in series (8 branches in total), the maximum capacity of the connectable indoor units is up to 56.0 kW.