CONTROL SYSTEM
& OPTIONAL PARTS

CONTROL SYSTEM

OPTIONAL PARTS

SPLIT

MULTI SPLIT

SMALL VRF

LARGE VRF

CONTROL SYSTEM
OVERVIEW for SPLIT & MULTI SPLIT

All indoor units are provided with wireless or wired remote controllers as standard equipment. Other options, such as individual and central remote controllers, are also available. 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.

Air Conditioning
Individual Control

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

Wireless Remote Controller
Simple and sophisticated operations with a choice of 4 daily timers

Simple Remote Controller
Compact remote controller provides access to basic functions

For Duct type

Duct type indoor unit

IR Receiver Unit

Wireless Remote Controller

For Cassette type

IR Receiver Unit
Necessary to control for all duct type by Wireless Remote Controller

Air Conditioning
Centralized Control

Central Remote Controller
For 5-6 & 8 Rooms Multi
Central Remote Controller allows individual and central control

Convertor/Adaptor
For external device

MODBUS® Convertor
For indoor unit
UTY-VMSX

MODBUS® Interface
FJ-RC-MBS-1

KNX® Convertor
For indoor unit
UTY-VKSX

KNX® Interface
FJ-RC-KNX-1i

Online Control
(Adopting Wireless LAN Interface)

By using our Wireless LAN Interface and FGLair app, you can control your home's cooling and heating anytime and anywhere.

Wireless LAN Interface
The exclusive Wi-Fi adaptor enables to operate the air conditioner by smartphone or tablet PC from outside.

FGLair™

Download Free
Download on the App Store
ANDROID APP ON Google play

User friendly app
User friendly screen display facilitates easy operation.

Individual AC name display

ON/OFF button

Room temperature

Temperature setting

Operation mode

CONTROL SYSTEM OVERVIEW for VRF

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

Air Conditioning
Individual Control

Wired Remote Controller
(Touch panel)
UTY-RNRYZ2

Wired Remote Controller
UTY-RLRY

Simple Remote Controller
UTY-RSRY
UTY-RHRY
Without operation mode

Wireless Remote Controller
UTY-LNHY

IR Receiver Unit
UTB-YWC For Duct type
UTY-LRHYB1 For Cassette type

For Duct   For Cassette

Air Conditioning
Centralized Control

Remote/
Monitoring side

Internet or
Public
Telephone
Line

USB Adaptor*1
(Locally purchased)

System Controller (Software)
UTY-APGXZ1/UTY-ALGXZ1 (Lite edition)

Max.
Controllable
1600[*2]
indoor units

*1: USB Adaptor: Echelon® U10 USB Network Interface
*2: Lite edition is max. controllable 400 indoor units

Remote/
Monitoring side

Internet or
Public
Telephone
Line

Touch Panel Controller
UTY-DTGYZ1

Max.
Controllable
400
indoor units

Central Remote Controller
UTY-DCGY

Max.
Controllable
100
indoor units

Group Remote Controller
UTY-CGGY

Max.
Controllable
8
Remote
Controller
Groups

Network Convertor
(For Group Remote Controller)
UTY-VGGXZ1

Convertor/Adaptor
For external device

BACnet® Gateway
UTY-ABGXZ1 (Software)
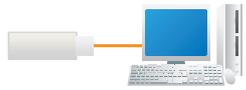
BACnet® Gateway
UTY-VBGX (Hardware)

Network Convertor
(For LONWORKS®)
UTY-VLGX

MODBUS® Convertor
UTY-VMGX

MODBUS® Interface
FJ-RC-MBS-1

KNX® Convertor For VRF
UTY-VKGX
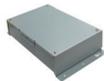
KNX® Interface
FJ-RC-KNX-1i

Wireless LAN Interface
FJ-RC-WIFI-1

External Switch Controller
UTY-TERX

Card-key
(Locally purchased)

Internet device

BMS/BAS[3]

BMS,[3] Home automation system

or

*3: BMS/BAS: Building Management System/Building Automation System

Convertor/Adaptor
For system expansion

Network Convertor
(DC power supply)
UTY-VTGX

Single split

Network Convertor
(AC power supply)
UTY-VTGXV

Single split

Signal Amplifier
UTY-VSGXZ1

S SPLIT
MULTI SPLIT
VRF
VENTILATION
CONTROL SYSTEM
AIR TO WATER

Best Control Solution for Each Property

Fujitsu General provides the best control solutions suitable for the various properties.

SHOP

Type	Individual Control	Centralized Control				Integrating Control (Interface)		
	Wired Remote Controller	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller	Network Convertor for LONWORKS®	MODBUS® Convertor	KNX® Convertor
	UTY-RNRYZ2, UTY-RLRY, UTY-RVNYM	UTY-CGGY	UTY-DCGY	UTY-DTGYZ1	UTY-APGXZ1, UTY-ALGXZ1	UTY-VLGX	UTY-VMSX, UTY-VMGX	UTY-VKGX, UTY-VKSX
Automatic control of A/C (Schedule timer, Weekly timer etc.)	●	●	●	●	●			
Limited control for staff (RC Prohibition, Room temp set point limitation etc.)			●	●	●	●	●	●
Group Control		●	●	●	●			
Advanced Energy Saving (Peak cut, Indoor unit rotation operation etc.)					●			
Remote Management				●	●			
Manage multiple sites				●	●			
Monitor energy consumption					●			
Control third party products					●			
Integrate FGL A/C into BMS						●	●	●

HOTEL

Type	Individual Control			Centralized Control				Integrating Control (Interface)				
	Wired Remote Controller	Simple Remote Controller	Wireless Remote Controller	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller	BACnet® Gateway	Network Convertor for LONWORKS®	MODBUS® Convertor	KNX® Convertor	External Switch Controller
	UTY-RNRYZ2, UTY-RLRY, UTY-RVNYM	UTY-RSRY, UTY-RHRY, UTY-RSNYM	UTY-LNHY	UTY-CGGY	UTY-DCGY	UTY-DTGYZ1	UTY-APGXZ1, UTY-ALGXZ1	UTY-ABGXZ1, UTY-VBGX	UTY-VLGX	UTY-VMSX UTY-VMGX	UTY-VKGX UTY-VKSX	UTY-TERX
Local control for hotel guest	●	●	●									
Centralized A/C control for common space				●	●	●	●	●	●	●	●	
Limited control for hotel guests					●	●	●	●	●	●	●	
Remote Management						●	●					
Advanced Energy Saving (Peak cut, Indoor unit rotation operation etc.)							●	●				
Monitor energy consumption							●					
Control third party products							●					
Integrate FGL A/C into BMS								●	●	●	●	
Interlock with window contact												●
Interlock with key-card												●

OFFICE

Type	Individual Control			Centralized Control				Integrating Control (Interface)				
	Wired Remote Controller	Simple Remote Controller	Wireless Remote Controller	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller	BACnet® Gateway	Network Convertor for LONWORKS®	MODBUS® Convertor	KNX® Convertor	External Switch Controller
	UTY-RNRYZ2, UTY-RLRY	UTY-RSRY, UTY-RHRY, UTY-RSNYM	UTY-LNHY	UTY-CGGY	UTY-DCGY	UTY-DTGYZ1	UTY-APGXZ1, UTY-ALGXZ1	UTY-ABGXZ1, UTY-VBGX	UTY-VLGX	UTY-VMSX, UTY-VMGX	UTY-VKGX, UTY-VKSX	UTY-TERX
Local control for office staff	●	●	●	●	●							
Automatic control of A/C (Schedule timer, Weekly timer etc.)	●		●	●	●	●	●	●				
Centralized A/C control for management					●	●	●	●	●	●	●	
Limited control for office staff (RC Prohibition, Room temp set point limitation etc.)					●	●	●	●	●	●	●	
Advanced Energy Saving (Peak cut, Indoor unit rotation operation etc.)							●	●				
Remote Management						●	●					
Energy Charge Apportionment						●	●	●				
Monitor energy consumption							●					
Control third party products							●					
Integrate FGL A/C into BMS								●	●	●	●	
Interlock with door contact												●
Interlock with human sensor for meeting room												●

Comparison Table of Controllers

Item	Wired Remote Controller (Touch panel)	Wired Remote Controller	Wired Remote Controller	Simple Remote Controller	Simple Remote Controller	Simple Remote Controller*[1]
Model name	UTY-RNRYZ2	UTY-RLRY	UTY-RVNYM	UTY-RSNYM	UTY-RSRY	UTY-RHRY
Max. controllable remote controller groups	1	1	1	1	1	1
Max. controllable indoor units	16	16	16	16	16	16
Max. controllable groups	–	–	–	–	–	–
Air conditioning control function						
On / Off	●	●	●	●	●	●
Operation mode setting	●	●	●	●	●	–
Fan speed setting	●	●	●	●	●	●
Room temp. setting	●	●	●	●	●	●
Room temp. set point limitation	●	●	●	–	●	●
Test operation	●	●	●	●	●	●
Up/down air direction flap setting	●	●	●	–	●	●
Right/left air direction flap setting	●	●	●	–	–	–
Individual louver control	●	–	–	–	–	–
Group setting	–	–	–	–	–	–
RC prohibition	–	–	–	–	–	–
Anti freeze setting	●	–	–	–	–	–
Set temp. auto return	●	●	●	–	–	–
Economy mode setting	●	●	●	–	–	–
Human sensor control	●	–	–	–	–	–
Display						
Error	●	●	●	●	●	●
Defrosting	●	●	●	●	●	●
Current time	●	●	●	–	–	–
Day of week	●	●	●	–	–	–
R.C. prohibition	●	●	●	●	●	●
Cooling/heating priority	●	●	–	●	●	●
Address display	●	●	●	●	●	●
Room temp	●	–	●	–	●	●
Multi language	●	–	●	–	–	–
Summer time	●	–	●	–	–	–
Name registration	●	–	–	–	–	–
Backlight	●	–	●	●	●	●
2D floor layout / 3D building display	–	–	–	–	–	–
Refrigerant leakage detection function	–	–	–	–	–	–
Timer						
Schedule timer — Period	Week	Week	Week	–	–	–
Schedule timer — On/off, Temp, Mode, Times per day	8	4	8	–	–	–
On/off timer	●	●	●	–	–	–
Sleep timer	–	–	–	–	–	–
Program timer	–	–	–	–	–	–
Auto off timer	●	●	●	–	–	–
Day off	●	●	●	–	–	–
Min. unit of timer setting (Minutes)	10 • 30	30	30	–	–	–
Control						
Status monitoring system	–	–	–	–	–	–
Electricity charge apportionment	–	–	–	–	–	–
Error history	●	●	●	–	–	–
Emergency stop	–	–	–	–	–	–
Remote management	–	–	–	–	–	–
Energy saving management	–	–	–	–	–	–
E-mail notification for malfunction	–	–	–	–	–	–
Key lock	● Child lock	● Child lock	● Child lock	–	–	–
Low noise mode	–	–	–	–	–	–

	Wireless Remote Controller	Central Remote Controller (For 8 rooms Multi)	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller Lite (Software)	System Controller (Software)
	UTY-LNHY	UTY-DMMYM	UTY-CGGY	UTY-DCGY	UTY-DTGYZ1	UTY-ALGXZ1	UTY-APGXZ1
	1	1	8	100	400	400	1600
	16	8	128	100	400	400	1600
	−	−	−	16	400	400	1600
	●	●	●	●	●	●	●
	●	●	●	●	●	●	●
	●	●	●	●	●	●	●
	●	●	●	●	●	●	●
	−	−	−	●	●	●	●
	●	−	−	●	●	−	−
	●	−	−	●	●	●	●
	●	−	−	●	●	●	●
	−	−	−	−	●	−	−
	−	−	−	●	●	●	●
	−	●	−	●	●	●	●
	−	−	−	●	●	●	●
	−	−	−	−	●	−	−
	●	●	−	●	●	●	●
	−	●	−	−	●	●	●
	−	●	●	●	●	●	●
	−	−	−	●	●	●	●
	●	●	●	●	●	●	●
	−	−	●	−	●	●	●
	−	●	●	●	●	●	●
	−	−	●	●	●	●	●
	−	−	●	●	●	●	●
	−	−	−	−	●	−	−
	−	●	−	●	●	●	●
	−	●	−	●	●	●	●
	−	−	−	●	●	●	●
	−	●	−	●	●	−	−
	−	−	−	−	−	−	●
	−	−	−	−	●	●	●
	−	Week	Week	Week	Year	Year	Year
	−	4	4	20	20	144	144
	●	−	−	−	−	−	−
	●	−	−	−	−	−	−
	●	−	−	−	−	−	−
	−	−	−	−	●	−	−
	−	●	−	●	●	●	●
	5	5	10	10	10	10	10
	−	−	−	●	●	●	●
	−	−	−	−	○	○	●
	−	−	●	●	●	●	●
	−	−	−	●*2	●*2	−	−
	−	−	−	−	●	○	●
	−	−	−	−	−	○	○
	−	−	−	−	●	●	●
	−	● Child lock	● Child lock	● Password setting	● Password setting	● Password setting	● Password setting
	−	●	−	−	●	−	−

*1 "Operation mode" setting is not available for this model.   *2 This function is available only through external input control.   ●: Supported   ○: Optional function   −: Not supported yet

Wired Remote Controller (Touch Panel)

UTY-RNRYZ2

Max. Controllable
16 indoor units

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

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

High performance and compact size

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

Individual control + Thermo sensor + Weekly timer + Auto off timer →

Accurate and comfortable control

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

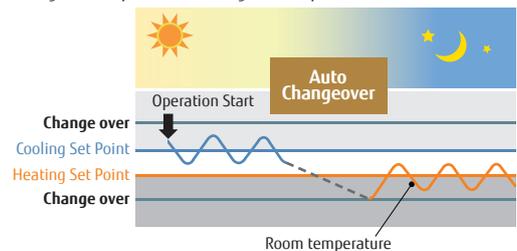Room temperature display

Room temperature sensor

Various energy saving control

Custom Auto
- Maintains 2 separate set points for heating and cooling.
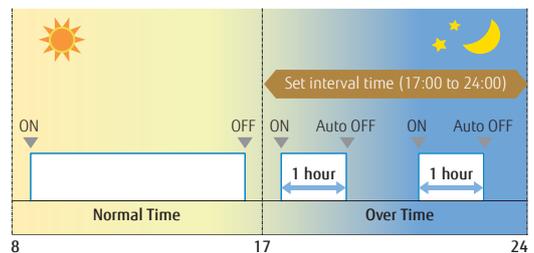- Automatically changes mode between heating and cooling.

* This function is not available for some models.

Cooling set temp. 27℃, Heating set temp. 26℃

Auto Changeover

Operation Start

Change over
Cooling Set Point
Heating Set Point
Change over

Room temperature

Auto OFF timer
- The indoor unit automatically is turned off when it reaches to the preset operating time frame.
- The time frame of the "Auto off timer" can be flexibly scheduled.
- Can be set off time 30 to 240 minutes

2 schedules Weekly Timer

Set Temperature Auto Return

Set Temperature Upper and Lower Limit Setting

Set interval time (17:00 to 24:00)

ON   OFF   ON   Auto OFF   ON   Auto OFF
                            1 hour   1 hour
     Normal Time   Over Time
8   17   24

Ex.) At interval time hour (17:00 to 24:00) to prevent forgetting to turn off
Set off time : 1 hour

Specifications

Model name	UTY-RNRYZ2
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

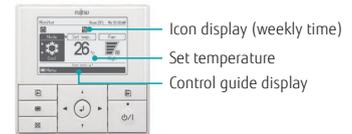**UTY-RVNYM**

Max. Controllable
16 indoor units

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

High performance and compact size

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

Individual control + Thermo sensor + Weekly timer + Auto off timer →

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

Weekly 1

Setting menu in remote controller

Weekly 2

Setting menu in remote controller
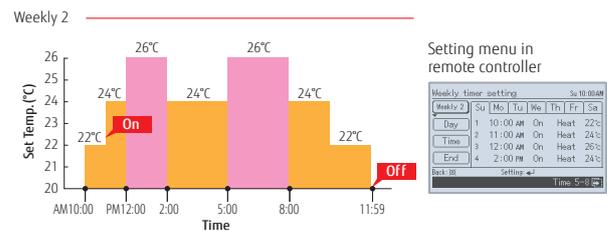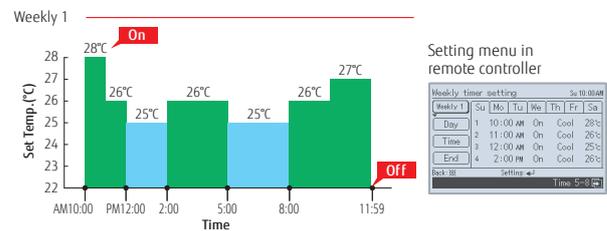
Specifications

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.

Wired Remote Controller

UTY-RLRY

- Various timer setup (ON / OFF / WEEKLY) are possible.
- The room temperature can be controlled by detecting the temperature accurately with Built-in thermo sensor.
- When a failure occurs, the error code is displayed.
- Error history. (Last 16 error codes can be accessed.)
- 2-wire type

Max. Controllable
16 indoor units

High performance and compact size

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

| Individual control | + | Thermo sensor | + | Weekly timer | + | Auto off timer | → |

High visibility and easy operation

- "Mode", "Set Temp", and "Fan" are displayed at large size on the top screen.
- Each function to be set is indicated by an icon.
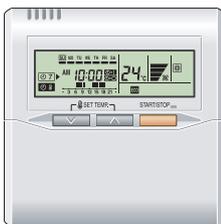- Control guide is displayed and operation is simple and straightforward.

Set contents can be displayed clearer with large LCD.

Sophisticated control buttons Simple operation with easy 4-way navigation pad

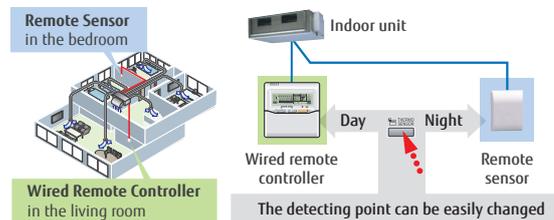# Wired Remote Controller

UTY-RNNYM

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

Max. Controllable
16 indoor units

Accurate and comfortable

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

Example of changing sensor

Remote Sensor in the bedroom

Indoor unit

Wired Remote Controller in the living room

Wired remote controller

Day   Night

Remote sensor

The detecting point can be easily changed

Displayed temperature is set temperature.

Built-in timers

Weekly timer: Possible to set ON/OFF time to operate twice each day of the week.
Setback timer: Possible to set temperature for two times spans and for each day of the week.
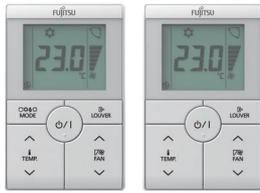At "Weekly timer" + "Set back timer" setup

Specifications

Model name	UTY-RLRY	UTY-RNNYM
Power Source	DC 12 V	DC 12 V
Dimensions (H × W × D) (mm)	120 × 120 × 17	120 × 120 × 18
Weight (g)	170	160

DC 12 V is supplied by the indoor unit.

Simple Remote Controller

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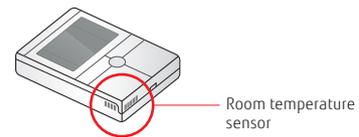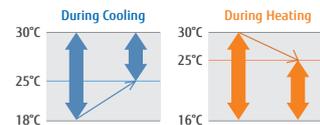
Without
operation mode

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 colored backlight on monitor enable easy operation in dark.
- 2-wire type

Max. Controllable
16 indoor units

Corresponding to various applications

- **Vertical louver control:** Vertical air flow direction can be adjusted for Duct types with auto louver 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.

During Cooling
30°C
25°C
18°C

During Heating
30°C
25°C
16°C

Room temperature
sensor

Simple Remote Controller

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

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

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 other 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.

Wireless Remote Controller
UTY-LNHY

Max. Controllable
16 indoor units

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
UTB-YWC / UTY-LRHYM / UTY-LBTYM

UTB-YWC
for VRF

UTY-LRHYM
for Split

Duct type indoor unit

IR Receiver Unit

Wireless
Remote Controller

UTY-LBTYM
for Split

Duct type indoor unit

IR Receiver Unit

Wireless
Remote Controller

Duct type* indoor units can be controlled with Wireless Remote Controller

*Only Large Airflow Duct can not be connected to IR Receiver Unit.

IR Receiver Unit
UTY-LRHYB1 / UTY-LBHXD / UTY-LRHYA2 / UTY-LBTYC

UTY-LRHYB1
for VRF

UTY-LBHXD
for VRF

UTY-LRHYA2
for Split

IR Receiver Unit

Wireless
Remote Controller

UTY-LBTYC
for Split

IR Receiver Unit

Wireless
Remote Controller

Cassette type indoor unit can be controlled with Wireless Remote Controller

Specifications

Model name	UTY-LNHY	UTB-YWC/UTY-LRHYM/UTY-LBTYM	UTY-LRHYB1/UTY-LBHXD UTY-LRHYA2/UTY-LBTYC
Battery	1.5 V (R03 / LR03 / AAA) × 2	DC 5 V	DC 5 V
Dimensions (H × W × D) (mm)	170 × 56 × 19	145 × 90 × 30	193.9 × 193.9 × 31.2
Weight (g)	85	150	140

DC 12 V is supplied by the indoor unit.

Group Remote Controller/Network Convertor

UTY-CGGY / UTY-VGGXZ1

**Group Remote Controllers
UTY-CGGY**

**Network Convertor
UTY-VGGXZ1
For Group Remote Controller**

Max. Controllable
8
remote
controller groups

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

Group control of indoor units with simple operation

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

Control up to 8 remote controller groups

- Single Group Remote Controller controls and monitors up to 8 remote controller groups.
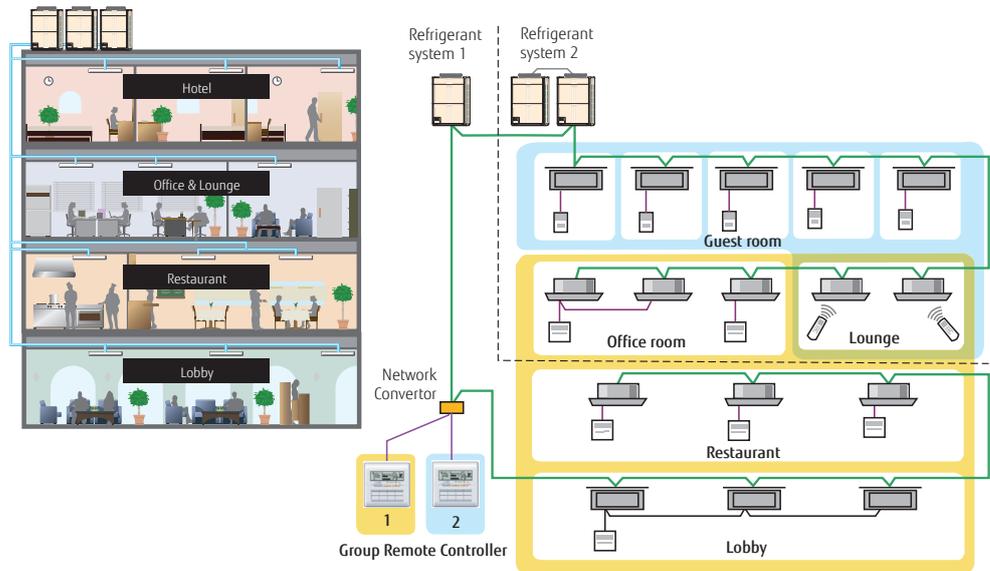
Group Remote Controller 1:
To control office room, lounge, restaurant and lobby (8 remote controller groups)

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

High performance and compact size

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

Central control + ON/OFF control + Weekly timer →

Built-in weekly timers

The weekly timer is provided as a standard function.

Specifications

Model name	UTY-CGGY
Power Supply	DC 12 V
Dimensions (H × W × D) (mm)	120 × 120 × 18
Weight (g)	200

DC 12 V is supplied by the indoor unit.

Model name	UTY-VGGXZ1
Power Supply	208-240 V 50/60 Hz, Single phase
Power Consumption (W)	6.5
Dimensions (H × W × D) (mm)	67 × 288 × 211
Weight (g)	1,500

201

Central Remote Controller

UTY-DCGY

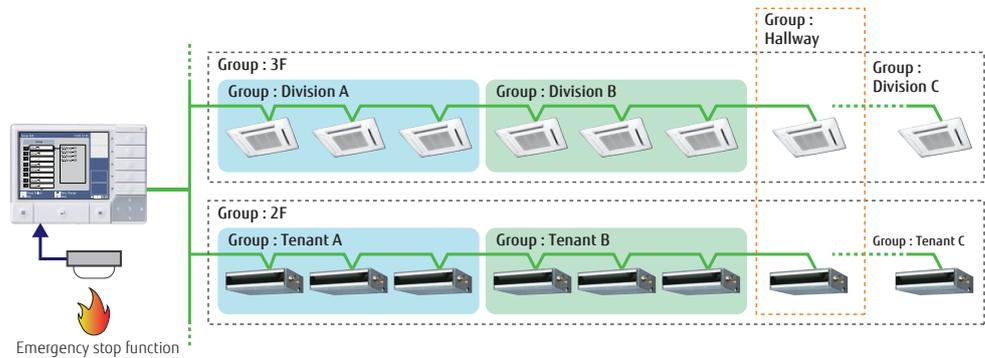## For small- and medium-sized buildings and tenants

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

Max. Controllable
100 indoor units

Max. Controllable
**16** groups

System overview

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

Group : Hallway

Group : 3F

Group : Division A

Group : Division B

Group : Division C

Group : 2F

Group : Tenant A

Group : Tenant B

Group : Tenant C

Emergency stop function

Easy Installation

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

Setting pattern 1

SW BOX

Power supply unit

Wall

Control panel + Power supply unit

Setting pattern 2

Ceiling

Power supply unit

Control panel

Wall
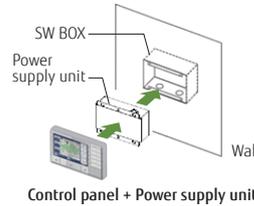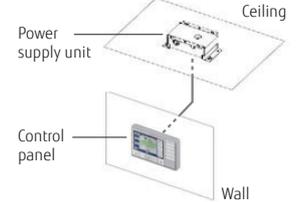
Functions

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

Specifications

Model name	UTY-DCGY	
	Control Panel	Power Supply Unit
Power Supply	DC 5 V	100-240 V, 50-60 Hz, Single phase
Dimensions (H × W × D) (mm)	120 × 162 × 25.7	99 × 135 × 39.2
Weight (g)	308	355

<PACKING LIST>

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

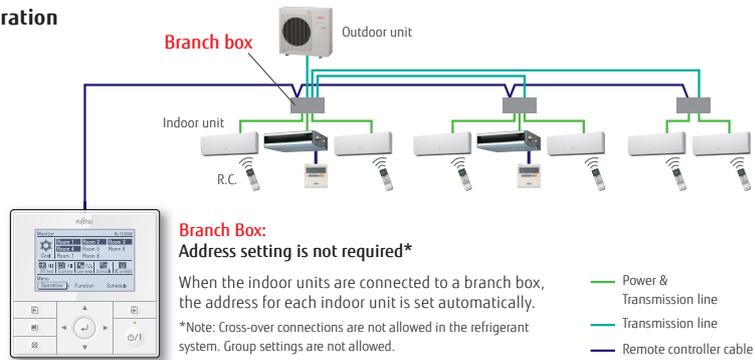# Central Remote Controller for 5-6 Rooms Multi, 8 Rooms Multi

UTY-DMMYM

Max. Controllable
1 multi system

Max. Controllable
8 indoor units

- 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

Branch box
Outdoor unit
Indoor unit
R.C.

Branch Box:
Address setting is not required*

When the indoor units are connected to a branch box, the address for each indoor unit is set automatically.

*Note: Cross-over connections are not allowed in the refrigerant system. Group settings are not allowed.

— Power & Transmission line
— Transmission line
— Remote controller cable

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.
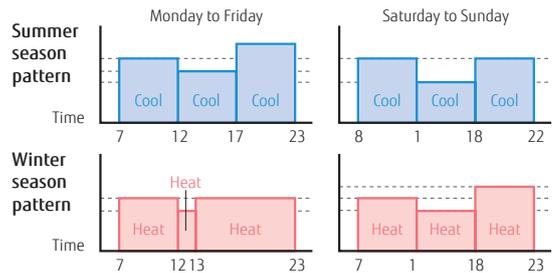
Low noise operation
Users can choose from 4 low noise levels, depending on the installation environment. The operation time can be set using the timer.
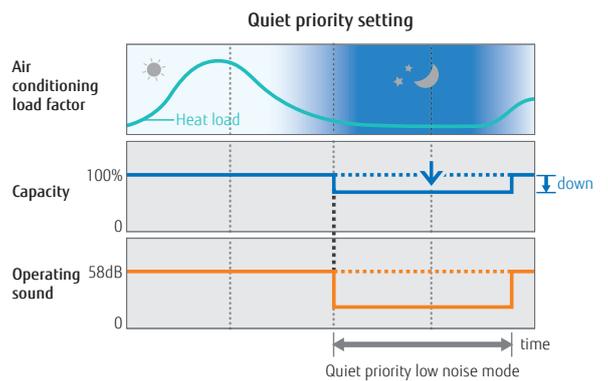
10°C heat operation
When you leave, minimum heating operation is performed to maintain the room temperature (maintain at 10°C).

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

Monday to Friday
Saturday to Sunday

Summer season pattern
Time

Cool Cool Cool
7 12 17 23

Cool Cool Cool
8 1 18 22

Winter season pattern
Time

Heat
Heat Heat
7 12 13 23

Heat Heat Heat
7 1 18 23

Quiet priority setting

Air conditioning load factor
Heat load

Capacity
100%
0
down

Operating sound
58dB
0
time

Quiet priority low noise mode

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.

Touch Panel Controller

UTY-DTGYZ1

- Large-sized 7.5-inch TFT color
- LCD Easy finger touch operation
- Stylish shape and design to suit all application
- 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

Max. Controllable
400 indoor units

Max. Controllable
100 outdoor units

Max. Controllable
400 groups

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 color identifies current control operation blue for monitoring, green for operational control.
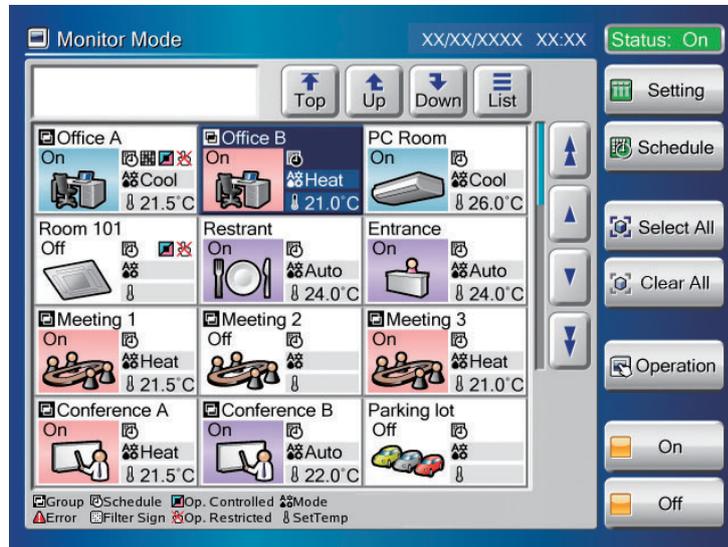
Easy maintenance

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

Easy installation

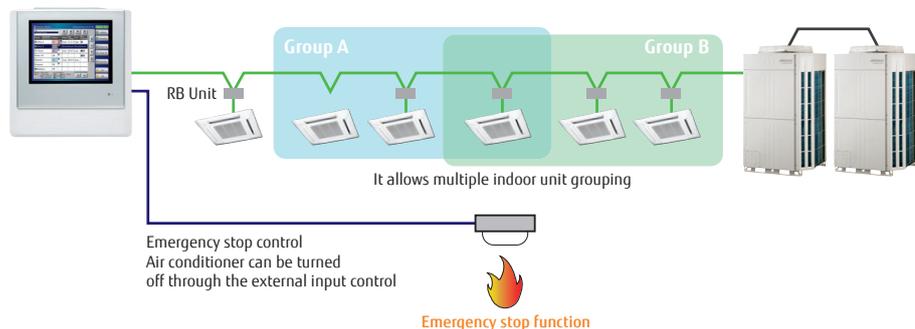- Touch Panel Controller is easily mounted to the wall.
- Flat back surface allows to be installed wherever it is needed.
- No additional component is required for installation
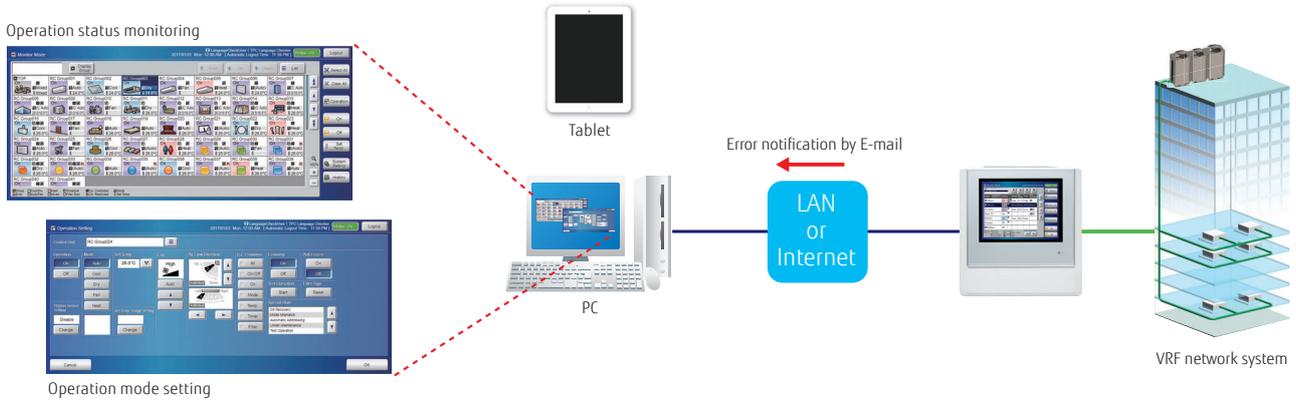
Up to 400 indoor units can be controlled

RB Unit

Group A

Group B

It allows multiple indoor unit grouping

Emergency stop control
Air conditioner can be turned
off through the external input control

Emergency stop function

Control & monitoring

- Control and monitor Fujitsu's air conditioner via LAN or Internet.
- Allow user or tenant to manage only assigned equipment by their PC or tablet from anywhere.
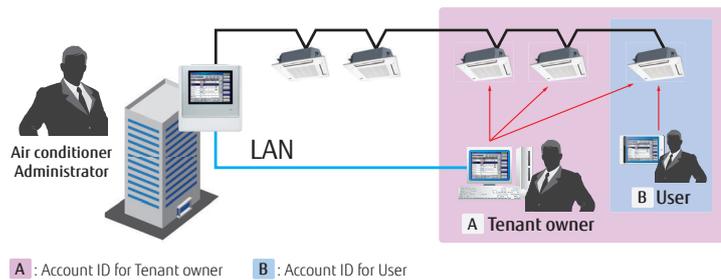- Error contents are notified automatically by E-mail at error occurrence to handle the trouble promptly.

Operation status monitoring

Tablet

Error notification by E-mail

LAN or Internet

PC

VRF network system

Operation mode setting

Smart Phone

Model name	Browser
Nexus 6P (Android 7.1.1)	Google Chrome 5.5
iphone7 (iOS 10.1)	Safari 10

Tablet

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

Flexible access permission for Point each level user.

Administrator can register multiple user to permit which indoor unit(s) and which function can access.

Air conditioner Administrator

LAN

B User

A Tenant owner

A : Account ID for Tenant owner   B : Account ID for User
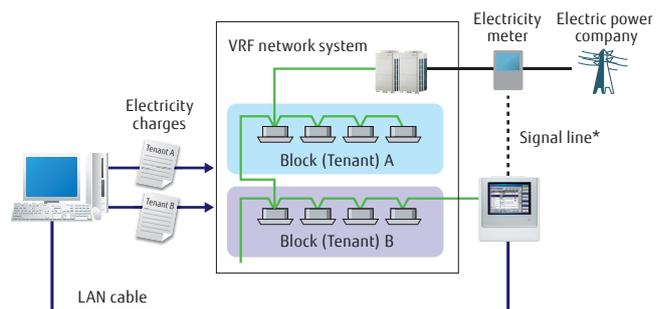
Additional languages function

Corresponds to 7 different languages, English, Chinese, French, German, Spanish, Russian, Polish as standard.
Additional language can be integrated on remote device by creating language database.
Additional language is displayed on only the remote device, and Touch Panel Controller cannot be added other languages.

Monitoring from web site

Write

7 Languages

Language data

7 Languages + Other languages
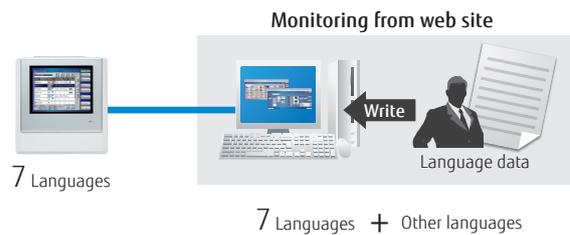
Electricity charge apportionment
(Option: UTY-PTGXA)

- 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

VRF network system

Electricity meter

Electric power company

Electricity charges

Tenant A

Tenant B

Block (Tenant) A

Block (Tenant) B

Signal line*

LAN cable

*: 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.
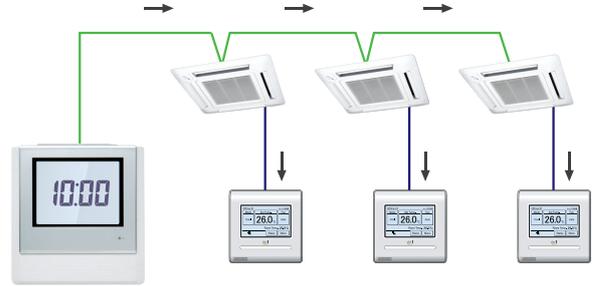
Features: Touch Panel Controller

Automatic summer time setting

Providing function

1) Schedule setting of summer time setting
  • It prevents the user from forgetting to set summer time. In addition, it reduces the time and labor of user.

Automatic clock adjustment

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

Outdoor 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.

Block (Tenant) A

Block (Tenant) B

Quiet priority setting

Air conditioning load factor

Heat load

Capacity   100%   0

Operating sound   58dB   0

NEW Various energy saving control

Custom Auto
• Maintains 2 separate set points for heating and cooling.
• Automatically changes mode between heating and cooling.

* This function is not available for some models.

Cooling set temp. 28℃, Heating set temp. 18℃

Auto Changeover

Operation Start

Change over

Cooling Set Point

Heating Set Point

Change over

Room temperature
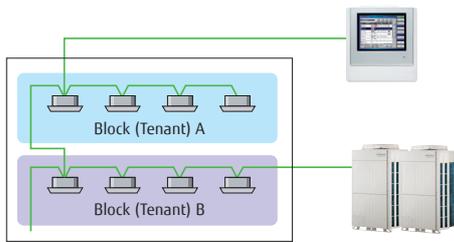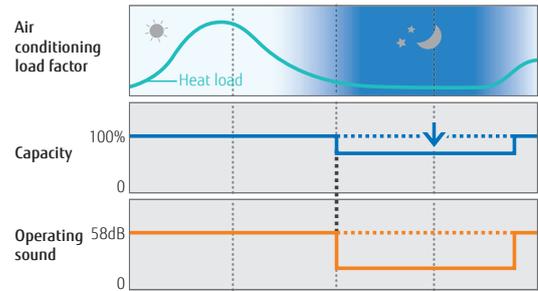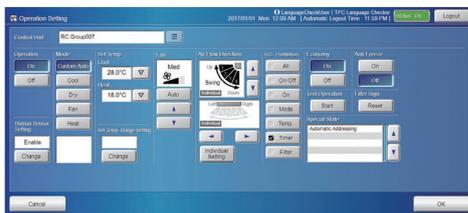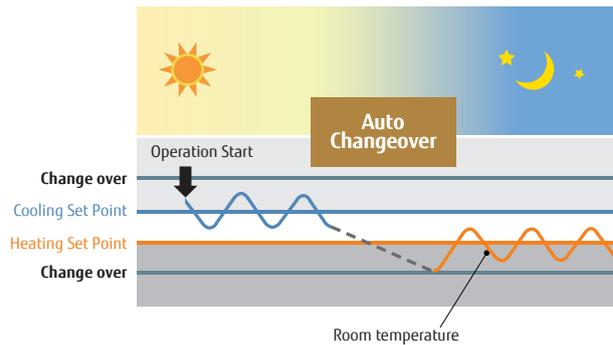
NEW Refrigerant leakage detection function

The refrigerant leak condition is indicated by the management equipment, and if refrigerant leakage occurs, it is displayed as a pop-up, the user is notified, and the refrigerant is shut off.

Refrigerant leakage was detected.
Please confirm the situation immediately.

Close

Pop-up highlighting

FUNCTIONS SUMMARY

	UTY-DTGYZ1	Monitoring side
Air conditioning control function		
On / Off	●	●
Operation mode setting*	●	●
Fan speed setting	●	●
Room temp. setting	●	●
Room temp. set point limitation	●	●
Test operation	●	●
Up/down air direction flap setting	●	●
Right/left air direction flap setting	●	●
Individual louver control	●*1	●
Group setting	●	●
RC prohibition	●	●
Anti freeze setting	●	●
Set temp. auto return	—	●
Various energy saving control	—	●
Economy mode setting	●	●
Human sensor control	—	●
Display		
Error	●	●
Defrosting	●	●
Current time	●	●
Day of week	●	●
R.C. prohibition	●	●
Cooling/heating priority	●	●
Address display	●	●
Room temp	●	●
Multi language	●	●
Summer time	●	●
Time zone setting	●	●
Name registration	●	●
Backlight	●	●
Language setting	7	7+other
Filter sign reset	●	●
Memory operation	●	●
Refrigerant leakage detection function	●	●

		UTY-DTGYZ1	Monitoring side
Timer			
Schedule timer	Period	Year	Year
	On/off, Temp, Mode, Times per day	20	20
On/off timer		—	—
Sleep timer		—	—
Program timer		—	—
Auto off timer		—	●
Day off		●	●
Min. unit of timer setting (Minutes)		10	10
Control			
Status monitoring system		●	●
Electricity charge apportionment		○	○
Error history		●	●
Emergency stop		●*2	●*2
Remote management		—	●
Energy saving management		—	—
E-mail notification for malfunction		—	●
Key lock		● Password setting	—
Low noise mode		●	●

●: Supported   ○: Optional function   —: Not supported yet
*1 Only setting cancellation can be operated.
*2 This function is available only through external input control.

Specifications

Model name	UTY-DTGYZ1
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

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

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

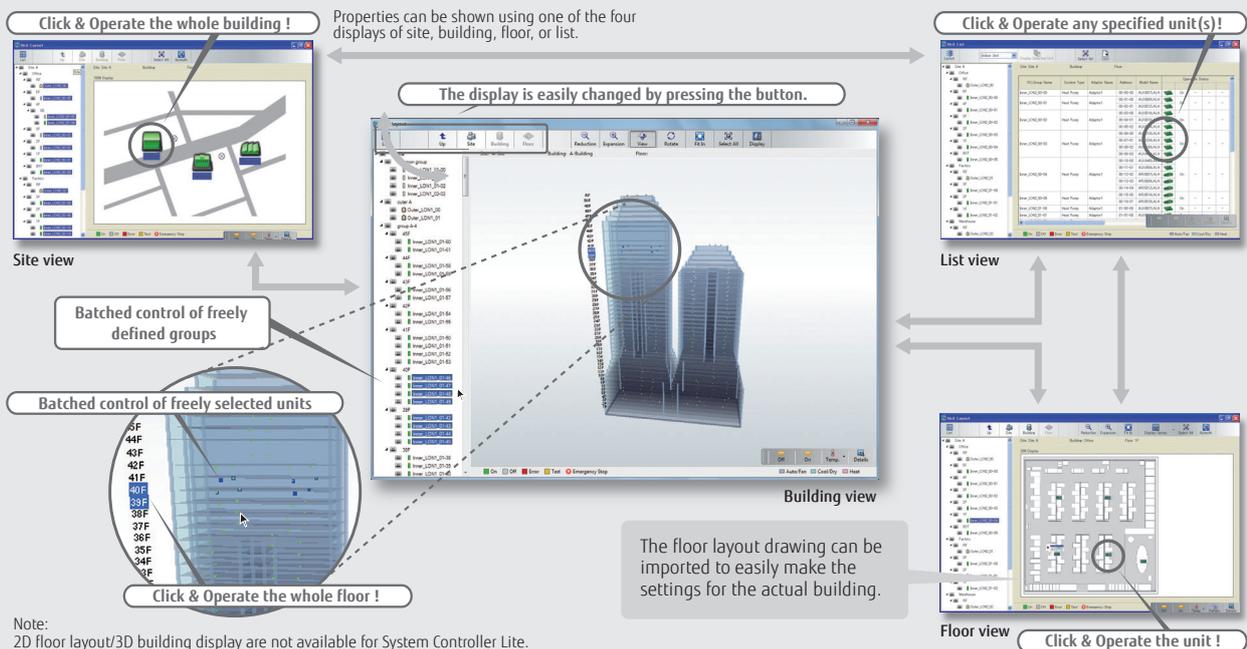Max. Controllable
400 indoor units

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.

Click & Operate the whole building !

Properties can be shown using one of the four displays of site, building, floor, or list.

Click & Operate any specified unit(s) !

The display is easily changed by pressing the button.

Site view

Batched control of freely defined groups

List view

Batched control of freely selected units

Click & Operate the whole floor !

Building view

The floor layout drawing can be imported to easily make the settings for the actual building.

Floor view

Click & Operate the unit !

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

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. Wasteful electricity charge by forgetting to turn off and patrol activities can be reduced in the entire building.
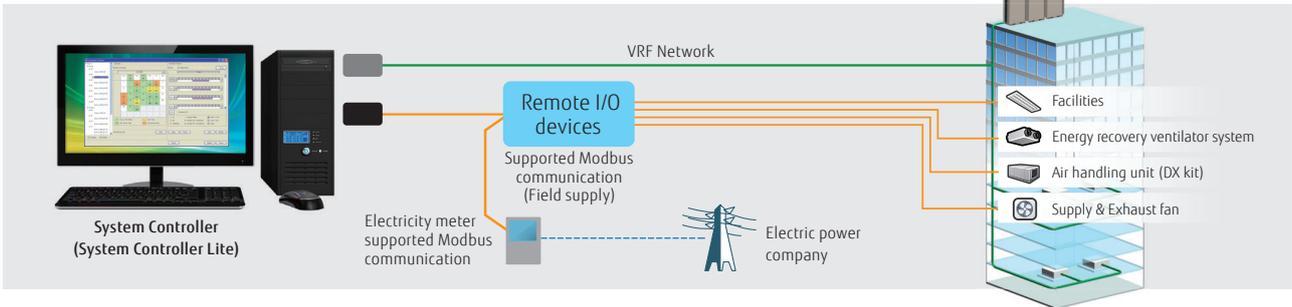
Diverse operation management & Data management

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.
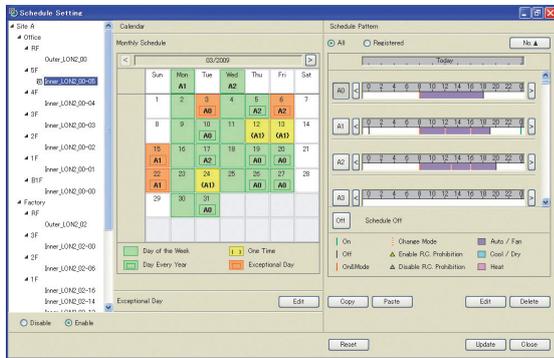- Settings can be made for periods straddling midnight.
- Allows programming of special settings for holidays, including public holidays, for a complete year.
- Low noise operation of outdoor unit can be scheduled.

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 of each tenant from the electricity charge for each month. With electricity charge apportionment function, used energy apportionment ratio will be provided, calculating in detail the energy consumed by the units used by each tenant. This information is then used to calculate the charges for the electricity consumed for air conditioning by each tenant from the total electricity charges in the bill from the electric power company. (See figure at right)
The detailed calculation takes into consideration such things as unused rooms and nighttime electricity charges and shows them in a charges calculation sheet.

System Configuration Example

209
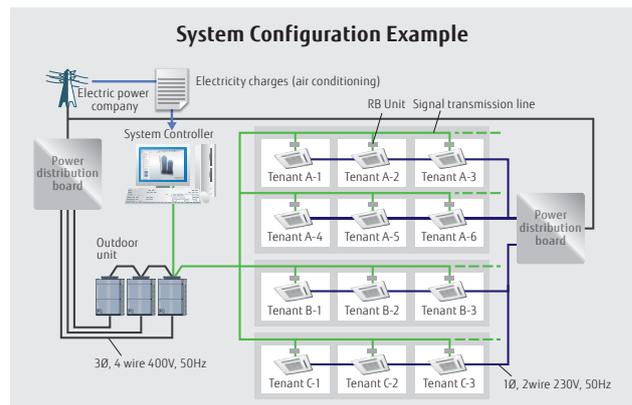
PRODUCT LINEUP: CONTROL SYSTEM-CENTRALIZED CONTROL

Features: System Controller/System Controller Light

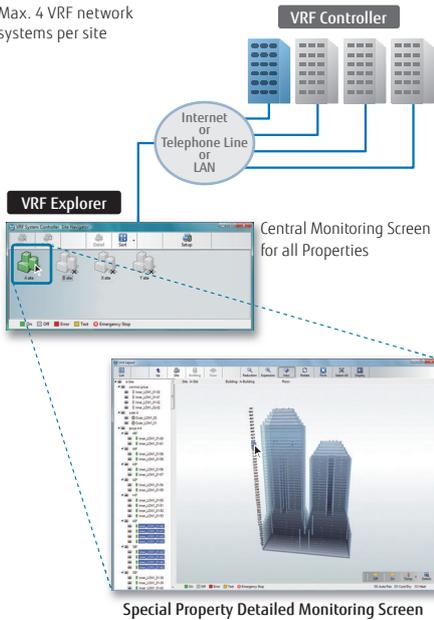## Remote management

`Standard` for System Controller
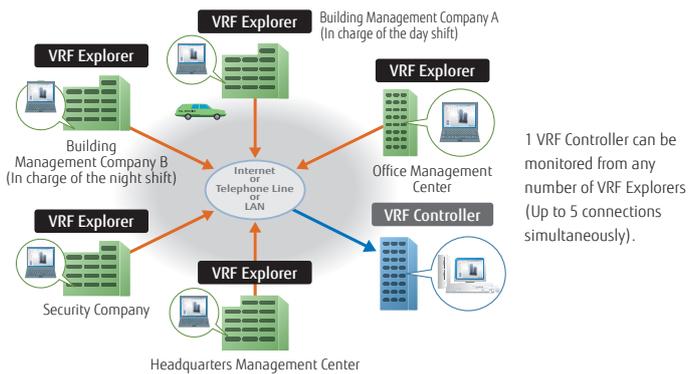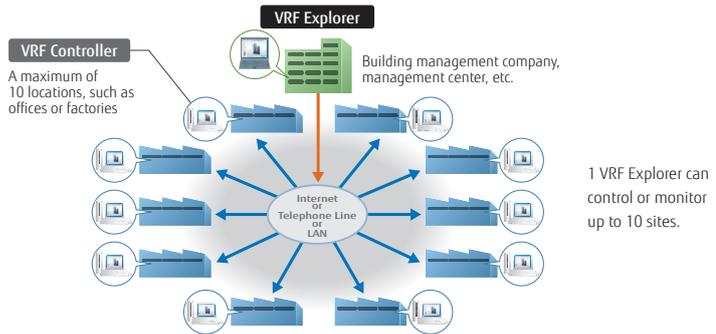`Option` for System Controller Lite UTY-PLGXR2

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

VRF Controller

Internet or Telephone Line or LAN

VRF Explorer

Central Monitoring Screen for all Properties

Special Property Detailed Monitoring Screen

Remote central control

VRF Explorer

VRF Controller
A maximum of 10 locations, such as offices or factories

Building management company, management center, etc.

Internet or Telephone Line or LAN

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

VRF Explorer — Building Management Company A (In charge of the day shift)

VRF Explorer

VRF Explorer

Building Management Company B (In charge of the night shift)

Internet or Telephone Line or LAN

Office Management Center

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

VRF Explorer
Security Company

VRF Explorer
Headquarters Management Center

VRF Controller

Energy saving management

`Option` for System Controller UTY-PEGX
`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 analyze 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		●	–	–	–	–	–	–
	Group display		●	–	–	–	–	–	–
Error management	Error notification		●	–	●	–	–	–	–
	Audible alarm		●	–	●	–	–	–	–
	Error e-mail notification		●	–	●	–	–	–	–
History	Error history		●	–	●	–	–	–	–
	Operation history		●	–	–	–	–	–	–
	Control history		●	–	–	–	–	–	–
Operation control	Individual control	On/Off	●	–	●	–	–	–	–
		Operation mode*	●	–	●	–	–	–	–
		Room temperature	●	–	●	–	–	–	–
		Fan speed	●	–	●	–	–	–	–
		Air flow direction	●	–	●	–	–	–	–
		Economy mode	●	–	●	–	–	–	–
		Room temperature set point limitation	●	–	●	–	–	–	–
		Test operation	●	–	●	–	–	–	–
		Antifreeze	●	–	●	–	–	–	–
		Outdoor unit low noise setting	●	–	●	–	–	–	–
	Individual management	Remote control prohibition setting	●	–	●	–	–	–	–
		Temperature upper and lower limit setting	●	–	●	–	–	–	–
		Filter sign reset	●	–	●	–	–	–	–
	Other	Memory operation	●	–	●	–	–	–	–
		Pattern operation	●	–	●	–	–	–	–
Schedule	Annual Schedule		●	–	●	–	–	–	–
	Special day setting		●	–	●	–	–	–	–
	On /off per day		72	–	72	–	–	–	–
	On / off per week		504	–	504	–	–	–	–
	Day off		●	–	●	–	–	–	–
	Min. unit of timer setting (Minutes)		10	–	10	–	–	–	–
	Low noise mode Weekly schedule		●	–	●	–	–	–	–
Remote management	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		–	●	–	–	●	–	–
	Electricity meter supported		–	●	–	–	●	–	–
Energy saving management	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		●	–	–	–	–	–	●
Others	Database import/export		●	–	●	–	–	–	–
	Automatic clock adjustment		●	–	●	–	–	–	–
	Multi language		7 languages	–	7 languages	–	–	–	–
	Refrigerant leakage detection function		●	–	●	–	–	–	–

●●: Available. - : Not available.

Personal computer system requirements

The required PC specifications are shown in the following table.

	System Controller	System Controller Lite
Operating system	• 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® CoreTM i3 2 GHz or higher	
Memory	• 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	•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.	•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	Option Remote access	Option Electricity charge apportionment	Option Energy saving	Option Central Control
Model name	UTY-APGXZ1	UTY-PEGXZ1	UTY-ALGXZ1	UTY-PLGXR2	UTY-PLGXA2	UTY-PLGXE2	UTY-PLGXX2
WHITE-USB-KEY	1	1	1	1	1	1	1

*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

WHITE-USB-KEY
(Software Protection Key)

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
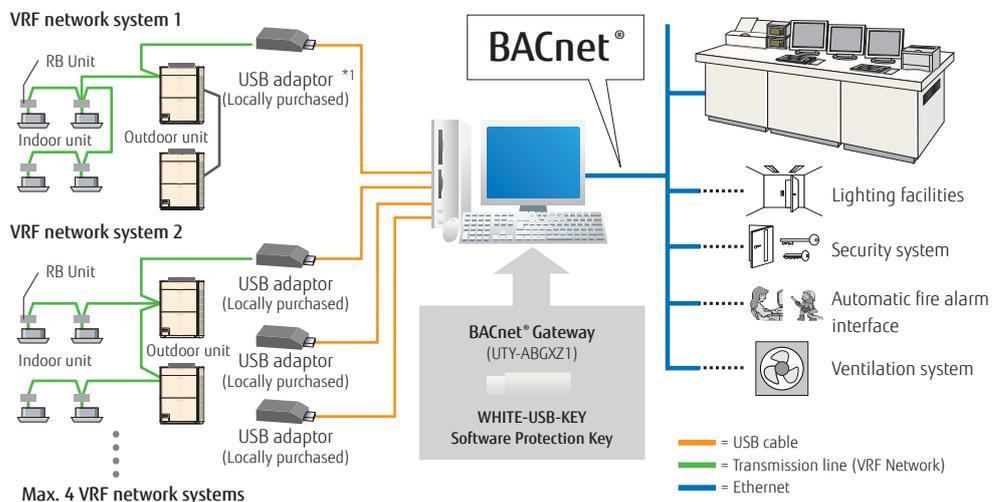**4**
VRF network systems

Max. Controllable
400 outdoor units

Max. Controllable
1,600 indoor units

Installation example

VRF network system 1
RB Unit
Indoor unit
Outdoor unit
USB adaptor *1 (Locally purchased)

VRF network system 2
RB Unit
Indoor unit
Outdoor unit
USB adaptor (Locally purchased)
USB adaptor (Locally purchased)
USB adaptor (Locally purchased)

Max. 4 VRF network systems

BACnet®

BACnet® Operator Workstation (B-OWS)

BACnet® Gateway (UTY-ABGXZ1)
WHITE-USB-KEY Software Protection Key

Lighting facilities
Security system
Automatic fire alarm interface
Ventilation system

= USB cable
= Transmission line (VRF Network)
= Ethernet

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

Personal computer system requirements

	UTY-ABGXZ1
Operating system	• Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish
CPU	Intel® Core™ i3 2 GHz or higher
Memory	• 2 GB or more (for Windows® 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	• Ethernet port (for getting access to the Internet using LAN)
	• USB ports (Maximum of 5 ports)
	  - 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

- BACnet® Gateway enables to connect a BMS and FG 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.

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.
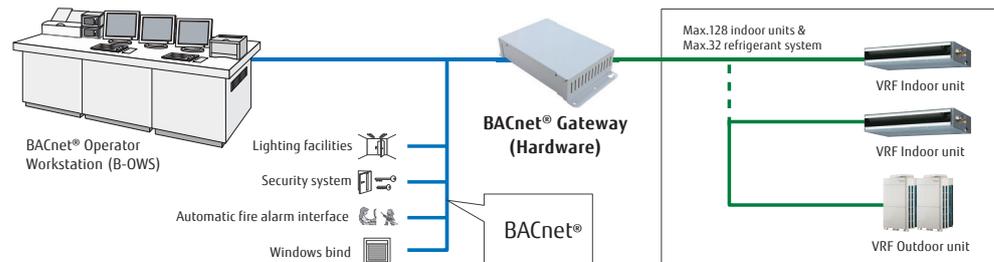
Max. Controllable
1 VRF network system

Max. Controllable
32 refrigerant system

Max. Controllable
128 indoor units

Installation example

BACnet® Operator Workstation (B-OWS)
Lighting facilities
Security system
Automatic fire alarm interface
Windows bind
BACnet® Gateway (Hardware)
BACnet®
Max.128 indoor units & Max.32 refrigerant system
VRF Indoor unit
VRF Indoor unit
VRF Outdoor unit

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

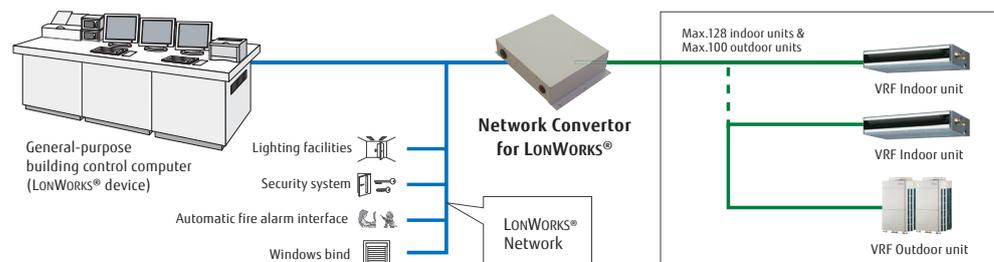| Model name	UTY-VBGX
Power Supply	100-240 V 50/60 Hz, single phase
Power Consumption (W)	4.6 (max.)
Dimensions (H × W × D) (mm)	59.6 × 270.4 × 176
Weight (g)	1,200

Network Convertor for LONWORKS®

UTY-VLGX

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

Max. Controllable
4 units to BMS

Max. Controllable
100 outdoor units

Max. Controllable
128 indoor units

Installation example

General-purpose building control computer (LONWORKS® device)
Lighting facilities
Security system
Automatic fire alarm interface
Windows bind
Network Convertor for LONWORKS®
LONWORKS® Network
Max.128 indoor units & Max.100 outdoor units
VRF Indoor unit
VRF Indoor unit
VRF Outdoor unit

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.)

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MODBUS® Convertor for Indoor Unit
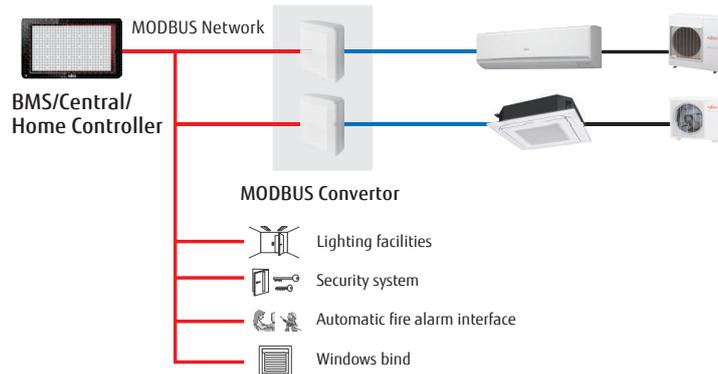
UTY-VMSX

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 in the indoor unit.
- The MODBUS Controller permits central monitoring and control of air conditioners from BMS/Central/Home Controller.

MODBUS Network

BMS/Central/
Home Controller

MODBUS Convertor

Lighting facilities

Security system

Automatic fire alarm interface

Windows bind

Basic control

- Turning the units on and off
- Mode control (Heat, Cool, Dry, Auto, Fan)
- Fan speed setting
- Louver 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.

MODBUS Network
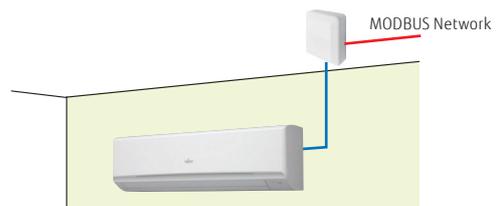
Specifications

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

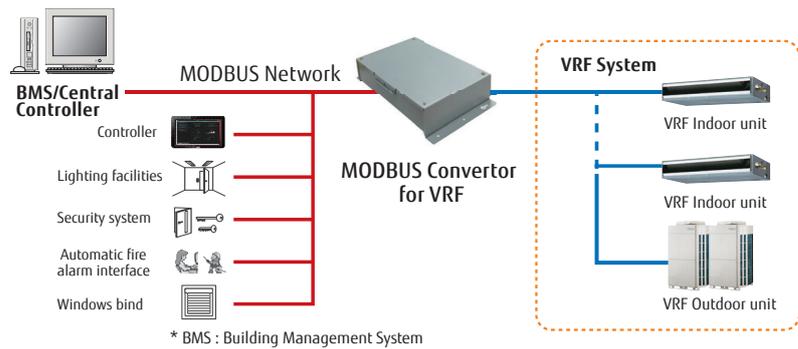| Transfer mode	RTU mode
Communication speed	9600/19200bps
Data bit	8
Parity	even/odd/none
Stop bit	1/2 (no parity)
Network	RS485
Maximum cable length	1000m (3280 ft)

MODBUS® Convertor

UTY-VMGX

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 convertors 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

MODBUS Network

BMS/Central Controller

Controller

Lighting facilities

Security system

Automatic fire alarm interface

Windows bind

MODBUS Convertor for VRF

VRF System

VRF Indoor unit

VRF Indoor unit

VRF Outdoor unit

* BMS : Building Management System
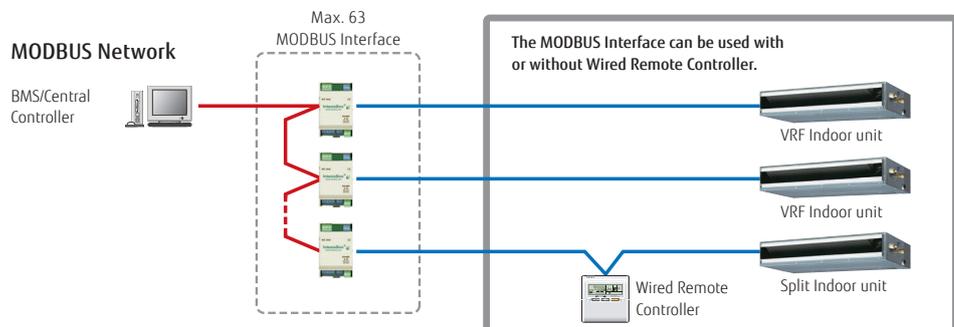
MODBUS® Interface

FJ-RC-MBS-1

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

MODBUS Network

Max. 63
MODBUS Interface

The MODBUS Interface can be used with or without Wired Remote Controller.

BMS/Central Controller

VRF Indoor unit

VRF Indoor unit

Split Indoor unit

Wired Remote Controller

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	FJ-RC-MBS-1
Dimensions (H × W × D) (mm)	93 × 53 × 58
Weight (g)	85

SPLIT

MULTI SPLIT

VRF

VENTILATION

CONTROL SYSTEM

AIR TO WATER

215

KNX® Convertor for VRF

UTY-VKGX

KNX Convertor is useful for centralized control in a system.

- New KNX Convertor enables to connect central/home controller and FG 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

KNX Convertor for VRF

Central / Home Controller

Registrable
128 indoor units
100 outdoor units

KNX® Convertor for Indoor Unit

UTY-VKSX

KNX Convertor is useful for individual control of indoor.

- New KNX Convertor enables to connect central/home controller and FG indoor unit.
- Compact and light weight design
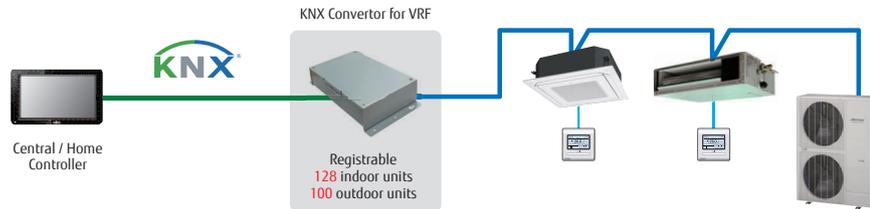
Max. Connectable
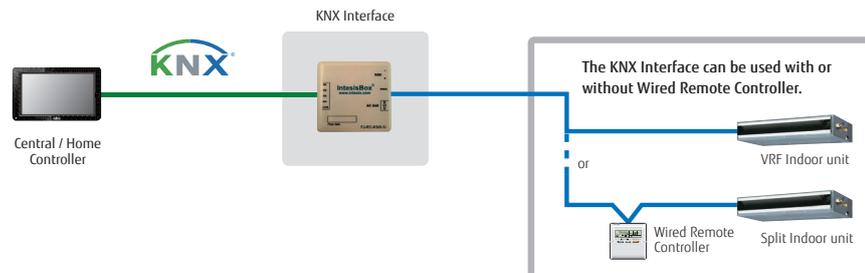**1** Single indoor unit

KNX Convertor for indoor unit

Single split indoor unit

Central / Home Controller
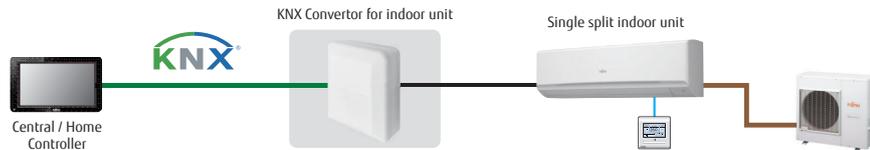
KNX® Interface

FJ-RC-KNX-1i

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 units and group controlled (up to 16) indoor units.

Max. Controllable
1 group

KNX Interface

Central / Home Controller

The KNX Interface can be used with or without Wired Remote Controller.

or

VRF Indoor unit

Wired Remote Controller

Split Indoor unit

Specifications

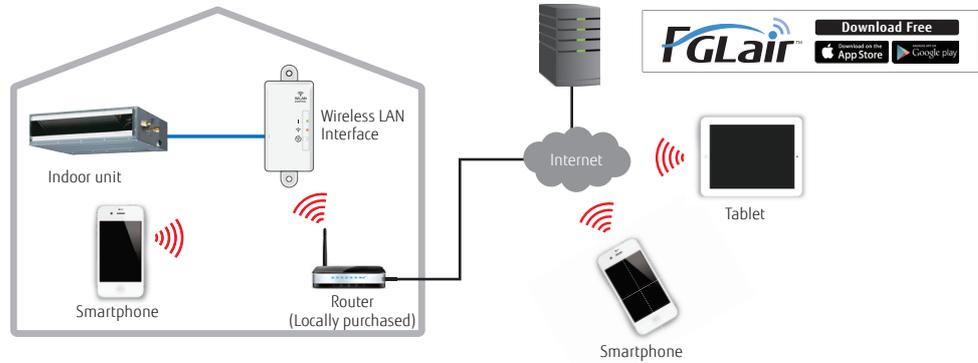| Model name	UTY-VKGX	UTY-VKSX	FJ-RC-KNX-1i
Power supply	220-240 V 50/60 Hz	(DC 12 V)	
Power consumption (W)	1.5	0.6	
Dimensions (H × W × D) (mm)	54 × 260 × 150	140 × 117 × 43	70 × 70 × 28
Weight (g)	1,200	215	70

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Wireless LAN Interface

UTY-TFNXZ1 / UTY-TFSXZ1, UTY-TFSXW1

Max. Connectable
1 Single indoor unit

- It is the most advanced solution 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

Indoor unit

Wireless LAN Interface

Smartphone

Router (Locally purchased)

Internet

Tablet

Smartphone

FGLair™

Download Free
App Store
Google play

Basic control

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

Multi system

Indoor unit

Indoor unit

Outdoor unit

Router (Locally purchased)

Internet

Smartphone
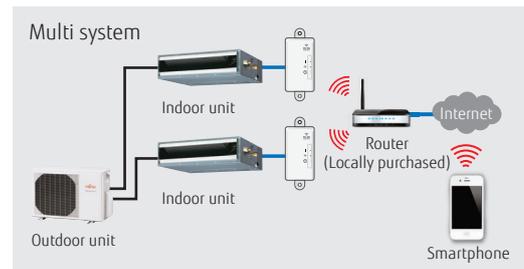
Multiple air conditioning management

- Multiple air conditioning management at difference locations.

Internet
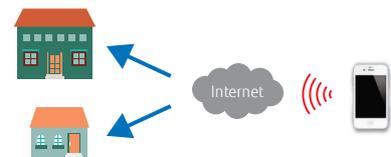
Error display & E-mail notification

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

Indoor unit

Internet
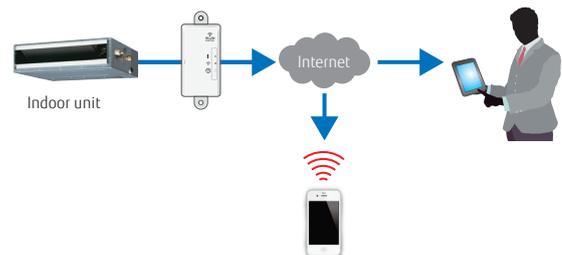
Specifications

Model name	UTY-TFNXZ1 / UTY-TFSXZ1	UTY-TFSXW1
Dimensions (H × W × D) (mm)	71 × 38 × 15	71 × 38 × 15
Weight (g)	85	35

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Wireless LAN Interface

FJ-RC-WIFI-1

IntesisHome®

- 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 units and group controlled (up to 16) indoor units

Max. Connectable

1 Single indoor unit
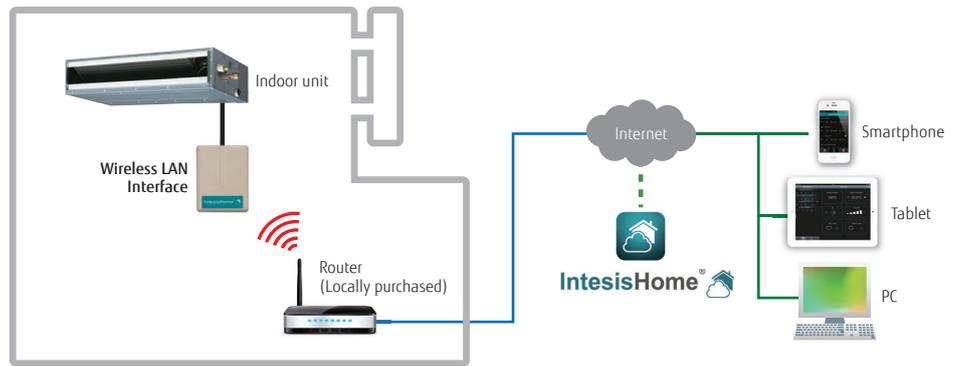
Basic control

- Turning the units on and off
- Mode control (Heat, Cool, Dry, Auto, Fan)
- Fan speed setting
- Louver 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, Louver 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
Dimensions (H × W × D) (mm)	108 × 70 × 28
Weight (g)	80

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External Switch Controller

UTY-TERX

Air conditioner switching can be controlled by connecting other sensor switches

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

Max. Controllable
1 group

Installation example

Human sensor catches movements of people in a room, and operates with lower capacity when people come back to the room, it automatically returns to previous operation mode.

		SAVE !	**AUTO RESTART**
Cooling/Dry	+2°C *Max. 30°C		
Set temp.			
Heating			
Set temp.	-4°C *Max. 16°C		
Normal operation		Saving operation	Normal operation

Human sensor equipment needs to be purchased locally.
Human sensor is not mounted on the External Switch Controller.

Signal Amplifier

UTY-VSGXZ1

- 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

A   B   C   D

Signal Amplifier

AB+BD+BC<500m
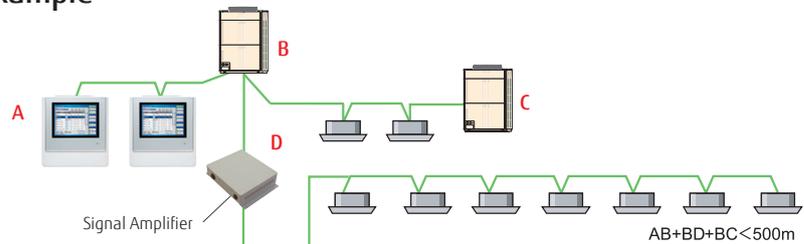
Specifications

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.

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

SPLIT

MULTI SPLIT

VRF

VENTILATION

CONTROL SYSTEM

AIR TO WATER

Network Convertor for Single Split

UTY-VTGX / UTY-VTGXV

UTY-VTGX
DC power supply type

UTY-VTGXV
AC power supply type

Max. Controllable
16
single indoor units

Max. Controllable
100
Network Convertors
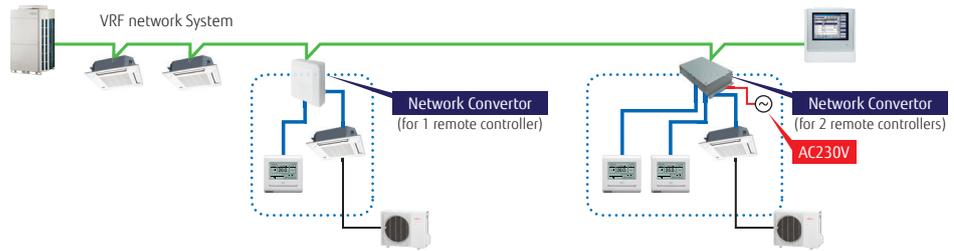
- The network convertors are required when connecting single split system to VRF network system.
- Compact and light weight design
- Connectable to both types of 2-wire and 3-wire remote controllers

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.

VRF network System

Network Convertor
(for 1 remote controller)

Network Convertor
(for 2 remote controllers)

AC230V

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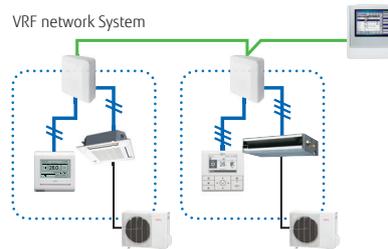
VRF network System

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

VRF Network System

Up to 100 units of
Network Convertor
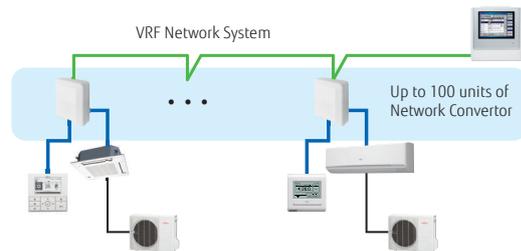
Specifications

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

220

SPLIT

MULTI SPLIT

VRF

VENTILATION

CONTROL SYSTEM

AIR TO WATER

Office 01   Fri 10:00AM

Mode   Set Temp.   Fan

Cool   **26.0**°C   Auto

Room Temp. 26.0°C

Status   Menu

⏻/I
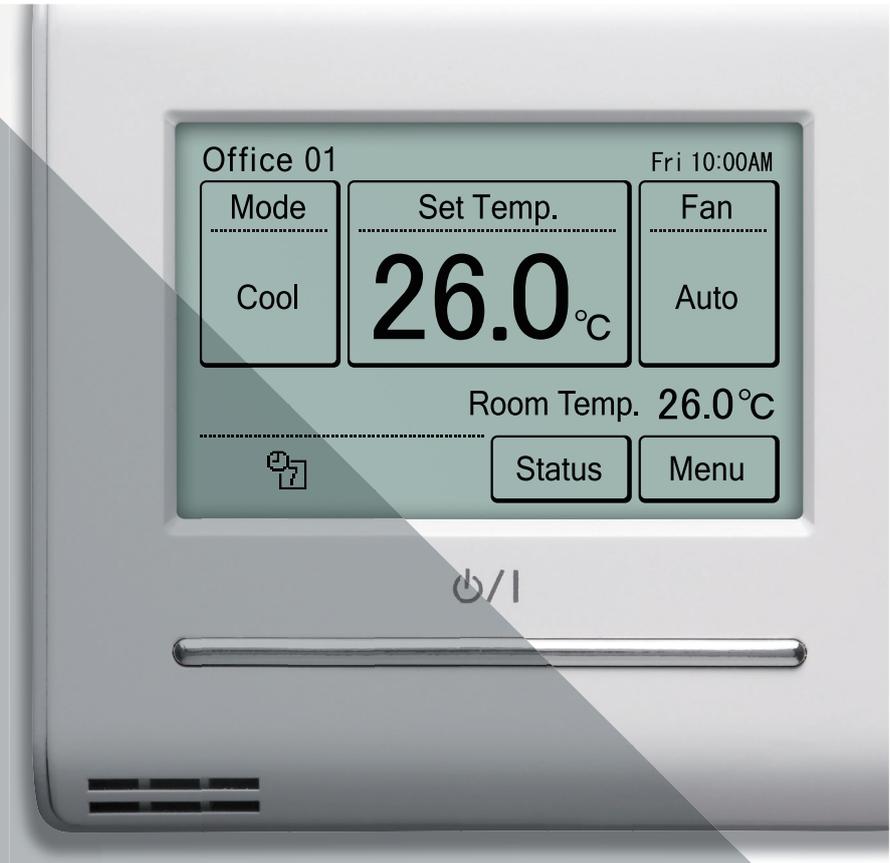
CONTROL SYSTEM LIST

For SPLIT & MULTI SPLIT
For VRF

CONTROL SYSTEM LIST for SPLIT/MULTI SPLIT

Type		Indoor unit										Cassette
		Wall Mounted										Cassette
		Flagship Range	Designer Range	Standard Range	ECO Range	Designer Range		Standard Range			ECO Range	4-way Flow Compact
		ASYG 09/12KXCA	ASYG 07/09/12/14 KGTA	ASYG 07/09/12/14 KMTA	ASYG 18/24KLCA	ASYG 09/12LTCA	ASYG 07/09/12/14 LUCA	ASYG 07/09/12/14 LMCE	ASYG 18/30LFCA, ASYG24LFCC	ASYG 30/36LMTA	ASYG 07/09/12 LLCE	AUYG 12/14/18 LVLB, AUYG24LVLA
Controllers	Wired Remote Controller		● UTY-RNRYZ2+ UTY-TWRXZ2							● UTY-RNRYZ2+ UTY-TWRX		
			● UTY-RLRY+ UTY-TWRXZ2							● UTY-RLRY+ UTY-TWRX		
						● UTY-RVNYM+ UTY-TWBXF		● UTY-RVNYM+ UTY-XCBXZ2	● UTY-RVNYM	● UTY-RVNYM+ UTY-XWNX		● UTY-RVNYM
				● UTY-RNNYM+ UTY-TWBXF		● UTY-RNNYM+ UTY-TWBXF		● UTY-RNNYM+ UTY-XCBXZ2	● UTY-RNNYM	● UTY-RNNYM+ UTY-XWNX		● UTY-RNNYM
	Simple Remote Controller (2-wire type / 3-wire type)		● UTY-RSRY, UTY-RHRY	● UTY-RSNYM+ UTY-TWBXF		● UTY-RSNYM+ UTY-TWBXF		● UTY-RSNYM+ UTY-XCBXZ2	● UTY-RSNYM	● UTY-RSNYM+ UTY-XWNX, UTY-RSRY UTY-RHRY+ UTY-XWRX		● UTY-RSNYM
	Central Remote Controller											
	IR Receiver Unit with Wireless Remote Controller (For Duct, For Cassette)											
Interface	MODBUS Convertor									● UTY-VMSX		
	MODBUS Interface					● FJ-RC-MBS-1						● FJ-RC-MBS-1
	KNX Convertor									● UTY-VKSX		
	KNX Interface					● FJ-RC-KNX-1i		● FJ-RC-KNX-1i				● FJ-RC-KNX-1i
	Wireless LAN Interface		● UTY-TFSXW1			● UTY-TFNXZ1						● UTZ-TFNXZ1
						● FJ-RC-WIFI-1						● FJ-RC-WIFI-1
	External Switch Controller		● UTY-TERX			● UTY-TERX						● UTY-TERX

Indoor unit											Outdoor unit	Other
Cassette		Duct						Floor	Floor/Ceiling	Ceiling	Single Phase	Branch Box (8 Rooms Multi)
Circular Flow	4-way Flow	Mini	Slim	Medium Static Pressure	Medium Static Pressure	High Static Pressure	Big	Floor	Floor/Ceiling	Ceiling	5-6 Rooms Multi	
AUXG 18/24/30/36/45/54 LRLB	AUYG 30/36LRLE, AUYG 36/45/54 LRLA	ARYG 12/14/18 LSLAP	ARYG 12/14/18 LLTB	ARYG 12/14/18/24/30/36/45/54 LHTBP	ARYG 24/36/45 LMLA, ARYG 30/36LMLE	ARYG 45/54/60 LHTA	ARYG 72/90LHTA	AGYG 09/12/14 LVCA	ABYG18LVTB, ABYG24LVTA	ABYG 30/36 LRTE, ABYG 36/45/54 LRTA	AOYG36LBLA5 AOYG45LBLA6	UTP-PY03A UTP-PY02A
● UTY-RNRYZ2		● UTY-RNRYZ2		● UTY-RNRYZ2			● UTY-RNRYZ2					
● UTY-RLRY		● UTY-RLRY		● UTY-RLRY			● UTY-RLRY					
● UTY-RVNYM												
● UTY-RNNYM												
● UTY-RSRY, UTY-RHRY, UTY-RSNYM	● UTY-RSNYM	● UTY-RSRY, UTY-RHRY, UTY-RSNYM	● UTY-RSNYM	● UTY-RSRY, UTY-RHRY, UTY-RSNYM	● UTY-RSNYM		● UTY-RSRY, UTY-RHRY, UTY-RSNYM	● UTY-RSNYM	● UTY-RSNYM			
											● UTY-DMMYM	
	● UTY-LRHYA2	● UTY-LRHYM			● UTY-LRHYM	● UTY-LRHYM (60 only)	● UTY-LRHYM					
● UTY-LBTYC		● UTY-LBTYM		● UTY-LBTYM			● UTY-LBTYM					
● UTY-VMSX		● UTY-VMSX		● UTY-VMSX			● UTY-VMSX	● FJ-RC-MBS-1				
	● FJ-RC-MBS-1		● FJ-RC-MBS-1		● FJ-RC-MBS-1					● FJ-RC-MBS-1		
● UTY-VKSX		● UTY-VKSX		● UTY-VKSX			● UTY-VKSX	● FJ-RC-KNX-1i				
	● FJ-RC-KNX-1i		● FJ-RC-KNX-1i		● FJ-RC-KNX-1i					● FJ-RC-KNX-1i		
● UTZ-TFNXZ1		● UTZ-TFSXZ1		● UTZ-TFNXZ1			● UTZ-TFSXZ1		● UTY-TFNXZ1			
● FJ-RC-WIFI-1				● FJ-RC-WIFI-1					● FJ-RC-WIFI-1			
● UTY-TERX												

CONTROL SYSTEM LIST for VRF

Type			Indoor unit								
			Cassette					Duct			
			Compact Grid type /Standard type	4-way (Slim)	4-way (Large)	Circular Flow (Slim)	Circular Flow (Large)	Mini (With drain pump)	Slim (With drain pump)	Medium Static Pressure	High Static Pressure
			AUXB 04GBLH, AUXB 07/09/12/14/18/24 GALH	AUXD 18/24GALH	AUXA 18/24/30/34/36/45/54 GALH	AUXM 018/024/030 GLAH	AUXK 018/024/030/034/036/045/054 GLAH	ARXK 04/07/09/12/14/18/24 GCLH	ARXD 04/07/09/12/14/18/24 GALH	ARXA 24/30/36/45 GBLH	ARXC 36GBTH, ARXC 45/60GATH
Controllers	Wired Remote Controller		UTY-RNRYZ2								
			UTY-RLRY								
	Simple Remote Controller	2-wire type / 3-wire type	UTY-RSRY, UTY-RHRY, UTY-RSKY, UTY-RHKY								
	Wireless Remote Controller		UTY-LNHY								
	Group Remote Controller		UTY-CGGY + UTY-VGGXZ1								
	Central Remote Controller		UTY-DCGY								
	Touch Panel Controller		UTY-DTGYZ1								
	System Controller, System Controller Lite		UTY-APGXZ1, UTY-ALGXZ1								
	IR Receiver Unit			UTY-LRHYB1		UTY-LBHXD		UTB-YWC			
Interface	MODBUS Convertor		UTY-VMGX			UTY-VMGX UTY-VMSX		UTY-VMGX			
	MODBUS Interface		FJ-RC-MBS-1						FJ-RC-MBS-1		
	KNX Convertor		UTY-VKGX			UTY-VKGX UTY-VKSX		UTY-VKGX			
	KNX Interface		FJ-RC-KNX-1i						FJ-RC-KNX-1i		
	Wireless LAN Interface					UTY-TFSXZ1					
			FJ-RC-WIFI-1						FJ-RC-WIFI-1		
	External Switch Controller		UTY-TERX								

Indoor unit										
Duct	Floor		Ceiling/Floor	Ceiling	Wall Mounted					
High Static Pressure	___	EEV external			___	EEV external	___	EEV external	___	___
ARXC 72/90GBTH, ARXC 96GATH	AGYA 004/007/009/012/014 GCAH	AGYE 004/007/009/012/014 GCAH	ABYA 12/14/18/24 GATH	ABYA 30/36/45/54 GATH	ASYA 004/007/009 GTAH	ASYE 004/007/009 GTAH	ASYA 012/014GCAH	ASYE 012/014GCAH	ASYA 18/24GBCH	ASYA 030/034GTAH
● UTY-RNRYZ2 (all columns)										
● UTY-RLRY (all columns)										
● UTY-RSRY, UTY-RHRY, UTY-RSKY, UTY-RHKY (all columns)										
● UTY-LNHY (all columns)										
● UTY-CGGY + UTY-VGGXZ1 (all columns)										
● UTY-DCGY (all columns)										
● UTY-DTGYZ1 (all columns)										
● UTY-APGXZ1, UTY-ALGXZ1 (all columns)										
● UTB-YWC										
● UTY-VMGX	● UTY-VMGX UTY-VMSX		● UTY-VMGX		● UTY-VMGX UTY-VMSX		● UTY-VMGX			● UTY-VMGX UTY-VMSX
			● FJ-RC-MBS-1				● FJ-RC-MBS-1			
● UTY-VKGX	● UTY-VKGX UTY-VKSX		● UTY-VKGX		● UTY-VKGX UTY-VKSX		● UTY-VKGX			● UTY-VKGX UTY-VKSX
● FJ-RC-KNX-1i			● FJ-RC-KNX-1i				● FJ-RC-KNX-1i			
	● UTY-TFSXZ1				● UTY-TFSXZ1					● UTY-TFSXZ1
● FJ-RC-WIFI-1			● FJ-RC-WIFI-1				● FJ-RC-WIFI-1			
● UTY-TERX (all columns)										