



CONTROL SYSTEM & OPTIONAL PARTS



Fujitsu offers 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

- 190 Wired Remote Controller (Touch Panel)
- 190 Wired Remote Controller Compact Wired Remote Controller
- 191 Simple Remote Controller

CONVERTOR/ADAPTOR

- 192 MODBUS® Convertor
- KNX® Convertor
- 193 Wireless LAN Interface
- 195 External Switch Controller



INDIVIDUAL CONTROL

- 194 Wired Remote Controller
- 195 Wireless Remote Controller
- 196 IR Receiver Unit

CENTRALISED CONTROL

- 197 Central Remote Controller

CONVERTOR/ADAPTOR

- 198 MODBUS® Interface
- KNX® Interface
- 199 Wireless LAN Interface
- 200 Network Convertor for Single Split



INDIVIDUAL CONTROL

- 201 Wireless Remote Controller IR Receiver Unit For Duct, Cassette

CENTRALISED CONTROL

- 202 Central Remote Controller
- 204 System Controller **Software**
- System Controller Lite **Software**

CONVERTOR/ADAPTOR

- 208 BACnet® Gateway **Software**
- 209 BACnet® Gateway **Hardware**
- Network Convertor for LONWORKS®
- 210 MODBUS® Convertor
- KNX® Convertor
- 211 Signal Amplifier

OPTIONAL PARTS



- 214 Auto Louvre Grille Kit
- 215 External Power Supply Unit
-
- 216 Optional Parts List
- 218 Function List
- 220 Separation Tube etc.
-
- 222 Service Tool
- 223 Web Monitoring Tool
-
- 224 Leak Detection



SPLIT



MULTI-SPLIT



VRF J Series



VRF V Series

Wired Remote Controller (Touch Panel)

UTY-RNRYZ3

SPLITS/MULTI/VRF



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

- Easy finger touch operation with LCD panel
- Built-in weekly/daily timer (ON/OFF, Temp., Mode)
- Backlight enables easy operation in a darkened room
- Room temperature display
- Control up to 16 indoor units
- Corresponds to 12 different languages (English, Chinese, French, German, Spanish, Russian, Polish, Italian, Greek, Portuguese, Turkish and Dutch)
- 2-wire type

Max. Controllable

16 indoor units

Max. Controllable

1 Group

High performance and compact size

In addition to the individual control, weekly timer, and various energy saving controls can be realised using one remote controller only.



Specifications

Model name	UTY-RNRYZ3
Power Source	DC 12 V
Dimensions (H × W × D) (mm)	120 × 120 × 20.4
Weight (g)	220

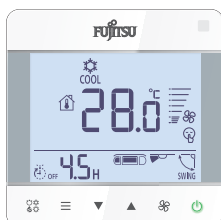
DC 12 V is supplied by the indoor unit.

Compact Wired Remote Controller

UTY-RCRYZ1

SPLITS/MULTI/VRF

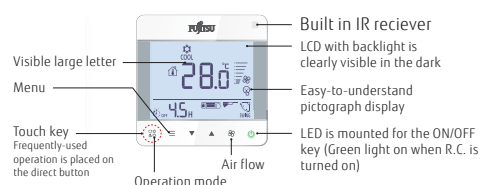
NEW



- Simple design to match the stylish interior
- Easy to install : Body of controller is designed to fit in European standard junction box
- Can be operated both by wireless and wired remote controller.
- 2-wire type

Large screen and simple display

- Although the size is compact, the screen is large
- Large letters makes it easy to see
- Operation is simple and easy-to-understand



Max. Controllable

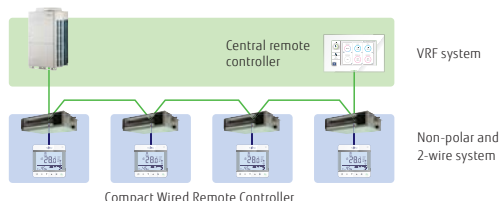
1 single indoor unit

Max. Controllable

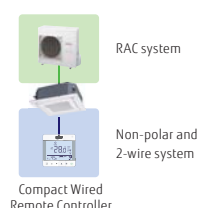
1 Group

System overview

VRF connection



RAC connection



Specifications

Model name	UTY-RLRY	UTY-RCRYZ1
Power Source	DC 12 V	DC12V
Dimensions (H × W × D) (mm)	120 × 120 × 17	86 × 86 × 44
Weight (g)	170	135

DC 12 V is supplied by the indoor unit.

Simple Remote Controller

UTY-RSRY / UTY-RHRY (Without operation mode)

SPLITS/MULTI/VRF



UTY-RSRY

UTY-RHRY
(Without
operation mode)

Compact remote controller provides access to basic functions

- Up to 16 indoor units can be controlled with one remote controller.
- Suitable for hotels or offices as it is easily operated with no complex functions.
- Stylish design: Simple design to match the stylish interior.
- Large LCD screen & simple operation buttons
- Backlight: White coloured backlight on monitor enable easy operation in dark.
- 2-wire type

Max. Controllable

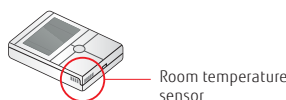
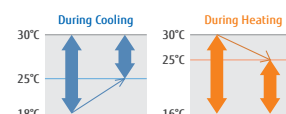
16 indoor units

Max. Controllable

1 Group

Corresponding to various applications

- **Vertical louvre control:** Vertical air flow direction can be adjusted for Duct types with auto louvre and Cassette types, which are installed in hotels and conference rooms, can be adjusted.
- **Room temperature set point limitation:** The Simple Remote Controller can manage to energy saving operation in small buildings without the central control unit.
- **Built in room temperature sensor:** The Simple Remote Controller detects actual room temperature and controls room climate accuracy.



Simple Remote Controller

UTY-RSNYM, UTY-RSKY/UTY-RHKY (Without operation mode)

SPLITS/MULTI/VRF



UTY-RSNYM
UTY-RSKY

UTY-RHKY
(Without
operation mode)

Compact remote controller provides access to basic functions

- Up to 16 indoor units can be controlled with one remote controller.
- Suitable for hotels or offices as it is easily operated with no complex functions.
- Backlight enables easy operation in a darkened room.
- 3-wire type

Max. Controllable

16 indoor units

Max. Controllable

1 Group

Easy-to-use operation

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

Specifications

Model name	UTY-RSRY	UTY-RHRY	UTY-RSNYM, UTY-RSKY	UTY-RHKY
Power Source	DC 12 V	DC 12 V	DC 12 V	DC 12 V
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

DC 12 V is supplied by the indoor unit.

MODBUS® Convertor for Indoor Unit

UTY-VMSX

SPLITS/MULTI/VRF

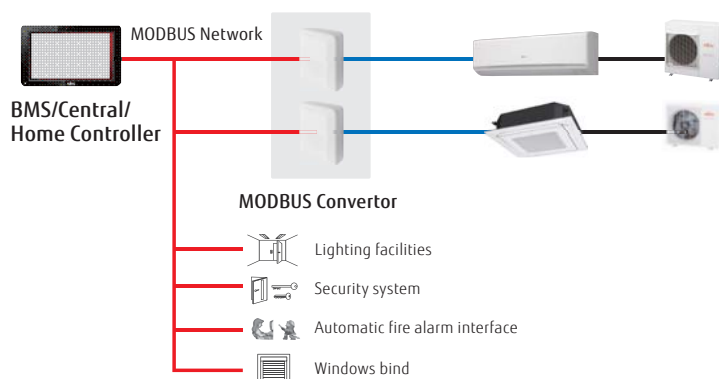


Max. Connectable

1 Single indoor unit

The MODBUS Convertor allows a complete integration of air conditioners into MODBUS Networks.

- Simple installation due to small and compact size.
- No separate external power supply required.
- The MODBUS Convertor must be connected one by one within the indoor unit.
- The MODBUS Controller permits central monitoring and control of air conditioners from BMS/Central/Home Controller.

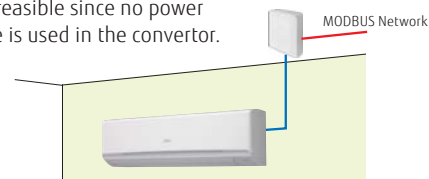


Basic control

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

Easy Installation

Flexible installation locations with neat wirings are feasible since no power supply cable is used in the convertor.



KNX® Convertor for Indoor Unit

UTY-VKSX

SPLITS/MULTI/VRF

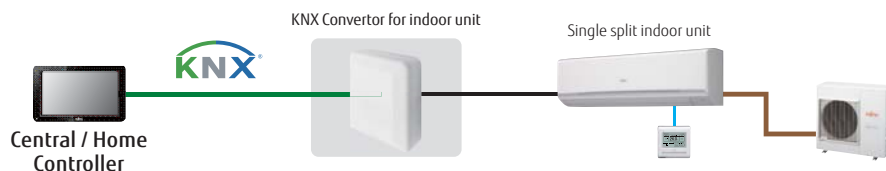


Max. Connectable

1 Single indoor unit

KNX Convertor is useful for individual control of indoor.

- New KNX Convertor enables to connect central/home controller and Fujitsu General indoor unit.
- Compact and light weight design



Specifications

Model name	UTY-VMSX
Power supply	DC 12 V
Input Power (W)	Max. 1.2
Dimensions (H×W×D)(mm)	140 × 117 × 43
Weight (g)	200
Maximum Connectable indoor unit number per 1 MODBUS Convertor	1

Modbus communication specifications

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

Model name	UTY-VKSX
Power supply	DC 12 V
Power consumption (W)	0.6
Dimensions (H×W×D)(mm)	140 × 117 × 43
Weight (g)	215

Wireless LAN Interface

UTY-TFNXZ1 / UTY-TFSXZ1, UTY-TFSXW1, UTY-TFSXF2

SPLITS/MULTI/VRF



USB type for single split models
UTY-TFSXF2



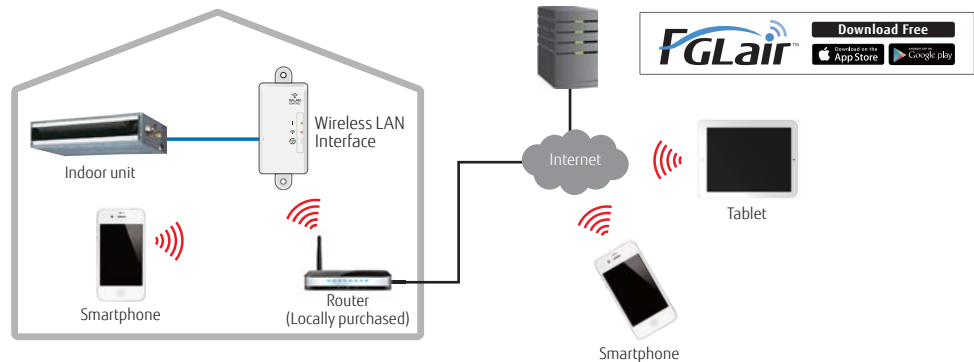
UTY-TFNXZ1
UTY-TFSXZ1

UTY-TFSXW1

Max. Connectable

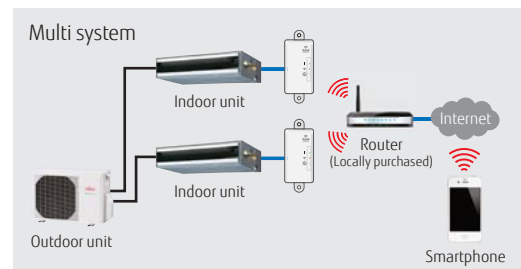
1 Single indoor unit

- Allows users to remotely manage an Air Conditioning system using all sort of mobile devices such as Smartphones, and tablets.
- No separate external power supply required
- Can be used for single indoor units and multi system indoor units



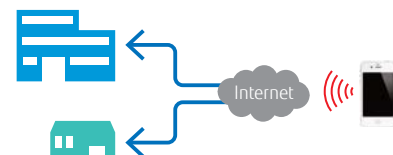
Basic control

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



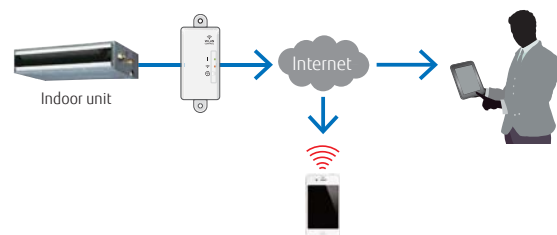
Multiple air conditioning management

- Multiple air conditioning management at difference locations.



Error display & E-mail notification

- Alerts e-mail notification
- Air conditioning malfunction display
- It enables rapid service response when error occurs.



Wireless LAN Interface (USB type) UTY-TFSXF2

New compact USB type is available. Specialised installation work is not required and it can be installed to indoor unit easily.



Specifications

Model name	UTY-TFNXZ1 / UTY-TFSXZ1	UTY-TFSXW1	UTY-TFSXF2
Dimensions (H × W × D) (mm)	71 × 38 × 15	71 × 38 × 15	56.7 × 34 × 9.72
Weight (g)	35	35	30

Wired Remote Controller

UTY-RVNYM

SPLITS/MULTI



Hi-grade individual control using various functions.

- 3.7-inch LCD backlight screen.
- Supporting various Energy Saving functions with simple operation.
- Multiple Language Support.
(English, German, French, Spanish, Russian, Portuguese, Italian, Greek, and Turkish)

High visibility and Easy operation

- Icon display of effectual functions.
- Main functions in large icons: "Mode", "Set Temp", and "Fan".
- Easy to operate by Control guide display.
- Simple operation with easy 4-way navigation pad.



- Icon display (weekly time)
- Set temperature
- Control guide display

Max. Controllable

16 indoor units

Max. Controllable

1 Group

High performance and compact size

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



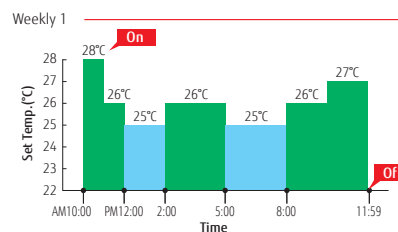
Various energy saving control

Weekly Timer function

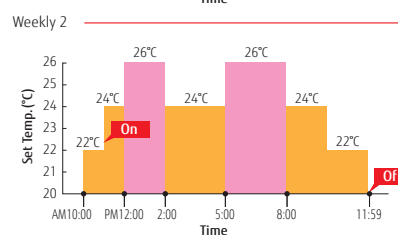
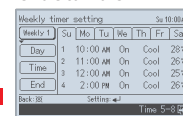
- Can be set up to 8 times per day (On/Off, mode, Temp)
- 2 pattern settings (i.e. Summer/Winter setting) are available.

Auto OFF Timer

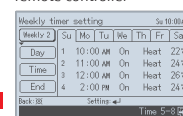
- Set Temperature Auto Return
- Set Temperature Upper and Lower Limit Setting



Setting menu in remote controller



Setting menu in remote controller



Specifications

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

DC 12 V is supplied by the indoor unit.

External Switch Controller

UTY-TERX

SPLITS/MULTI/VRF



Max. Controllable
1 group

Air conditioner switching can be controlled by connecting other sensor switches

- In combination with a field supply Card-Key Switch or other sensor, the External Switch Controller allows control of the ON / OFF, Room temperature, Fan speed and Master control functions. This makes this product suitable for installations such as hotel rooms.
- Card-key or other sensor switches are available as a locally purchased parts.
- The set temperature can be specified at two points for cooling and heating individually (4 points).



Specifications

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

DC 12 V is supplied by the indoor unit.

Wireless Remote Controller

UTY-LNTY

SPLITS/MULTI



Max. Controllable
16 indoor units

Max. Controllable
1 Group

Selectable
4 daily timers

Simple and sophisticated operations with a choice of 4 daily timers

- A single controller controls up to 16 indoor units.

Built-in timers

4 timer programs: On / Off / Program / Sleep

Program timer: Operates ON/OFF timer once within 24 hours

Sleep timer: Corrects the set temperature automatically during sleep time

Easy installation and operation

Code selector switch prevents indoor unit mix-up (up to 4 codes)

Wide and precise transmitting range

Specifications

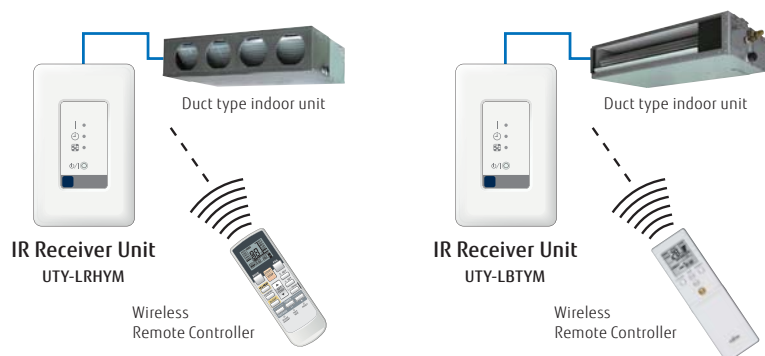
Model name		UTY-RNNYM	UTY-LNTY
Power Source		DC 12 V	DC5V
Dimensions (H × W × D) (mm)		120 × 120 × 18	145 × 90 × 30
Weight (g)		160	150

DC 12 V is supplied by the indoor unit.

IR Receiver Unit for Duct

UTY-LRHYM, UTY-LBTYM

SPLITS/MULTI



Duct type indoor units can be controlled with Wireless Remote Controller

IR Receiver Unit for Cassette

UTY-LRHYA2, UTY-LBTYC

SPLITS/MULTI

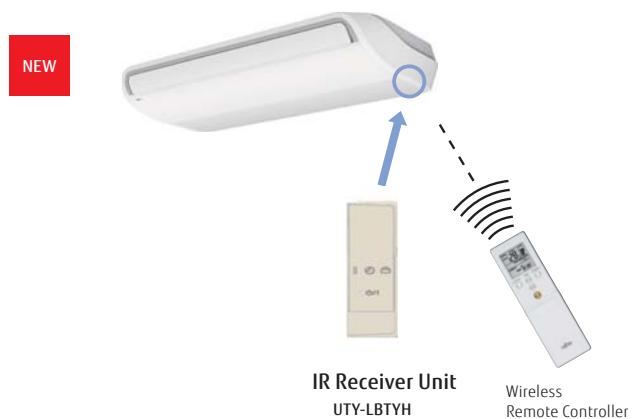


Cassette type indoor unit can be controlled with Wireless Remote Controller

IR Receiver Unit for Ceiling

UTY-LBTYH

SPLITS/MULTI



Ceiling type indoor unit can be controlled with Wireless Remote Controller

Specifications

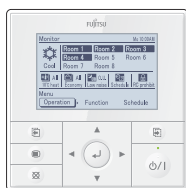
Model name		UTY-LRHYM	UTY-LBTYM	UTY-LRHYA2	UTY-LBTYC	UTY-LBTYH
Battery		DC5V	DC5V	DC5V	DC5V	DC5V
Dimensions (H × W × D) (mm)		145 × 90 × 30	145 × 90 × 30	193.9 × 193.9 × 31.2	193.9 × 193.9 × 31.2	174.8 × 48.6 × 23.1
Weight (g)		150	150	140	140	TBA

DC 12 V is supplied by the indoor unit.

Central Remote Controller

UTY-DMMYM

MULTI



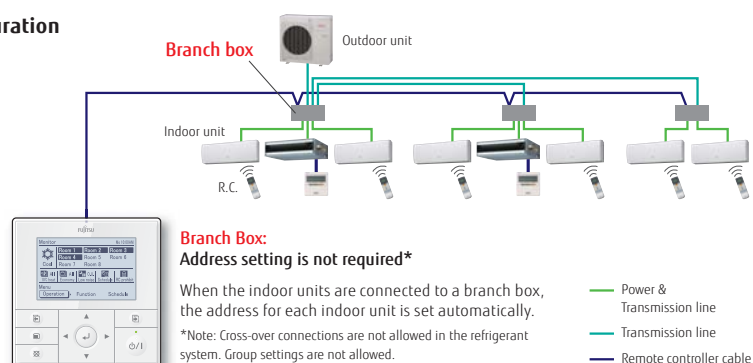
Max. Controllable
1 multi system

Max. Controllable
6 indoor units

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

- Batched control of up to 8 indoor units. The temperature, airflow volume, and remote control prohibition settings of all indoor units can be batched.
- Corresponds to 9 different languages (English, German, French, Spanish, Russian, Portuguese, Italian, Greek, and Turkish)
- Large backlight LED screen
- Large easy-to-see operation panel

System configuration



Central Remote Controller Functions

Weekly schedule timer

The ON/OFF setting can be set for 4 times a day. Two weekly patterns can be set to match the cooling and heating seasons.

Low noise operation

Users can choose from 4 low noise levels, depending on the installation environment. The operation time can be set using the timer.

10°C heat operation

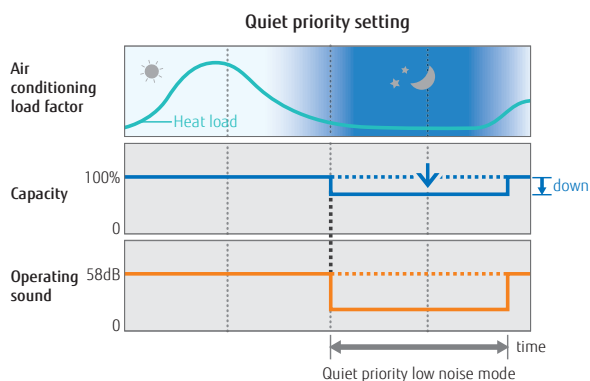
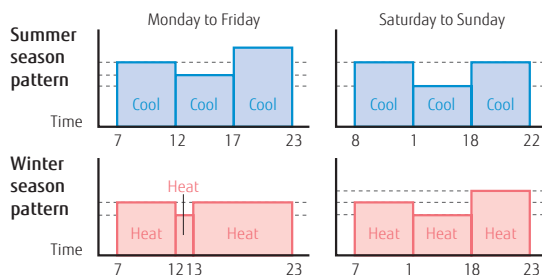
When you leave, minimum heating operation is performed to maintain the room temperature (maintain at 10°C).

Economy operation

Economy operation is energy saving, as the set temperature of indoor unit is shifted by 1°C and the maximum electric value of the outdoor unit is suppressed.

Prohibited Settings

The remote controller operation of all indoor units comes with a lock function to prevent unapproved operations in the various rooms. The central remote controller also has a key lock function to prevent children from playing with it, etc.



Specifications

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

DC 12 V is supplied by the indoor unit.

MODBUS® Interface

FJ-RC-MBS-1

SPLITS/MULTI



The MODBUS Interface allows a complete integration of air conditioners into MODBUS Networks.

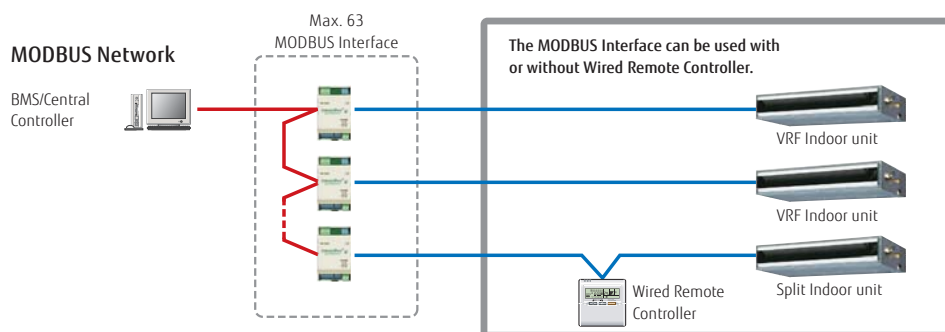
- Simple installation due to small and compact size.
- No separate external power supply required.
- The MODBUS Interface permits central monitoring and control of air conditioners from BMS.

Max. Connectable

1 Single indoor unit

Max. Controllable

1 Group



KNX® Interface

FJ-RC-KNX-1i

SPLITS/MULTI



The KNX Interface allows a complete integration of air conditioners with KNX Network systems.

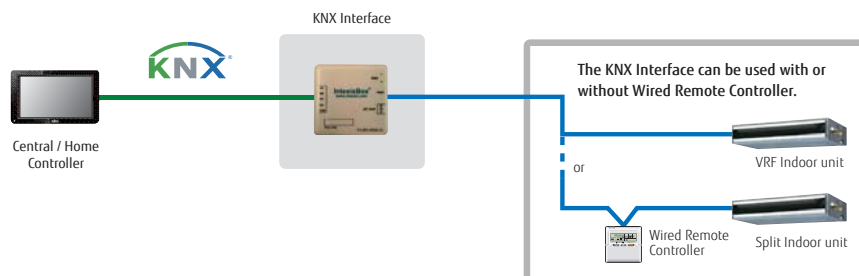
- Simple installation due to small and compact size.
- No separate external power supply required (just KNX bus power).
- Can be used for single indoor unit and group controlled (up to 16) indoor units.

Max. Connectable

1 Single indoor unit

Max. Controllable

1 Group



Specifications

Model name	FJ-RC-MBS-1	FJ-RC-KNX-1i
Dimensions (H × W × D) (mm)	93 × 53 × 58	70 × 70 × 28
Weight (g)	85	70

Wireless LAN Interface

FJ-RC-WIFI-2, FJ-IR-WIFI-1, FJ-AC-WIFI-1

SPLITS/MULTI



Max. Connectable

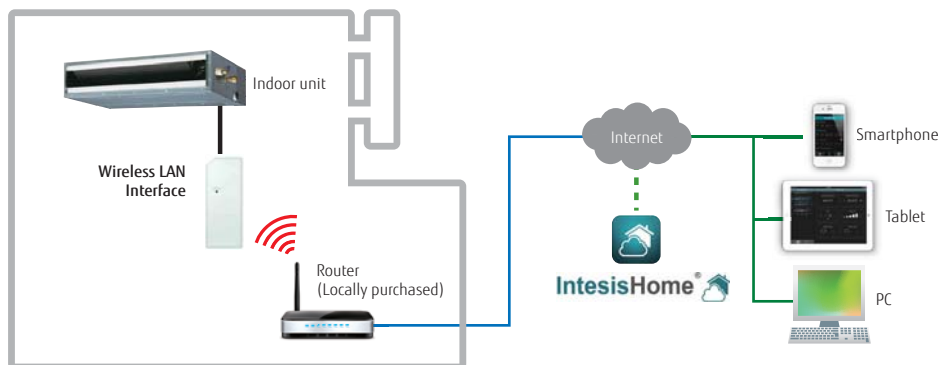
1 Single indoor unit

Max. Controllable

1 Group



- It is the most advanced solution to remotely manage an Air Conditioning system using all sort of mobile devices such as Smartphones, Tablets and PC
- No separate external power supply required
- Can be used for single indoor unit and group controlled (up to 16) indoor units



- **FJ-IR-WIFI-1** - IR version compatible with most AC units with an IR wireless remote controller
- **FJ-RC-WIFI-2** - Compatible with most 3-wire remote controller models
- **FJ-AC-WIFI-1** - Compatible with CN6 / CN65 R410A and R32 models

Basic control

- Alexa, Google, IFTTT Compatible
- Turning the units on and off
- Mode control (Heat, Cool, Dry, Auto, Fan)
- Fan speed setting
- Louvre position (Airflow direction setting)
- Room temperature display
- Set temperature control
- Multi Language
- One Scene and Timer



(Application screen image)

Advanced control (Optional functions)

- Climate working modes (ECO, Comfort, Powerful) (future release)
- Schedule functions (ON/OFF, Modes, Set point temperature, Fan Speed, Louvre position)
- Set temperature limitation (future release)
- Multiple Scenes & Timers and Calendar function

Notifications and history

- Alerts e-mail notification (future release)
- Air conditioning malfunction alerts
- Connectivity monitoring and alerts
- History (future release)

Specifications

Model name	FJ-RC-WIFI-1	FJ-IR-WIFI-1	FJ-AC-WIFI-1
Dimensions (H × W × D) (mm)	108 × 70 × 28		
Weight (g)	80		

Network Converter for Single Split

UTY-VTGX / UTY-VTGXV

SPLITS/MULTI



UTY-VTGX
DC power supply type

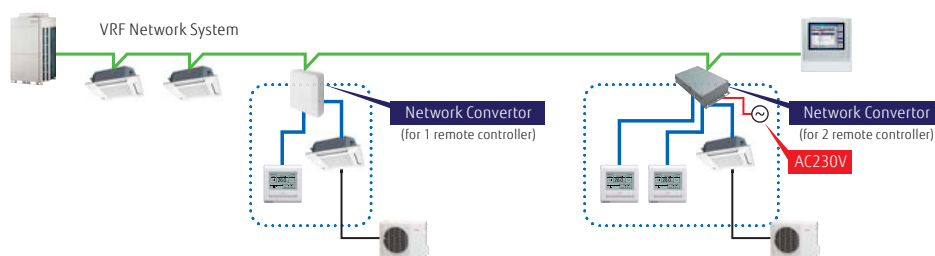


UTY-VTGXV
AC power supply type

- The network converters are required when connecting single split system to VRF network system.
- Compact and light weight design
- Connectable to both types of 2-wire and 3-wire remote controllers

Installation example.

- 2 types of 1 remote controller type and 2 remote controllers type are available.
- Power supply (AC220-240V, 50/60 Hz) is required for 2 remote controllers type.



Max. Controllable

16

single indoor units

Max. Controllable

1

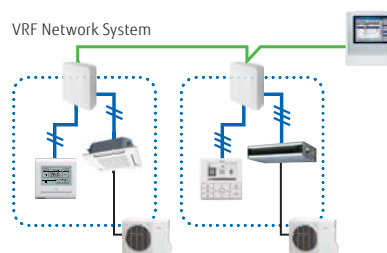
Group

Max. Controllable

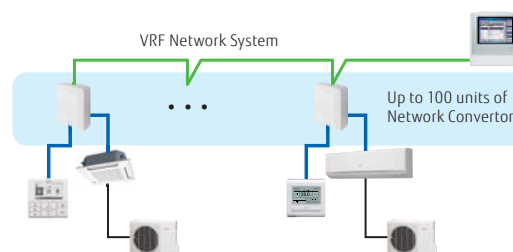
100

Network Convertors

- 2-wire and 3-wire type of the wired remote controller can be connectable.



- A central control can be provided for the single split systems. (Up to 100 units of Network Converter is connectable in one VRF network system)



Specifications

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

Wireless Remote Controller

UTY-LNHY

VRF



Max. Controllable

16 indoor units

Max. Controllable

1 Group

Selectable

4 daily timers

Simple and sophisticated operations with a choice of 4 daily timers

- A single controller controls up to 16 indoor units.

Built-in timers

4 timer programs: On / Off / Program / Sleep

Program timer: Operates ON/OFF timer once within 24 hours

Sleep timer: Corrects the set temperature automatically during sleep time

Easy installation and operation

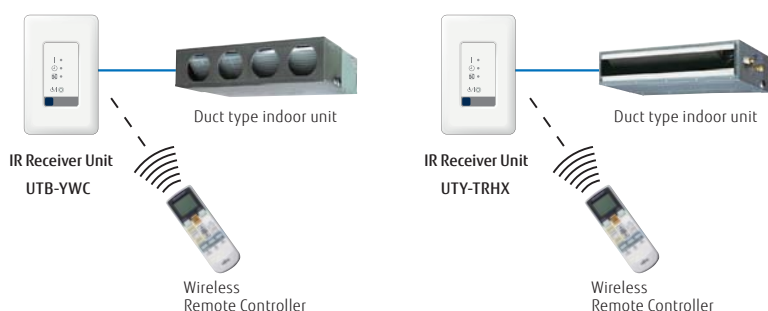
Code selector switch prevents indoor unit mix-up (up to 4 codes)

Wide and precise transmitting range

IR Receiver Unit for Duct

UTB-YWC, UTY-TRHX

VRF



*The wireless remote controller (Model: UTY-LNHY) is necessary separately

Duct type indoor units can be controlled with Wireless Remote Controller

IR Receiver Unit for Cassette

UTY-LRHYB1, UTY-LBH XD, UTY-TRHX

VRF



*The wireless remote controller (Model: UTY-LNHY) is necessary separately

Cassette type indoor unit can be controlled with Wireless Remote Controller

Specifications

Model name	UTY-LNHY	UTB-YWC	UTY-LRHYB1	UTY-LBH XD	UTY-TRHX
Battery	1.5 V (R03 / LR03 / AAA)×2	DC 5 V	DC5V	DC5V	DC 5 V
Dimensions (H × W × D) (mm)	170 × 56 × 19	145 × 90 × 30	193.9 × 193.9 × 31.2	193.9 × 193.9 × 31.2	145 × 90 × 30
Weight (g)	85	150	140	140	150

DC 12 V is supplied by the indoor unit.

Central Remote Controller

UTY-DCGYZ1



For small- and medium-sized buildings and tenants

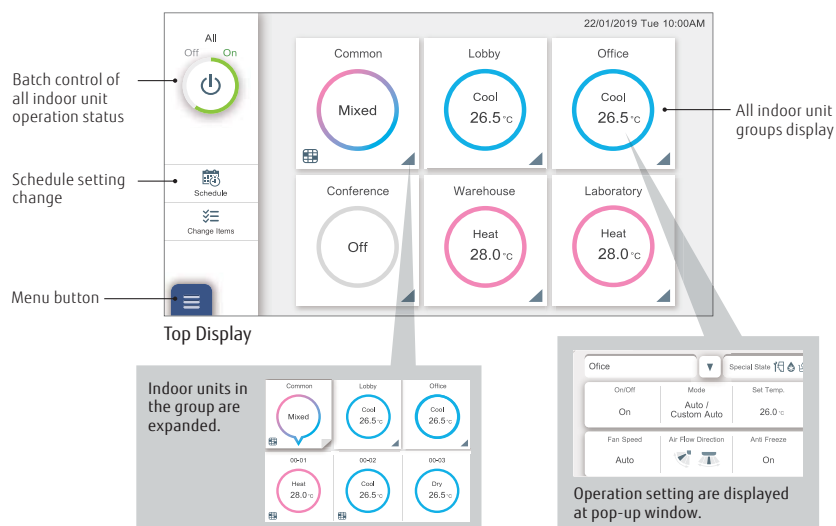
- Individual control and monitor of 100 indoor units
- 7.0inch TFT colour screen
- High visibility and easy operation
- Supports 12 different languages (English, Spanish, German, French, Italian, Russian, Portuguese, Turkish, Polish, Greek, Dutch, Chinese)

Max. Controllable
100 indoor units

Max. Controllable
50 groups

Easy operation

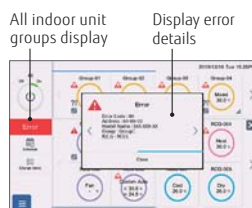
- The new central remote controller realised an intuitive operation feeling by touch panel operation.
- All functions can be accessed from the top display and the following operations are displayed at pop-up window.



Trouble support function

Display error details

Display descriptive explanation when an error occurs



Sensor value monitoring function

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

Notify room temperature by email*

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

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

Remote monitoring / Remote operation

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

Example

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



Specifications

Model name	UTY-DCGYZ1	
Power Supply	100-240 V 50/60 Hz	
Dimensions (H × W × D) (mm)	134.6 × 216.2 × 37.9	
Weight (g)	800	

Touch Panel Controller

UTY-DTGYZ1

VRF



- Large-sized 7.5-inch TFT colour
- LCD Easy finger touch operation
- Stylish shape and design to suit all applications
- Up to 400 indoor units can be controlled
- Selectable 2 display types (Icon / List) in monitoring mode
- Supports 7 different-languages ,English, Chinese, French, German, Spanish, Russian, Polish.
- Mounted with LAN interface for remote control & operation, external input / output with emergency stop and batch ON / OFF

Easy Operation

- Wide range of simple-to-understand icons
- Operation can be selected using your finger or the dedicated touch pen by pressing the appropriate on-screen icon.
- Back colour identifies current control operation blue for monitoring, green for operational control.

Easy maintenance

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

Easy installation

- Touch Panel Controller is easily mounted to the wall.
- Flat back surface allows to be installed wherever it is needed.
- No additional component is required for installation



Max. Controllable
400 indoor units

Max. Controllable
100 outdoor units

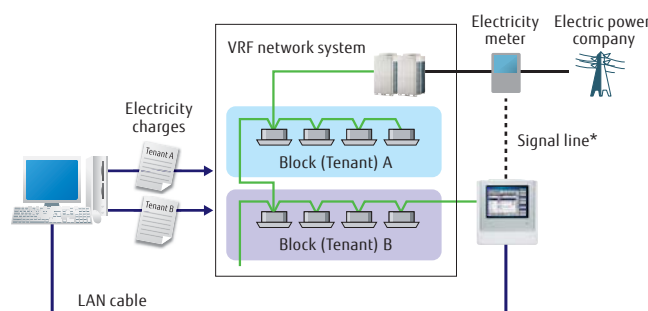
Max. Controllable
400 groups

Electricity charge apportionment

(Option: UTYPGTGA only compatible with UTYDTGYZ1)

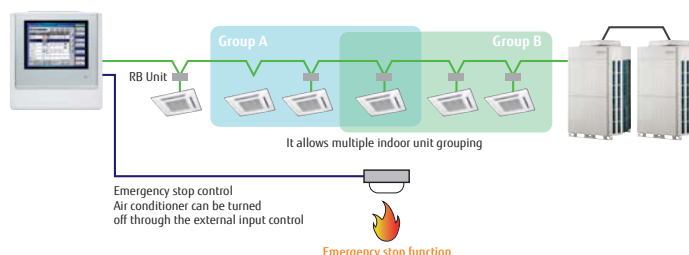
- Electricity charge apportionment can be performed easily for the power consumed when billing users for air conditioning power charges.

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



*: Electricity meter (1unit) can be connected to external input connector of the TPC unit. In this case, electricity meter cannot be connected to outdoor unit simultaneously.

Up to 400 indoor units can be controlled



Specifications

Model name	UTYDTGYZ1
Power Supply	100-240 V 50/60 Hz, Single phase
Dimensions (H × W × D) (mm)	260 × 246 × 54
Weight (g)	2,150
Interface	Transmission/LAN/USB/EXT IN/EXT OUT/Reset SW

System Controller

UTY-APGXZ1 (Software)

Max. Controllable

4 VRF network systems

Max. Controllable

400 outdoor units

Max. Controllable

1,600 indoor units

VRF



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

- Up to a maximum of 4 VRF network systems, 1600 indoor units, and 400 outdoor units can be controlled.
- In addition to air conditioning precision control function, central remote control, electricity charge calculation, schedule management, and energy saving functions are strengthened and building manager and owner needs are met.
- Corresponds to 7 different languages (English, Chinese, French, German, Spanish, Russian, Polish)

System Controller Lite

UTY-ALGXZ1 (Software)

Max. Controllable

1 VRF network systems

Max. Controllable

100 outdoor units

Max. Controllable

400 indoor units

VRF



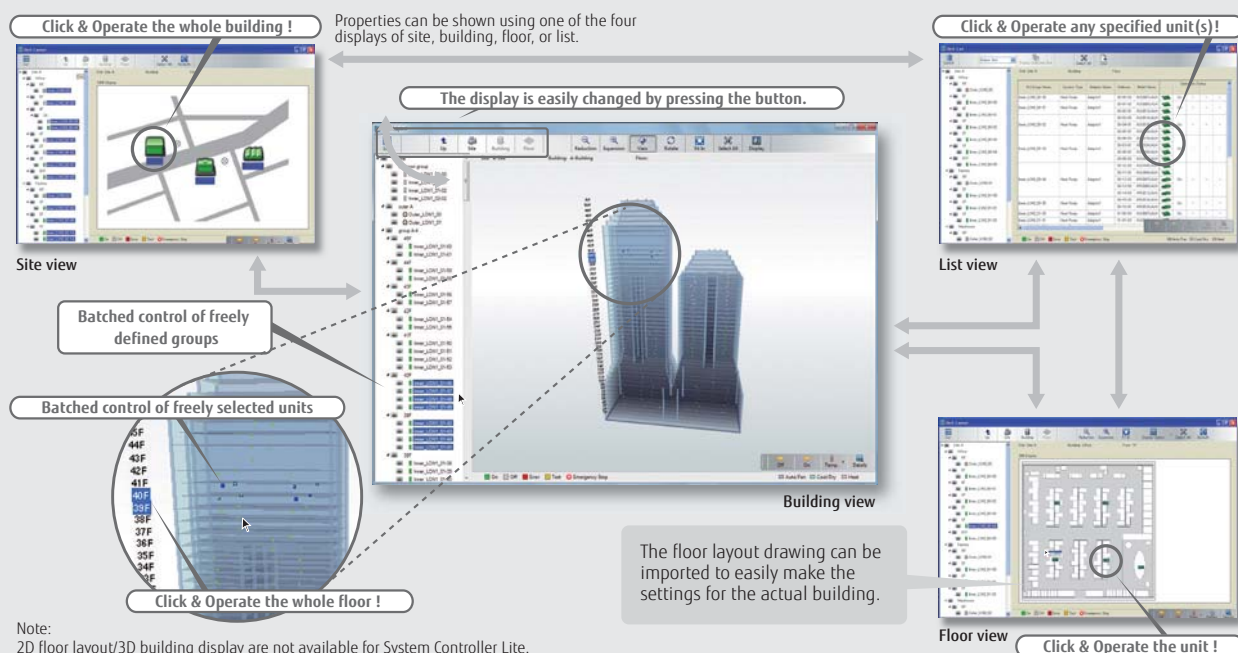
System Controller Lite has standard functions sufficient for air conditioner management in small and medium scale buildings .

- Up to a maximum of 1 VRF network system, 400 indoor units, and 100 outdoor units can be controlled.
- In addition to air conditioning precision control function, a variety of management software is available as an option to give customers a wide range of choice.
- Corresponds to 7 different languages (English, Chinese, French, German, Spanish, Russian, Polish)

High visibility and Easy operation

Click & Operate: The property is shown visually from the perspective most suitable for operation and operated accordingly (Click & Operate). You can select from among the 4 displays of site, building, floor, or list.

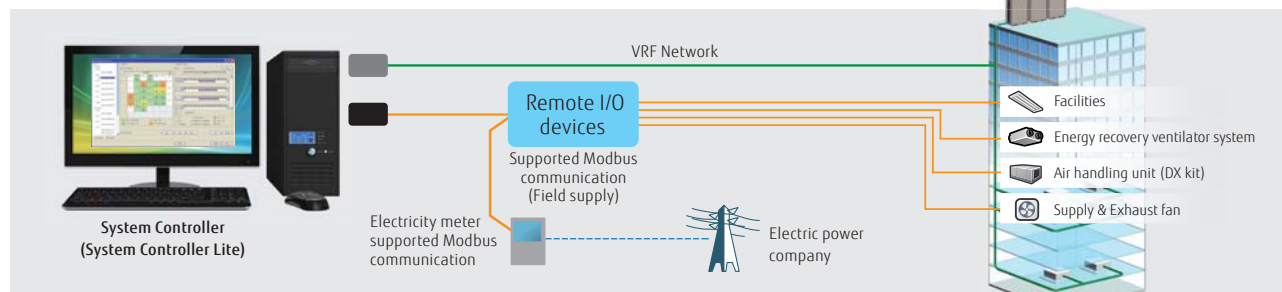
Freely define groups for batched control: Indoor units can be freely grouped for simple batched control from a tree menu. Grouping by hierarchal structure, such as by section, division or department is possible.



3rd party devices connected by Modbus can be controlled.

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

When Modbus Adaptor (locally purchased) is connected to PC, the electric facilities supported by Modbus can be controlled centrally. By using Modbus wasted electricity charge can be reduced in the entire building.

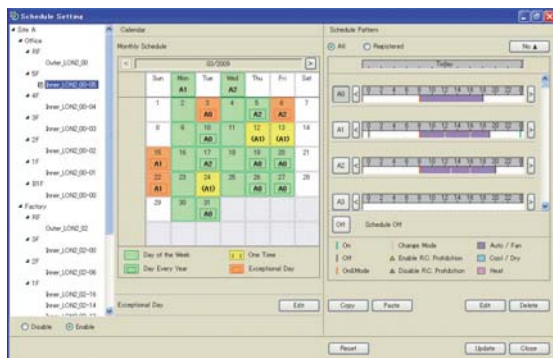


Diverse operation management & Data management

Standard for System Controller and System Controller Lite

Schedule management

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



Diverse control of indoor unit and outdoor unit

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

Remote controller prohibition

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

Error display & E-mail notification

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

Operating & control record

Displays the history of operation status and control.

Data base import/export

Imports/exports registration data, layout data, and image data. Only the administrator can make this setting.

Automatic clock adjustment

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

Electricity charge apportionment

Standard for System Controller

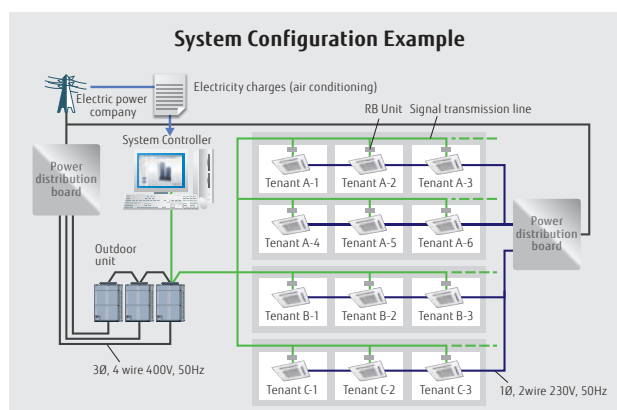
Option for System Controller Lite UTY-PLGXA2

Electricity charge apportionment calculation framework

Suppose you want to find the power consumed by the air conditioners for each tenant. With the electricity charge apportionment function, the used energy ratio will be provided, calculating in detail the energy consumed by the units used by each tenant. This information is then used to calculate the charges for the electricity consumed by air conditioning for each tenant by using the electricity bill provided by the power company

(See figure at right)

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



Features: System Controller/System Controller Light

Remote management

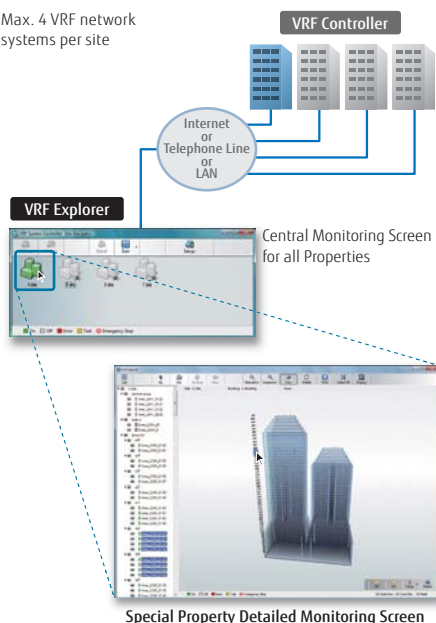
Standard for System Controller

Option for System Controller Lite UTY-PLGXR2

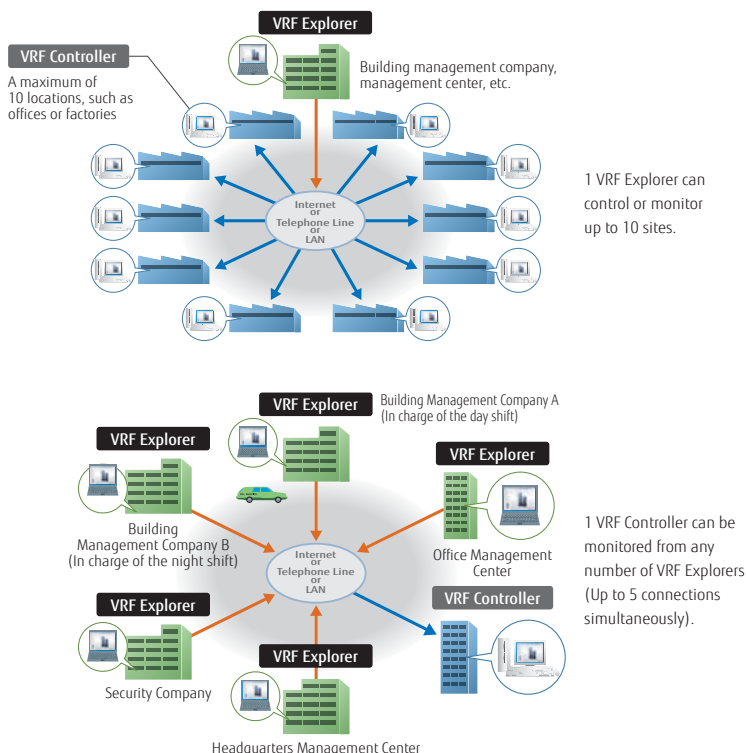
System Controller may be used on site or remotely over various networks for remote central control. System Controller requires 2 software working together. VRF Controller runs on site and communicate with VRF system. VRF Explorer runs remotely and provides user interface and communicate with the VRF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

On site central control

Max. 4 VRF network systems per site



Remote central control

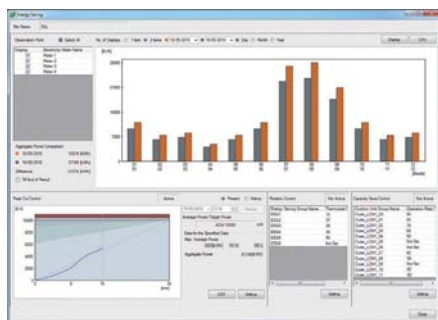


Energy saving management

Option for System Controller UTY-PEGXZ1

Option for System Controller Lite UTY-PLGXE2

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



Energy Saving Management Main Screen

Energy saving graph data: This graph compares the electricity consumption with the previous month and previous year to make it easy to analyse the energy saving effect.

Indoor unit rotation operation

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

Peak cut operation

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

Outdoor unit capacity save

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

FUNCTIONS SUMMARY

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

●●: Available. -: Not available.

Personal computer system requirements

The required PC specifications are shown in the following table.

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

• Echelon® U10 USB Network Interface - TP/FT-10 Channel (Model number: 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	Option Electricity charge apportionment	Option Energy saving	Option Central Control
Model name	UTY-APGXZ1	UTY-PEGXZ1	UTY-ALGXZ1	UTY-PLGXR2	UTY-PLGXA2	UTY-PLGXE2	UTY-PLGXX2
WHITE-USB-KEY	1	1	1	1	1	1	1

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

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

BACnet® Gateway

UTY-ABGXZ1 **Software**

VRF



BACnet is a registered trademark of ASHRAE. ASHRAE does not endorse, approve or test products for compliance with ASHRAE standards. Compliance of listed products to the requirements of ASHRAE Standard 135 is the responsibility of BACnet International (BI). BTL is a registered trademark of BACnet International.

- It is possible to connect medium to large sized BMS to VRF network system via BACnet®, a global standard for open networks.
- A maximum of 1600 indoor units with 4 VRF network systems (a maximum of 400 indoor units & 100 outdoor units for one network system) can be connected to one BACnet® Gateway.
- It is possible to control or monitor VRF network system from BMS via BACnet® Gateway.
- Compatible with BACnet® (ANSI / ASHRAE-135-2014) application specific controller (B-ASC).
- Compatible with BACnet®/IP over Ethernet.
- Scheduling function, Alarm & Event functions as well as Electricity Change Apportionment function are provided in BACnet® Gateway.
- Connection between VRF network system to personal computer is possible via small U10 USB interface. However, both U10 USB interface & personal computer are field supplied items.
- Corresponds to 7 different languages, English, Chinese, French, German, Spanish, Russian, Polish.

Max. Controllable

4

VRF network systems

Max. Controllable

400

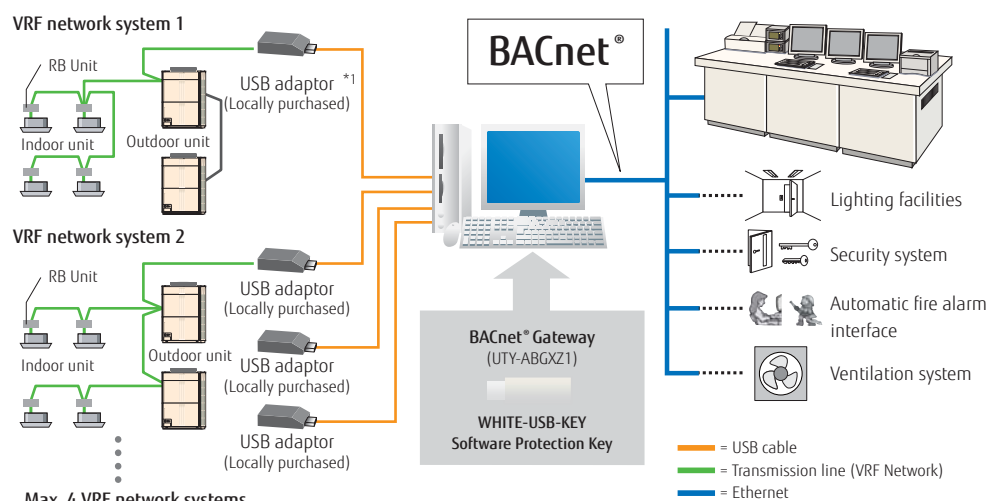
outdoor units

Max. Controllable

1,600

indoor units

Installation example



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

Personal computer system requirements

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

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

<Packing list>

Name and shape	Quantity	Application
WHITE-USB-KEY	1	Includes the software and manuals, license for BACnet® Gateway.

BACnet® Gateway

UTY-VBGX **Hardware**

VRF



BACnet is a registered trademark of ASHRAE. ASHRAE does not endorse, approve or test products for compliance with ASHRAE standards. Compliance of listed products to the requirements of ASHRAE Standard 135 is the responsibility of BACnet International (BI). BTL is a registered trademark of BACnet International.

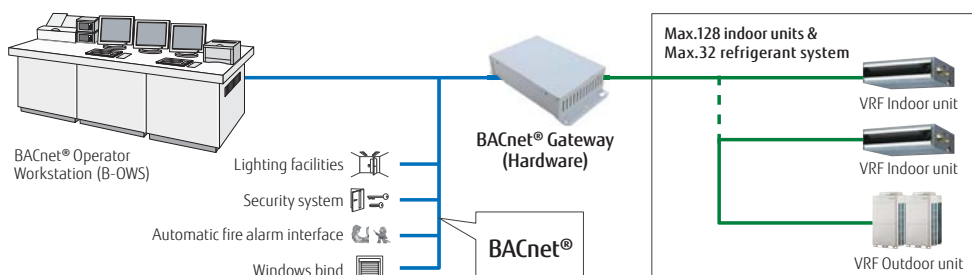
Max. Controllable
1 VRF network system

Max. Controllable
32 refrigerant systems

Max. Controllable
128 indoor units

- BACnet® Gateway enables to connect a BMS and Fujitsu General VRF system.
- A maximum of 128 indoor units and 32 refrigerant system 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 system	32
Number of controllable VRF network	1
Number of connectable units / one VRF network	4

Model name	UTY-VBGX
Power Supply	Single phase, 100-240V, 50/60 Hz
Power Consumption (W)	4.6 (max.)
Dimensions (H × W × D) (mm)	59.6 × 270.4 × 176
Weight (g)	1,200

Network Converter for LONWORKS®

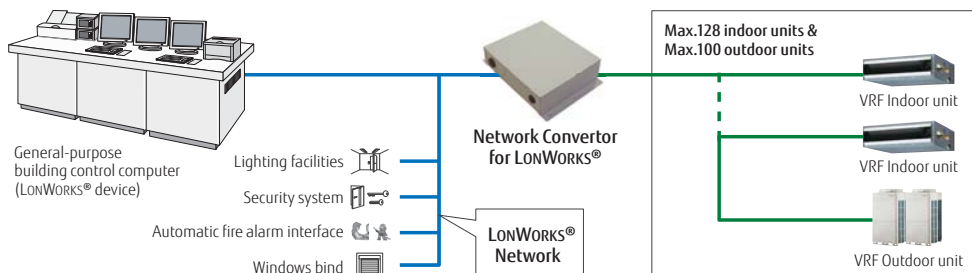
UTY-VLGX

VRF



- For connection between VRF network system and a **LONWORKS®** open network for management of small to medium-sized BMS and VRF network system.
- The UTY-VLGX permits central monitoring and control of a VRF network system from a BMS through a **LONWORKS®** interface.
- Up to 128 Indoor units can be connected to one Network Converter for **LONWORKS®**

Installation example



Max. Controllable
4 units to BMS

Max. Controllable
100 outdoor units

Max. Controllable
128 indoor units

Specifications

Model name	UTY-VLGX
Power Supply	208-240 V 50/60 Hz, Single phase
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 (Echelon® Corporation)
Transmission way form	Free topology
Terminal resistor	None (It attaches at the terminal of a network.)

MODBUS® Convertor for VRF

UTY-VMGX

VRF



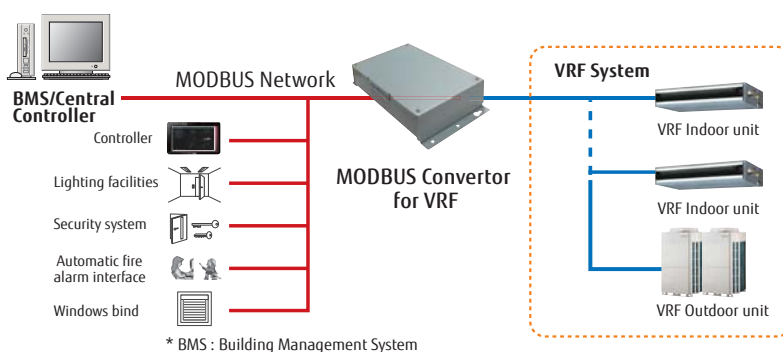
The MODBUS Convertor allows a complete integration of air conditioners into MODBUS Networks.

- Compact and lightweight design
- Direct connection to MODBUS Network
- Up to 128 indoor units can be controlled in one MODBUS Convertor
- The MODBUS Convertor permits central monitoring and control of air conditioners from BMS or Central Controller.
- Up to 9 converters can be connected to a VRF network. The simultaneous controls such as ON/OFF or temperature settings can be done for each zone.
- It is easy to locate the source of error if any connection errors should occur after completion of installation works.

Max. Controllable
9 units to one VRF

Max. Controllable
100 outdoor units

Selectable
128 indoor units



KNX® Convertor for VRF

UTY-VKGX

VRF

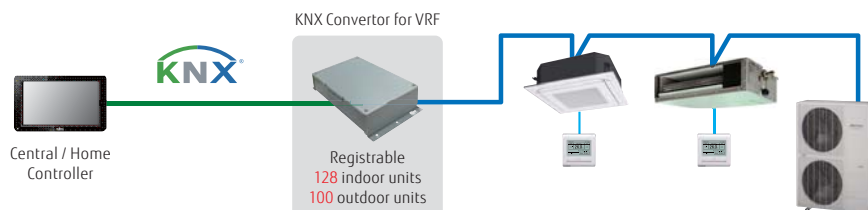


KNX Convertor is useful for centralised control in a system.

- New KNX Convertor enables to connect central/home controller and Fujitsu General VRF system.
- A maximum of 128 indoor units and 100 outdoor units can be connected to single KNX Convertor.

Max. Controllable
100 outdoor units

Selectable
128 indoor units



Specifications

Model name	UTY-VMGX
Power Supply	220-240 V 50/60 Hz
Input power (W)	Max. 2
Dimensions (H × W × D) (mm)	54 × 260 × 150
Weight (g)	1,100

Model name	UTY-VKGX
Power supply	220-240 V 50/60 Hz
Power consumption (W)	1.5
Dimensions (H × W × D) (mm)	54 × 260 × 150
Weight (g)	1,200

Signal Amplifier

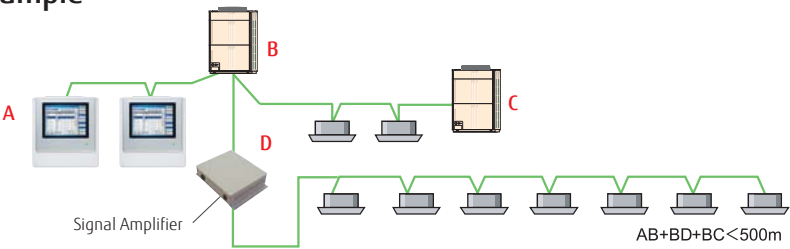
UTY-VSGXZ1

VRF



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

Installation example



Specifications

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



Optional Parts Overview

VRF

Various optional parts are provided to install the selected indoor unit properly according to the environment.

Optional Parts For Cassette



Human Sensor Kit

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



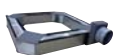
For Compact Cassette



For Cassette Circular Flow

Cassette Grille

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



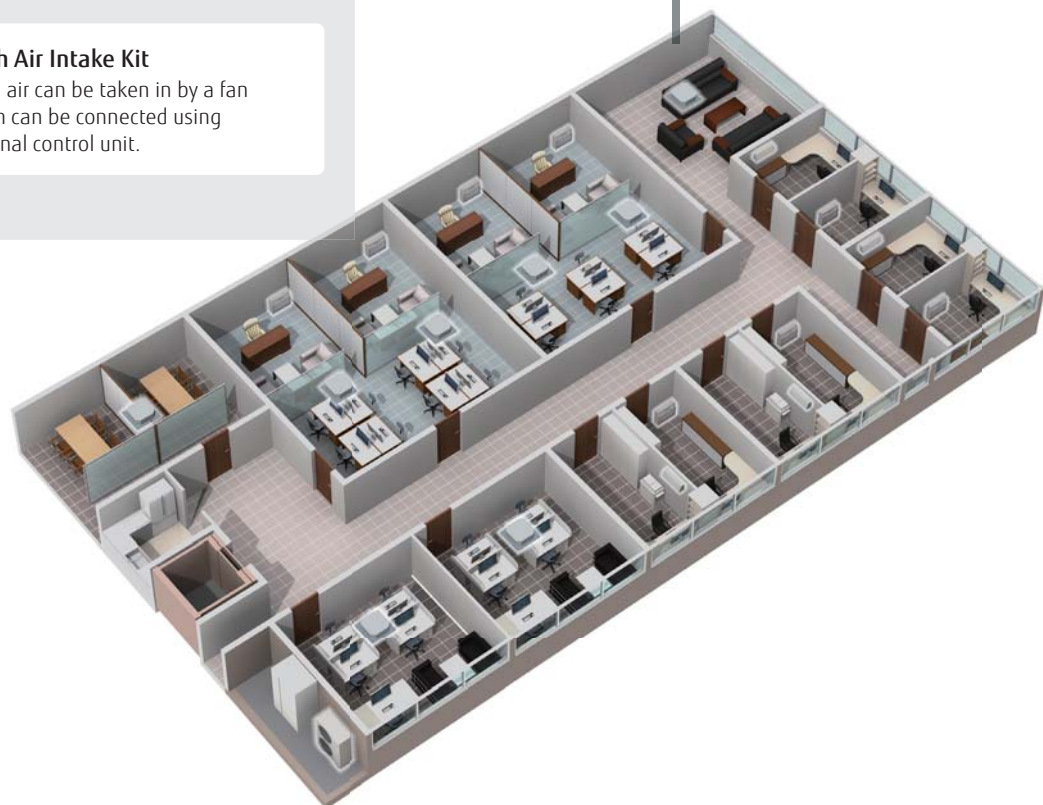
For Compact Cassette

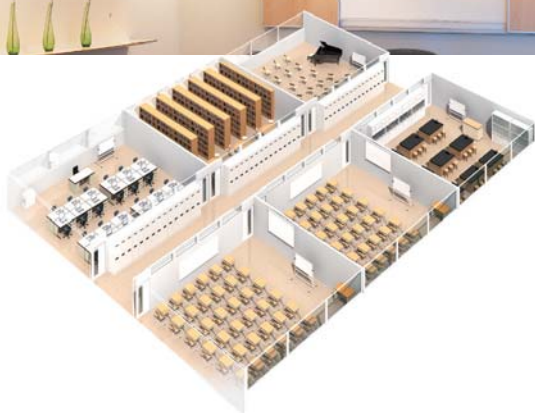


For Cassette

Fresh Air Intake Kit

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





Optional Parts For Duct & Ceiling



Auto Louvre Grille Kit

Simple flat Auto louvre will provide comfort airflow and harmonise with luxury Interior.



Remote Sensor Unit

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



Long Life Filter

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



Flange

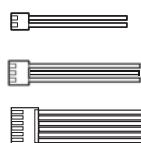
Flange is used for Medium Static Pressure Duct type and Ceiling type to connect between pipes.



Drain Pump Unit

This device can drain the collected water during operation.

Connection Parts



External Connect Kit & Set

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



Connection Units

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



External Power Supply Unit

External Power Supply Unit can protect the units in the system even if some powers of indoor units are shut down in the system.

Auto Louvre Grille

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

SPLITS/MULTI/VRF



Simple flat Auto Louvre will provide comfort airflow and harmonise with luxury interior.

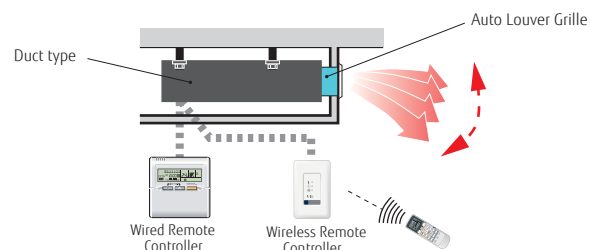


Closed louvre

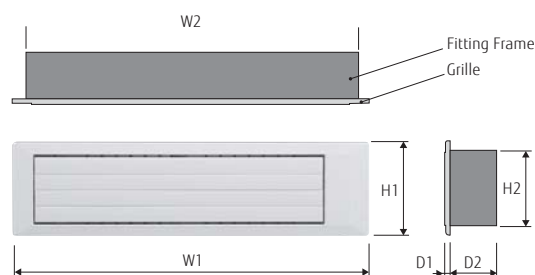
Opened louvre

Flexible Control

- **Operation with indoor unit**
Auto Louvre can be operated by synchronising remote controller of indoor unit.
- **UP and Down auto swing**
 - Auto airflow direction and auto swing
 - 4 steps selectable
- **Auto-closing louvre**
When operation of indoor unit is stopped, the louvre will automatically close.



Dimensions



Unit:mm

Model Name	W1	W2	H1	H2	D1	D2
UTD-GXSA-W	683	645				
UTD-GXSB-W	883	845	180	148	9	84
UTD-GXSC-W	1,083	1,045				

Specifications

Model name			UTD-GXSA-W	UTD-GXSB-W	UTD-GXSC-W
Applicable Indoor Unit			ARYG07/09LLTA ARYG12/14LLTB ARXD007/009/012/014GLEH (For VRF) ARXK004/007/009/012/014GLEH (For VRF) ARXD04GALH (For VRF)	ARYG18LLTB ARXD018GLEH (For VRF) ARXK018GLEH (For VRF)	ARXD024GLEH (For VRF) ARXK024GLEH (For VRF)
Power Supply			Connecting with Control box of indoor unit		
Fixing of Auto Louvre Grille			Screw fixing to Flange or Square Duct		
Extension Square Duct Limit			1.0m (Max. duct length between indoor unit and Grille)		
Net Dimension (H × W × D)		mm	180×683×(84+9)	180×883×(84+9)	180×1083×(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		
Louvre Motor			Stepping Motor		
Accessories			Fitting Frame, etc.		
Operation range	Cooling	°C	18 to 32		
		% RH	80% or less		
	Heating	°C	16 to 30		

External Power Supply Unit

UTZ-GXXA

VRF

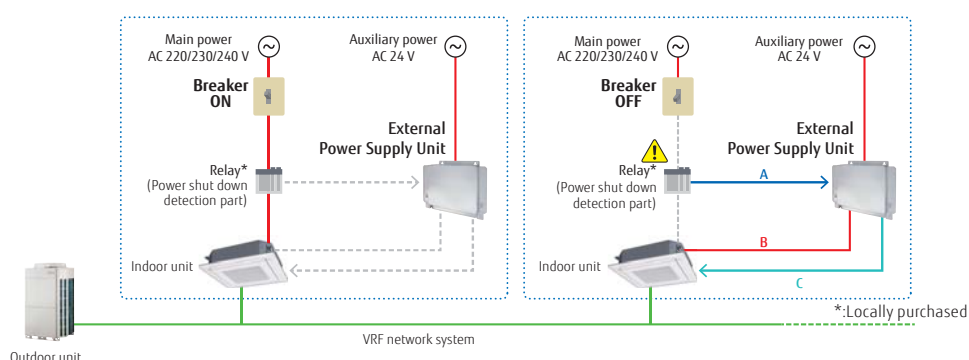


External Power Supply Unit can protect the units in the system even if some powers of indoor units are shut down in the system.

Power is supplied to the indoor unit from auxiliary power by connecting to External Power Supply Unit. This makes it possible to operate continuously without system error.

High Reliability

- A: Main power shut down can be detected at power shut down detection part.
- B: The power for indoor unit expansion valve drive, etc. is supplied. (DC 12V, 5V)
- C: Power supply from External Power Supply Unit is notified.

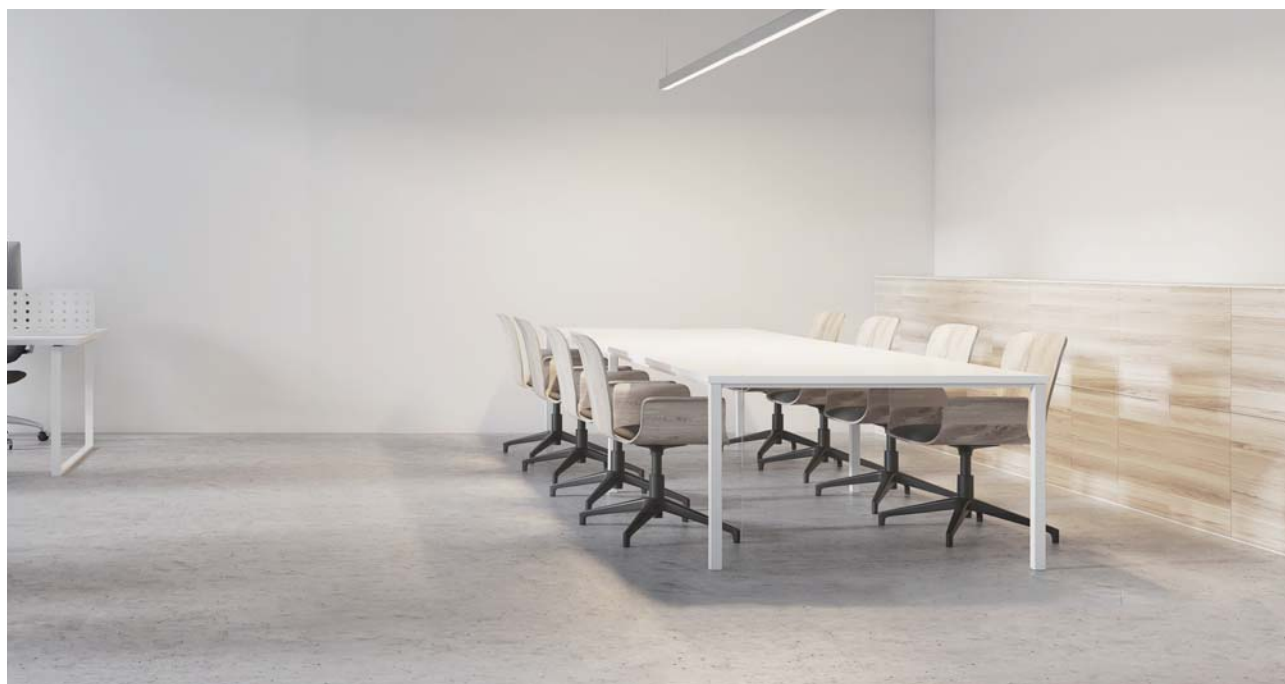


Note











- When changing the power supply voltage to AC24V, use a power transformer with an insulation structure equivalent to CLASS 2.
- Indoor units that are powered off and driven by an External Power Supply Unit are handled in the same manner as operation off units in the electricity charge apportionment function. Since standby power may be charged to them, the electricity charge apportionment result for them may not be 0.

Specifications

Model name	UTZ-GXXA	
Power Supply	AC 24 V 50/60 Hz, single phase	
Dimensions (H × W × D) (mm)	65 × 186 × 178	
Weight (g)	500	



Optional Parts List For VRF






Type	Refrigerant	Indoor unit									
		Cassette						Duct			
		3D Flow	Compact Grid type / Standard type	Slim type	Large type	Slim type	Large type	Low Static Pressure Duct			
	R410A			4-way Flow		Circular Flow		Mini (With drain pump)	Slim (With drain pump)		Slim High Efficiency
		AUXS 018/024GLEH	AUXB 004/007/009/012/014/018/024GLEH	AUXD 18/24GALH	AUXA 18/24/30/36/45/54 GALH	AUXN 009/012/014 GLAH, 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	ARXP 009/012/014/018 GLAH
IR Receiver Unit		● UTY-TRHX		● UTY-LRHYB1		● UTY-LBHDX		● UTY-TRHX	● UTB-YWC	● UTY-TRHX	● UTB-YWC
Human Sensor Kit						● UTY-SHZXC					
Remote Sensor Unit	 New amenity space can be offered by installing the Remote sensor.							● UTY-XSZX			
Cassette Grille	 UTG-USYA-W UTG-UFYE-W UTG-UFYC-W UTG-UKYC-W UTG-UGYA-W	● UTG-USYA-W	● UTG-UFYE-W UTG-UFYC-W	● UTG-UGYA-W		● UTG-UKYC-W					
Auto Louver Grille Kit								● UTD-GXTA-W, UTD-GXTB-W (18), UTD-GXTC-W (24)		● UTD-GXTC-W (009/012/014)	
Long Life Filter											● UTD-LF25NA (018)
Flange											● UTD-SF045T (018) UTD-RF204 (018)
Drain Pump Unit											● UTZ-PXINBA (018)
Fresh Air Intake Kit*1	 For Compact Cassette For Cassette		● UTZ-VXAA	● UTZ-VXGA		● UTZ-VXRA					
External Power Supply Unit		● UTZ-GXXA				● UTZ-GXXA				● UTZ-GXXA	









Duct						Indoor unit		Floor / Ceiling	Ceiling	Wall Mounted			
Medium Static Pressure			High Static Pressure			-	EEV external			-	EEV external	-	-
Normal	High Efficiency		Normal	High Efficiency									
ARXA 024/030/ 036/045 GLEH	ARXQ 018/024GTAH	ARXP 024/030GTAH	ARXC 45/60GATH	ARXC 036/072/ 090/096 GTEH	ARXQ 030GTAH	AGYA 004/007/ 009/012/014 GCGH	AGYE 004/007/ 009/012/014 GCEH	ABYA 012/014/ 018/024 GTEH	ABYA 030/036/ 045/054 GTEH	ASYA 004/007/009 GTEH, ASYA 012/014GCEH	ASYE 004/007/009 GTEH, ASYE 012/014GCEH	ASYA 18/24GBCH	ASYA 030/034GTEH
	● UTY-TRHX	● UTB-YWC		● UTY-TRHX	● UTB-YWC								
● UTY-XSZX													
● UTD-LF25NA		● UTD-LFNA	● UTD-LF60KA (45/60/036)										
● UTD-SF045T UTD-RF204									● UTD-RF204				
● UTZ-PX1NBA									● UTR-DPB24T				
	● UTZ-GXXA			● UTZ-GXXA		● UTZ-GXXA							● UTZ-GXXA

Function List For VRF

External Inputs & Outputs

For Indoor unit		For Outdoor unit	
UTY-XWZXZ7		UTY-XWZXZD	
UTY-XWZXZB		UTY-XWZXZE	
UTY-XWZXZC			

For RB unit	For Central Remote Controller	For Touch Panel Controller
UTY-XWZXZ6	UTY-XWZXZ7	UTY-XWZXZA
		
UTY-XWZXZB	UTY-XWZXZ8	
		
	UTY-XWZXZA	
		

Function list

		Indoor unit	Outdoor unit	Controller		Other
				Central Remote Controller	Touch Panel Controller	RB Unit
Input	Operation / Stop	●UTY-XWZXZD ○UTY-XWZXZB	—	—	—	—
	All On / All Off	—	—	●UTY-XWZXZ7 ○UTY-XWZXZ8	●*3 ○*3	—
	Batch Stop	—	●UTY-XWZXZ6	—	—	—
	Forced Stop	●UTY-XWZXZD ○UTY-XWZXZB	—	—	—	—
	Emergency Stop	●UTY-XWZXZD ○UTY-XWZXZB	●UTY-XWZXZ6	●UTY-XWZXZ7 ○UTY-XWZXZ8	●*3 ○*3	—
	Forced Thermostat off	●UTY-XWZXZE ○UTY-XWZXZ7	—	—	—	—
	Low Noise Mode Operation	—	●UTY-XWZXZ6	—	—	—
	Cooling / Heating Priority	—	●UTY-XWZXZ6*1	—	—	●UTY-XWZXZ6 ○UTY-XWZXZB
	"Outdoor Unit Operation Peak Control"	—	●UTY-XWZXZ6	—	—	—
	"Power Usage Information from Electricity Meter"	—	●UTY-XWZXZF	—	●*3 ○*3	—
Output	Operation Status	●UTY-XWZXZC	○UTY-XWZXZ6	○UTY-XWZXZA	○UTY-XWZXZA	—
	Error Status	●UTY-XWZXZC	○UTY-XWZXZ6	○UTY-XWZXZA	○UTY-XWZXZA	—
	Indoor Unit Fan Operation Status	●UTY-XWZXZC	—	—	—	—
	Auxiliary Heater Output	●UTY-XWZXZC*2	—	—	—	—
	Base Heater	—	●UTY-XWZXZ9	—	—	—

*1. Heat Pump type only

*2. Duct type only

*3. Touch Panel Controller has these functions for Dry contact and Apply voltage, however, above External Connect Kit is not necessary because Touch Panel Controller has an external input terminal block.

●: Dry Contact ○: Apply Voltage

For Duct type

Flange (Round)

UTD-RF204

For Medium Static Pressure Duct type /
Ceiling type - pack of 4



Flange (Square)

UTD-SF045T

For Medium Static Pressure Duct type



Remote Sensor Unit

UTY-XSZX

For All Duct type

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



Long-Life Filter

UTD-LF25NA

For Medium Static
Pressure Duct type



UTD-LF60KA

For High Static
Pressure Duct type



Auto Louvre Grille Kit

UTD-GXSA-W

(for ARXD04-14GALH, ARXK07-12GCLH)

UTD-GXSB-W

(for ARXD18GALH)

UTD-GXSC-W

(for ARXD24GALH)



Drain Pump Unit

UTZ-PX1NBA

For Medium Static Pressure Duct type

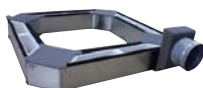


For Cassette type

Fresh Air Intake Kit

UTZ-VXAA

For Compact
Cassette type



Fresh Air Intake Kit

UTZ-VXGA

For Cassette type



Fresh Air Intake Kit

UTZ-VXRA

For Circular Flow
Cassette type



Human Sensor Kit

UTY-SHZXC

For Circular Flow Cassette



Cassette Grille

UTG-UFYD-W

For Compact Cassette type



Cassette Grille

UTG-UKYC-W

For Circular flow Cassette type



Cassette Grille

UTG-UFYE-W

For Compact Cassette type VRF

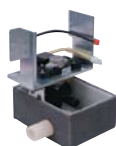


For Ceiling type

Drain Pump Unit

UTR-DPB24T

For Ceiling type



Flange (Round)






UTD-RF204

For Ceiling type
pack of 4

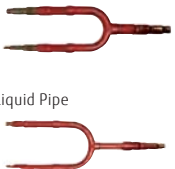
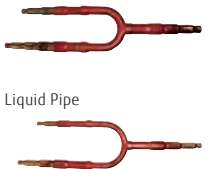
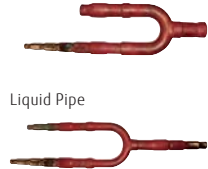
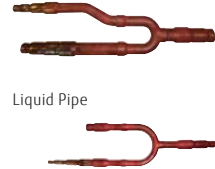
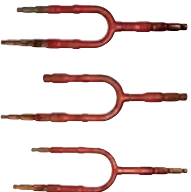





Separation Tube etc.

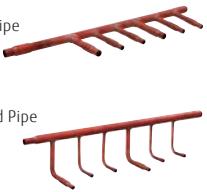
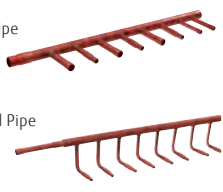

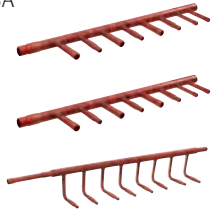
For SPLIT/MULTI SPLIT/SIMULTANEOUS MULTI

Separation Tube				
UTPSX236A / UTPSX254A For 3-phase Simultaneous Multi UTPSX272A For Simultaneous Multi Twin / Triple / Quad	UTPSX354A For 3-phase Simultaneous Multi UTPSX372A For Simultaneous Multi Twin / Triple / Quad	Comtest COMTEST	Service Monitoring Tool UTYASSX	Heat Sink Pack HSPACK01
				

For VRF

Separation Tube			
UTPAX054A Gas Pipe Liquid Pipe	UTPAX090A Gas Pipe Liquid Pipe	UTPAX180A Gas Pipe Liquid Pipe	UTPAX567A Gas Pipe Liquid Pipe
			
UTPBX090A Suction Gas Pipe Discharge Gas Pipe Liquid Pipe	UTPBX180A Suction Gas Pipe Discharge Gas Pipe Liquid Pipe	UTPBX567A Suction Gas Pipe Discharge Gas Pipe Liquid Pipe	UTPLX180A For DX-Kit
			

Header

UTRH0906L UTRH1806L Gas Pipe Liquid Pipe	UTRH0908L UTRH1808L Gas Pipe Liquid Pipe	UTRJ0906A UTRJ1806A Suction Gas Pipe Discharge Gas Pipe Liquid Pipe	UTPJ0908A UTPJ1808A Suction Gas Pipe Discharge Gas Pipe Liquid Pipe
			

Outdoor Unit Branch Kit

UTPCX567A Gas Pipe Liquid Pipe	UTPDX567A Suction Gas Pipe Discharge Gas Pipe Liquid Pipe	USB Adaptor USB75010R Needed for UTYASGXZ1 UTYAMGXZ1 UTYALGXZ1 UTYAPGXZ1 UTYABGXZ1	Outdoor Unit Strip & Rebuild (Terms & Conditions Apply)
			

For VRF

EV Kit

Model code ≤ 09 : UTR-EV09XB
Model code ≥ 12 : UTR-EV14XB For
Compact Wall Mounted type



RB Unit

UTP-RX01AH
UTP-RX01BH
UTP-RX01CH
Single type



UTP-RX04BH
Multi-split type



UTP-RX08AH
Multi-split type

NEW



UTP-RX12AH
Multi-split type

NEW



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

Model name	UTP-BX090A	UTP-BX180A	UTP-BX567A
Total cooling capacity of indoor unit (kW)	28.0 or less	28.1 to 56.0	56.1 or more

Header

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

Model name	3-6 Branches	UTP-J0906A	UTP-J1806A
	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-III/V-III Tropical)	UTP-DX567A (for VR-II)
Number of outdoor unit	2 outdoor units	1
	3 outdoor units	2

EV Kit

Model name	UTR-EV09XB		UTR-EV14XB	
Application model	ASYE004GTEH ASYE007GTEH ASYE009GTEH	AGYE004GTEH AGYE007GTEH AGYE009GTEH	ASYE012GCEH ASYE014GCEH	AGYE012GCEH AGYE014GCEH

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	204
Number of branches		1	1	1	4	8	12
Maximum capacity of connectable indoor units (Q)	kW	$Q \leq 8.0$	$Q \leq 18.0$	$Q \leq 28.0$	$Q \leq 56.1^{*1}$	$Q \leq 72.0$	$Q \leq 95.0$
Maximum capacity of connectable indoor units per branch (Q)	kW	$Q \leq 8.0$	$Q \leq 18.0$	$Q \leq 28.0$	$Q \leq 18.0$	$Q \leq 8.0$	$Q \leq 8.0$
Maximum number of connectable indoor units per branch		3	8	8	8	7	7
Dimensions (H×W×D)	mm	198×298×268			260×658×428	298×660×618	298×990×618

*1: In case of two RB units connected in series (total 8-branches), maximum capacity of connectable indoor units is up to 56.0 kW.

Service Tool

Extensive monitoring and analysis functions for installation and maintenance

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

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

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

Automatic operation check for refrigeration cycle

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



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

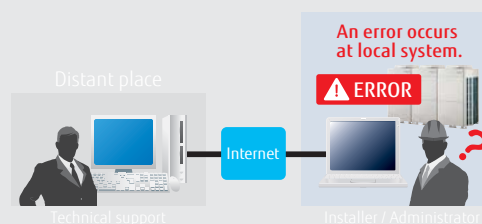
Whether each sensor value is normal is judged automatically.

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



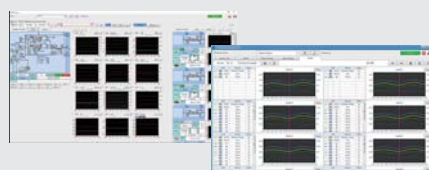
Remote technical support & maintenance

On-site check screen can be shared with the skilled person in a distant place. When visiting for troubleshooting on site, operation status can be shared in real time and get assistance easily. Online chat function helps to support on site staff.



Various trend graph display

Previously, only 3 kinds of each sensor value can be displayed. However, multiple graphs can be displayed in new Service Tool depending on the situation. The refrigeration cycle can be checked in detail.



Personal computer system requirements

UTY-ASGXZ1	
Operating system	<ul style="list-style-type: none"> • Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Pro (32-bit or 64-bit)
CPU	1 GHz or higher
Memory	<ul style="list-style-type: none"> • 1 GB or more (for Windows® 7 [32-bit], Windows® 8.1 [32-bit], and Windows® 10 [32-bit]) • 2 GB or more (for Windows® 7 [64-bit], Windows® 8.1 [64-bit], and Windows® 10 [64-bit])
HDD	40 GB or more of free space
Display	1366 x 768 or higher resolution
Interface	• USB port for U10 USB Network Interface and Software protection key
Software	Internet Explorer® 11 or Microsoft Edge

<Packing list>

Name and shape	Quantity	Application
WHITE-USB-KEY (Software protection key)	1	Software protection key to be connected to USB port on the Service Tool-installed PC. These products run only on a PC with WibuKey.

• Personal computer that satisfies the following system requirements

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

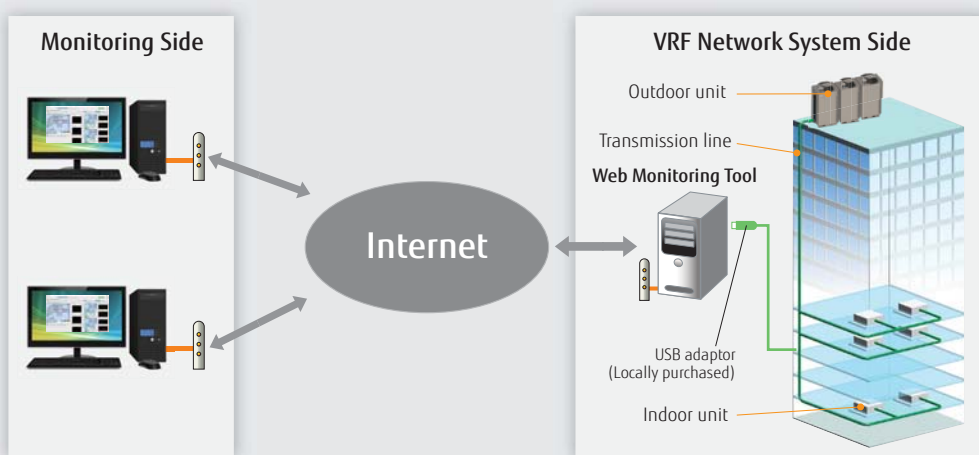
Web Monitoring Tool

Product features

- Troubleshooting is performed by monitoring each air conditioning unit remotely during periodical system checks.
- Error notification can be automatically transmitted to several locations using the internet*1.
- Requires either a dedicated internet connection or public telephone line.
- Determination of an error occurrence can be made through error warnings and equipment status information obtained from a remote location.
- The monitoring data in a remote side can be optionally downloaded. And, this data can be displayed in offline mode of the service tool.
- Monitoring side computer is not required to install special software, requires only general web browser.

*1: Use of internet mail system required.

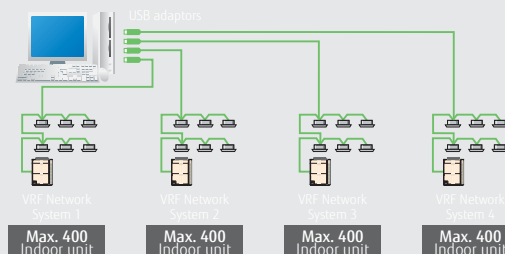
Web Monitoring System



Support 4 VRF network systems

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

Suitable for large-scale buildings or hotels.



Personal computer system requirements

	UTY-AMGXZ1
Operating system	<ul style="list-style-type: none"> • Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Pro (32-bit or 64-bit)
CPU	1 GHz or higher
Memory	<ul style="list-style-type: none"> • 1 GB or more (for Windows® 7 [32-bit], Windows® 8.1 [32-bit], and Windows® 10 [32-bit]) • 2 GB or more (for Windows® 7 [64-bit], Windows® 8.1 [64-bit], and Windows® 10 [64-bit])
HDD	40 GB or more of free space
Display	1366 x 768 or higher resolution
Interface	<ul style="list-style-type: none"> • USB port (for 10 USB Network Interface Max.4, Software protection key) • Either of the following interface is required for remote connection: <ul style="list-style-type: none"> - Public Telephone Line: Modem is required - Internet using LAN: Ethernet port is required
Software	Internet Explorer® 11 or Microsoft Edge

<Packing list>

Name and shape	Quantity	Application
WHITE-USB-KEY (Software protection key)	1	Software protection key to be connected to USB port on the Service Tool-installed PC. These products run only on a PC with WibuKey.

• Personal computer that satisfies the following system requirements

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

Refrigerant Leak Detection

The F-Gas regulations are an EU environmental regulation brought into effect on the 4th July 2007, as part of the European Union's obligations under the Kyoto protocol. F-gasses or HFC's (hydrofluorocarbons) can cause harm to our environment and cause climate change. These regulations are directed at reducing cover both pure HFC's such as R134a and blends like R404a.

Refrigerant Leak Detection

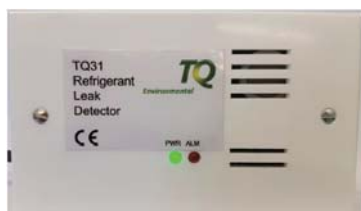
To Meet the requirements of BS-EN378 all split / VRF systems containing refrigerant gasses installed in a Catagory Class A space (Hotel Bedroom or similar) must meet the limitations regarding maximum system refrigerant volumes that could leak within the space

Fujitsu's Design Simulator program can be used to accuratley calculate the actual refrigerant volumes based on the system size and the popposed pipe-work lengths and configuration

If these aformentioned limitations are exceeded there must be an alarm system to alert the occupier through both audible and visual indication, this alarm must also alert the staff such as supervisors, night porters etc.

There is no specific requirement for the alarm system to be linked to the refrigerant system to pump down or stop the operation.

Individual Sensors



TQ31

Monitors all refrigerant gasses typically used in air conditioning systems

Stand alone, single point refrigerant detector and alarm unit ideal for room monitoring.

Resistant to cross sensitivity from hairspray and deodorants so are ideally suited in a hotel / Bedroom environment.

Designed as a single point, self contained unit but can be connected to a TQ32 Area Alarm panel for remote monitoring and group alarms.

Area Alarm Panels & Indicator Panel



TQ32 (32 Channel & 64 Channel)

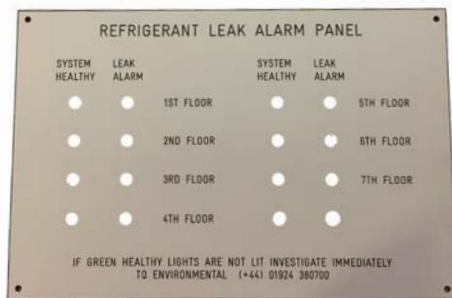
Upto 64 individual sensor inputs gives wide area coverage

The TQ32 Area Alarm Panel combined with the TQ31 sensors enables the group monitoring of individual rooms for common refrigerants used in air conditioning systems

Designed for hotel or office use, a single alarm panel will typically monitor 1 or 2 floors depending on the number of sensors needed.

The 3 digit LED display shows individual room numbers.

Configurable alarm outputs can provide plant trip signals and alert the reception desk, via the optional TQ34 indicator panel or a 3rd party alarm.



TQ34

Upto 8(max) Area Alarm Panel inputs for whole building coverage

The TQ34 Floor Indicator Panel combined with the TQ32 Area Alarm Panels and the TQ31 Individual Sensors enables the monitoring of the entire building

Designed for hotel or office use, a Indicator panel will typically monitor 1-8 floors depending on the number of Area Alarm panels used



Specifications

Model name	TQ31	TQ32 (32 Channel)	TQ32 (64 Channel)	TQ34
Power Source	220/240v 50Hz	220/240v 50Hz	220/240v 50Hz	220/240v 50Hz
Power Consumption	<1.5w	<1.5w	<1.5w	<1.5W
Max switching current (Amp)	2	2	2	2
Indicator LED's	Power, Alarm	Power, Alarm, Room Number	Power, Alarm, Room Number	Power, Alarm, Floor Number
Audible Alarm (minimum dB)	75	85	85	85
Gases Detected	Halocarbon Refrigerants	—	—	—
Detection Range	10000 PPM (factory set 1000-5000)	—	—	—
Dimensions (H x W x D) (mm)	85 x 146 x 50	364 x 284 x 120	364 x 284 x 120	364 x 284 x 120
Weight (Kg)	0.3	1 approx.	1 approx.	1 approx.