# PRODUCT LINEUP CONTROL SYSTEM & OPTIONAL PARTS





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#### **PRODUCT LINEUP: CONTROL SYSTEM**

# 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







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

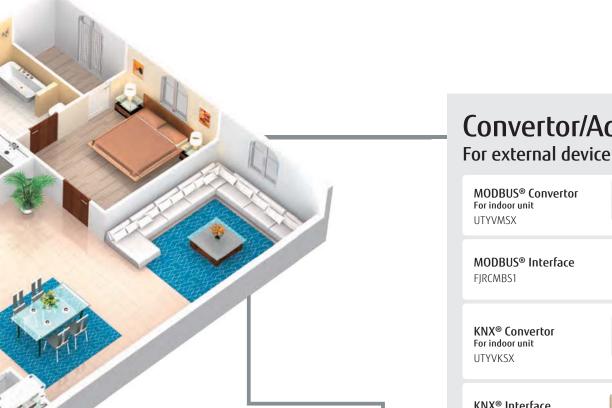


### Air Conditioning Centralised Control

	FUĴÎTSU	
Monitor		Mo 10:004M
3 <sub>4</sub> 4	Room 1 Room 2 Ro Room 4 Room 5 Ro	
	Room 7 Room 8	
E All	AI C.U. 20 Economy Low noise Schedule	E cohibit
Menu	Tarrent Tarrent Tarrent	The processory
Operat	tion Function Scl	redule
Operat	tion Function Sci	tedule
	tion Function Scl	
Operat	tion + Function Scl	redule
	tion Function Scl	

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





## **Convertor/Adaptor**



KNX<sup>®</sup> Interface FJRCKNX1i

**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.



#### User friendly app

User friendly screen display facilitates easy operation.



#### **PRODUCT LINEUP: CONTROL SYSTEM**

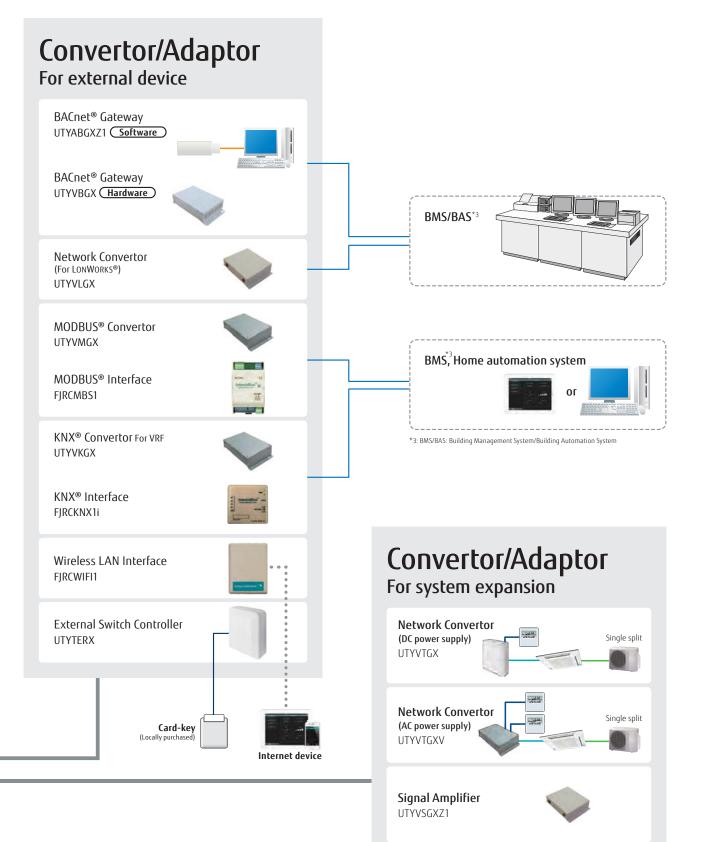
# CONTROL SYSTEM OVERVIEW for VRF

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



Air Conditioning





#### **PRODUCT LINEUP: CONTROL SYSTEM**

### Comparison Table of Controllers

				I	1	1		
lter	m			(and )	<u>In sec</u>			
			Wired Remote Controller (Touch panel)	Wired Remote Controller	Wired Remote Controller	Simple Remote Controller	Simple Remote Controller	Simple Remote Controller*1
Мо	del name		UTY-RNRYZ2	UTY-RLRY	UTY-RVNYM	UTY-RSNYM	UTY-RSRY	UTY-RHRY
Ма	x. controllable	e remote controller groups	1	1	1	1	1	1
Ма	x. controllable	e indoor units	16	16	16	16	16	16
Ма	x. controllable	e groups	-	-	-	-	-	-
	On / Off		•	•	•	•	٠	•
	Operation mo	ode setting	•	•	•	•	٠	-
	Fan speed se	tting	•	•	•	•	٠	•
5	Room temp.	setting	•	•	•	•	•	•
ction	Room temp.	set point limitation	•	•	•	-	٠	•
l fun	Test operatio	n	•	•	•	•	٠	•
ontro	Up/down air	direction flap setting	•	•	•	-	•	•
Air conditioning control function	Right/left air	direction flap setting	•	•	•	-	-	-
ioni	Individual lou		•	-	-	-	-	-
ondit	Group setting	]	-	-	-	-	-	-
Air co	RC prohibitio	n	-	-	-	-	-	-
	Anti freeze se	etting	•	-	-	-	-	-
	Set temp. au	to return	•	•	•	-	-	-
	Economy mo	de setting	•	•	•	-	-	-
	Human senso	or control	•	-	-	-	-	-
	Error		•	•	•	•	•	•
	Defrosting		•	•	•	•	•	•
	Current time		•	•	•	-	-	-
	Day of week		•	•	•	-	-	-
	R.C. prohibiti	on	•	•	•	•	•	•
	Cooling/heat	ing priority	•	•	-	•	•	•
Display	Address displ	lay	•	•	•	•	•	•
-	Room temp		•	_	•	-	•	•
	Multi langua		•	-	•	-	-	-
	Summer time		•	-	•	-	-	-
	Name registr	ation	•	-	-	-	-	-
	Backlight		•	-	•	•	•	•
		ut / 3D building display	-	_	-	-	-	-
	Refrigerant le	eakage detection function	-	_	-	-	_	-
	Schedule	Period	Week	Week	Week	-	_	_
	timer	On/off, Temp, Mode, Times per day	8	4	8	-	-	-
-	On/off timer		•	•	•	-	_	-
Timer	Sleep timer		-	-	-	-	_	-
	Program time		-	_	-	-	_	_
	Auto off time	۱ſ	•	•	•	-	_	_
-	Day off		•	•	•	-	_	-
_		imer setting (Minutes)	10 • 30	30	30	-	-	-
-	Status monit		-	_	-	-	_	-
	Electricity chi Error history	arge apportionment	-	-	-		-	-
	Error history Emergency s	top	-	_	-			-
ł	Remote man			_	-		_	-
Control		g management	_	_	_	_	_	-
Ŭ		ation for malfunction						
	Key lock		Child lock	Child lock	Child lock	_		
	Low noise me	ode			_	_		_
	LOW HUISE HIL				_	_		

Wireless Remote Controller	Central Remote Controller (For 5 & 6 rooms Multi)	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller Lite	System Controlle 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
•	•	•	•	•	•	•
•	•	•	•	•	•	•
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	-	_	-	•	•	•
-	Week	Week	Week	Year	Year	Year
-	4	4	20	20	144	144
•	-	_	_	-	_	-
•	-	_	-	-	-	-
•	-	-	-	-	-	-
-	-	-	-	•	-	_
-	•	_	•	•	•	٠
5	5	10	10	10	10	10
-	-	-	•	•	•	•
-	-	_	-	0	0	•
-	-	•	•	•	•	•
-	-	_	•*2	•*2	-	-
	-	_	_	•	0	•
	-	_	_	_	0	0
-	-	_	-	•	•	•
-	Child lock	• Child lock	Password setting	Password setting	• Password setting	Password setting
			setting	setting	setting	setting

\*1 "Operation mode" setting is not available for this model. \*2 This function is available only through external input control. •: Supported O: Optional function -: Not supported yet

#### **PRODUCT LINEUP: CONTROL SYSTEM-INDIVIDUAL CONTROL**

### External Input and Output Table

### SPLITS/MULTI

		Input		Output			
xternal Control	Start / Stop	Peak Cut	Low Noise	Op Status	Error Status	Fresh Air	Aux Heater
ALL MOUNT							
ompact							
SYG07-14KGTA*6	2			2	2		
SYG07-14KMTA*5	2			2	2		
SYG09-12LTCA*1	2	-		2	2		
SYG07-14LUCA*1	2			2	2		1
SYG07-14LMCE*2	2		i	2	2		1
arge			1				
SYG18LFCA	1			1/7*A	7*A		1
SYG24LFCC	1		1	1/7*A	7*A		1
SYG30-36LMTA*3	1			1	1		1
UCT	·						
lim							
RYG07-14LLTA	3			3/7	7	3	3
		-		3/7			
RYG12-18LLTB	3			3//	7	3	3
ulkhead				-			
RYG12-18SLAP	PCB Terminal		<u> </u>	6	6		6
ledium Static			ļ				
RYG12-54LHTBP*4	6		ļ]	6	6		6
RYG24-45LMLA	3			3/7	7	3	
RYG30-36LMLE	3			3/7	7	3	
ligh Static							
RYG45-60LHTA	3			3/7	7	3	3
RYG72-90LHTA	PCB Terminal	-		6	6		6
ASSETTE	i i						
ompact			i				1
UYG07-09LVLA	1			1/7	7	3/*B	
UYG12-18LVLB	1			1/7	7	3/*B	1
UYG24LVLA	1			1/7	7	3/*B	1
ircular Flow							1
UXG18-54LRLB*4	6			6	6		6
Way Flow				0	0		0
UYG30-36LRLE	1			1/7	7	3/*C	
LOOR	· ·			1//	1	57 C	
	1			1/7	7		
GYG09-14LVCA	1			1//	/		
LOOR/CEILING				1.7			
BYG14LVTA	1			1/7	7		
BYG18LVTB	1			1/7	7		
BYG24LVTA	1			1/7	7		
EILING							
BYG30-36LRTE	1			1/7	7	3	
BYG36-54LRTA	1			1/7	7	3	
INGLE PHASE OUTDOOR							
plit							
OYG45-54LETL		5	5	5	5		
Nulti			i i				1
OYG36-54LBTB		5	5	5	5		1
PHASE OUTDOOR							
plit							
OYG36-60LATT	+ +	4	4	4	4		1
	+	5	5	5	5		
OYG72-90LRLA	++	5		5	2		
Nulti OYG36-54LATT		/		1	1		
UTU 3D-54LALL	1	4	4	4	4		
	Т						
OYG72-90LRLA UTY-TWBXF Communication Kit require	ļ	5 *5 UTY-TWBX2 Comm	5	5	5 932012 required		

\*3 UTY-XCSXZ1 Required for more than 1 input or output \*4 UTY-XCSX Required for more than 1 input or output

#### Communication system For SPLIT/MULTI SPLIT

External Connect Kit	1	External Control Set		External Connect Kit		
For Indoor Unit1=UTYXWZX£9		For Indoor Unit 3=UTDECSSA f	£14	For Outdoor unit4=UTYXWZXZ2£19	For Outdoor unit5=UTYXWZXZ3£9	
External Connect Kit	Error Output Adaptor	Wired Remote Connector				
<b>For Indoor unit</b> 6=UTYXWZXZG <b>£8</b>	7=UTIERRW £114	9705932012 <b>£15</b>				
	9705932012 For use with all AS and AG models when using Intesis range and Network converter BMS options	For use with all AS and AG models when using Intesis range, Network converter, BMS options and Wired remotes.				

\*C Cable included with UTZ-VXGA

### Wired Remote Controller (Touch Panel)





#### 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 achieved using one remote controller only.



SPLITS/MULTI/VRF

#### Accurate and comfortable control

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

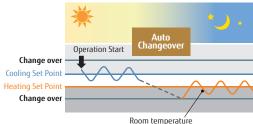


#### Various energy saving control

#### 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.





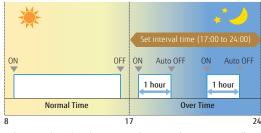
#### Auto OFF timer

- 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



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

#### Specifications

specificacions		
Model name		UTYRNRYZ2
Power Source		DC 12 V
Dimensions (H × W × D) (mm)		120 × 120 × 20.4
Weight (g)		220
List Price	£	161

DC 12 V is supplied by the indoor unit.

#### **PRODUCT LINEUP: CONTROL SYSTEM-INDIVIDUAL CONTROL**

### Wired Remote Controller

UTYRVNYM



#### Max. Controllable 16 indoor units

#### Hi-grade individual control using various functions.

- 3.7-inch LCD backlight screen.
  Supporting various Energy Say
- 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.



SPLITS/MULTI/VRF

lcon 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 achieved using only one remote controller.

Weekly 1



#### 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 28° 28 27 26 26°C Set Temp.(°C) 26° r setting Sult Su Mo Tu We Th Fr 25 25 24 25°C 23 22 AM10:00 PM12:00 2:00 5:00 Time 8:00 11:59 Weekly 2 26°C Setting menu in remote controller 26°0 26 25 Set Temp. (°C) 2/1°1 24 \_\_setting\_\_\_\_\_Suitcut u\_Mo\_Tu\_We\_Th\_Fr\_Sa 23 22 21 20 11:59 AM10:00 PM12:00 8:00 2:00

Time

#### Specifications

Model name		UTYRVNYM
Power Source		DC 12 V
Dimensions (H × W × D) (mm)		120 × 120 × 21.3
Weight (g)		220
List Price	£	104

DC 12 V is supplied by the indoor unit.

### Simple Remote Controller



Without operation mode

#### Max. Controllable 16 indoor units

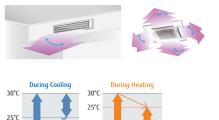
#### Compact remote controller provides access to basic functions

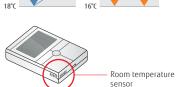
- Up to 16 indoor units can be controlled with one remote controller.
- Suitable for hotels or offices as it is easily operated with no complex functions.
- Stylish design: Simple design to match the stylish interior.
- Large LCD screen & simple operation buttons
- Backlight: White colored backlight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

2-wire type

#### 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 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 temperature accuracy.





SPLITS/MULTI/VRF

### Simple Remote Controller

UTYRSNYM, UTYRSKY / UTYRHKY (Without operation mode)

#### UTYRSNYM





SPLIT ONLY

# Without

operation mode VRF ONLY

26

#### Max. Controllable 16 indoor units

#### Easy-to-use operation

• 3-wire type

• Provides access to basic operations, such as Start / Stop, Fan control, Operation mode switching, and Room temperature setting.

Compact remote controller provides access to basic functions

• A large On / Off button is provided in the centre of the remote controller for easy operation.

• Up to 16 indoor units can be controlled with one remote controller.

• Backlight enables easy operation in a darkened room.

• Suitable for hotels or offices as it is easily operated with no complex functions.

- Can be used jointly with other individual control unit.
- Following an error display, diagnostics can be carried out on the controller.

Model name		UTYRSRY	UTYRHRY	UTYRSNYM	UTYRSKY	UTYRHKY	
Power Source		DC 12 V	DC 12 V	DC 12 V	DC 12 V	DC 12 V	
Dimensions (H $\times$ W $\times$ D) (mm)		120 × 75 × 19.4	120 × 75 × 19.4	120 × 75 × 19.4	120 × 75 × 19.4	120 × 75 × 14	
Weight (g)		120	120	120	120	90	
List Price	£	120	120	83	80	75	

### Wireless Remote Controller

UTYLNHY

### VRF



Max. Controllable

Selectable

16 indoor units

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

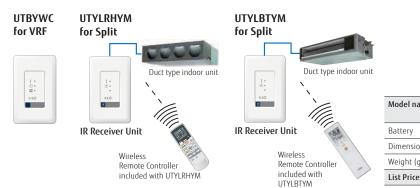
#### Easy installation and operation

Code selector switch prevents indoor unit mix-up (up to 4 codes) Wide and precise transmitting range

Model name	UTYLNHY		
Battery	1.5 V (R03 / LR03 / AAA) × 2		
Dimensions (H $\times$ W $\times$ D) (mm)	170 × 56 × 19		
Weight (g)	85		
List Price	47		

### IR Receiver Unit

#### UTBYWC / UTYLRHYM / UTYLBTYM



### SPLITS/MULTI/VRF

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

\*Only Large Airflow Duct cannot be connected to IR Receiver Unit.

Model name		UTBYWC	UTYLRHYM	UTYLBTYM	
Battery		DC 5 V			
Dimensions (H × W × D) (mm)		145 × 90 × 30			
Weight (g)		150			
List Price	£	76	262	266	

### IR Receiver Unit

UTYLRHYB1 / UTYLBHXD / UTYLRHYA2 / UTYLBTYC

### SPLITS/MULTI/VRF



#### Specifications

Model name		UTYLRHYB1	UTYLBHXD	UTYLRHYA2	UTYLBTYC		
Battery			DC	5 V			
Dimensions (H × W × D) (mm)			193.9 × 193.9 × 31.2				
Weight (g)			14	40			
List Price	£	76	86	76	98		

DC 12 V is supplied by the indoor unit

#### CONTROL SYSTEM-CENTRALISED CONTROL

### Group Remote Controller/Network Convertor

UTYCGGY / UTYVGGXZ1

### VRF



Group Remote Controllers UTYCGGY



Network Convertor UTYVGGXZ1 For Group Remote Controller

Max. Controllable 8 remote controller groups

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

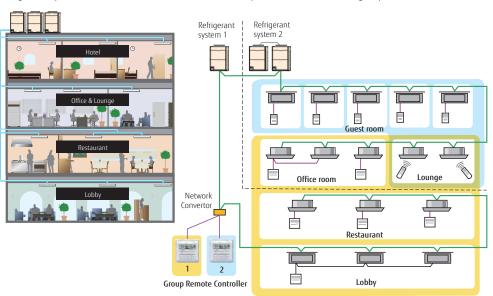
#### Group control of indoor units with simple operation

- 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

The weekly timer is provided as a standard function.

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

**Built-in weekly timers** 



# 1030

**CONTROL SYSTEM** 

#### Specifications

Model name		UTYCGGY				
Power Supply		DC 12 V				
Dimensions (H × W × D) (mm)		120 × 120 × 18				
Weight (g)		200				
List Price	£	146				
DC 12 V is supplied by the indees unit						

DC 12 V is supplied by the indoor unit.

Model name		UTYVGGXZ1		
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		
List Price £		456		

#### **PRODUCT LINEUP: CONTROL SYSTEM-CENTRALISED CONTROL**

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

UTYDMMYM

### MULTI

Noritor		My 10 OBABI
Cool	Rocen 1 Rocen 2 F Rocen 4 Rocen 5 F Rocen 7 Rocen 8 M Al 20 Cut 20 Lossony Law miss Schutz	icom 3 Icom 6
Neru	Economy ILlaw relies I Schools	
	•	6/

Max. Controllable 1 multi system

Max. Controllable 6 indoor units

- Batched control of up to 6 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

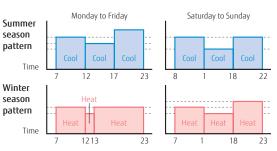
When you leave, minimum heating operation is performed to maintain the room temperature (maintain at 10°C).

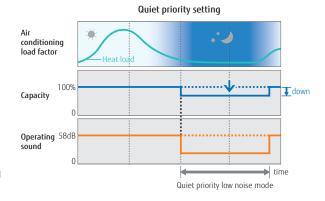
#### Economy operation

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

specifications					
Model name		UTYDMMYM			
Power Source		DC 12 V			
Dimensions (H $\times$ W $\times$ D) (mm)	× D) (mm) 120 × 120 × 21.3				
Weight (g)		220			
List Price	£	468			
List Price	£	468			

DC 12 V is supplied by the indoor unit

### **Central Remote Controller**

	A COMPANY OF A	Incl.	2
and a second second	o it manufactor a	-	-
91	K 181800	(A) (A)	
88 2	20200007		-
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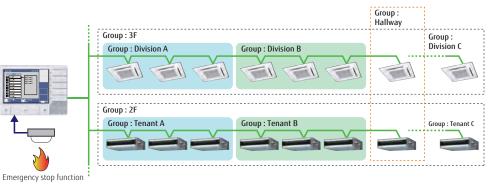
#### Max. Controllable 100 indoor units Max. Controllable 16 groups

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

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

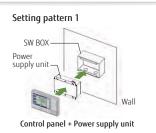
#### System overview

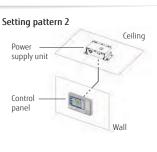
- It allows multiple indoor units grouping (Max.16 groups controlled)
- Interlock with external device



#### **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 fixed onto the wall.





#### **Functions**

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

|--|

Model name	UTYDCGY				
	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				
<pre><packing list=""></packing></pre>	·				
Packing List	Control Panel / Power Supply Unit / Connecting cable, etc.				
List Price £	1752				

VRF

### Touch Panel Controller

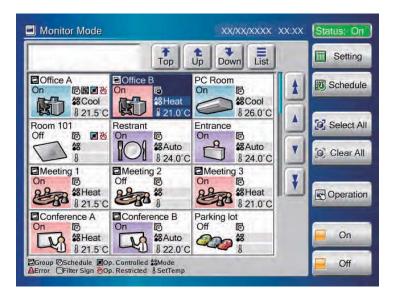
UTYDTGYZ1

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		-

- Large-sized 7.5-inch TFT colour
  LCD Easy finger touch operation
- LCD Easy Hinger touch operation
   Studieb ebape and design to quit all
- 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

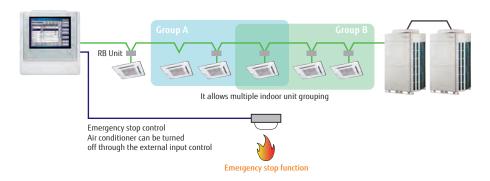


#### Easy installation

- 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



#### Up to 400 indoor units can be controlled

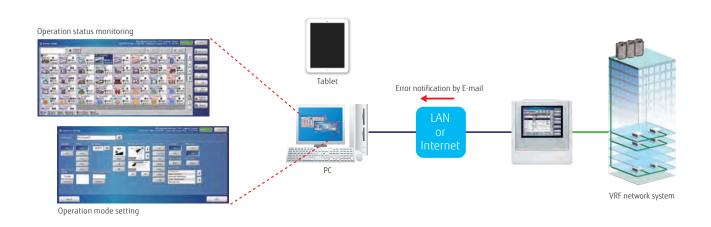


Max. Controllable 400 indoor units Max. Controllable 100 outdoor units

Max. Controllable

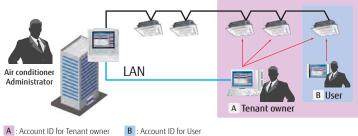
#### **Control & monitoring** (UTYDTGYZ1 only)

- 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.



#### Flexible access permission for each level user.

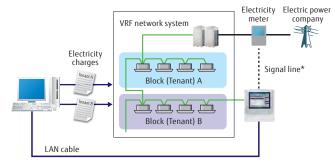
Administrator can register multiple users to permit which indoor unit(s) and which functions can be accessed.



A : Account ID for Tenant owner

#### Electricity charge apportionment (Option: UTYPTGXA 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.

-						
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				
List Price	£	3307				

#### **PRODUCT LINEUP: CONTROL SYSTEM-CENTRALISED CONTROL**

### System Controller

UTYAPGXZ1 Software



#### Max. Controllable

Max. Controllable 400 outdoor units Max. Controllable 1,600 indoor units

#### 4 VRF network systems System Controller achieves 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)

Note: Older Version UTY-APGX will be sent over while stocks last The differences between the versions are the software on the original is on a CD rom and the product key USB is a different colour

### System Controller Lite UTYALGXZ1 Software



#### Max. Controllable System Controller Lite has standard functions sufficient for air VRF network systems conditioner management in small and medium scale buildings. Max. Controllable • Up to a maximum of 1 VRF network system, 400 indoor units, and 100 outdoor units can be controlled. 100 outdoor units • In addition to air conditioning precision control function, a variety of management software is available as

Max. Controllable 400 indoor units

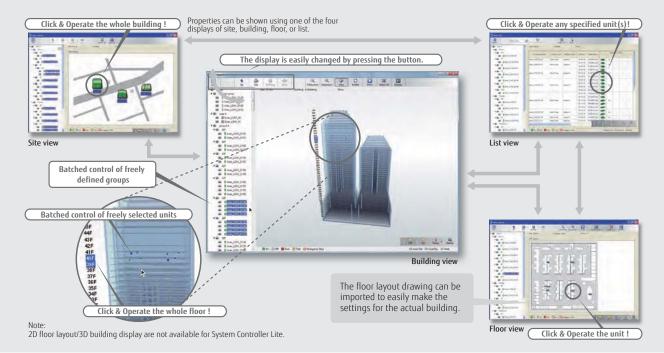
- an option to give customers a wide range of choice.
- Corresponds to 7 different languages (English, Chinese, French, German, Spanish, Russian, Polish)

Note: Older Version UTY-ALGX will be sent over while stocks last (UTY-ALGX is not compatible with option UTY-PLGXX2) The differences between the versions are the software on the original is on a CD rom and the product key USB is a different colour

#### 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.

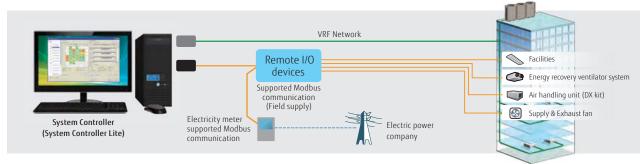
Freely define groups for batched control: Indoor units can be freely grouped for simple batched control from a tree menu. Grouping by hierarchal structure, such as by section, division or department is possible.



#### 3rd party devices connected by Modbus can be controlled.

#### Standard for System Controller Option for System Controller Lite UTYPLGXX2

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.



#### Electricity charge apportionment

Standard for System Controller

Option for System Controller Lite UTYPLGXA1

#### 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.

#### 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**

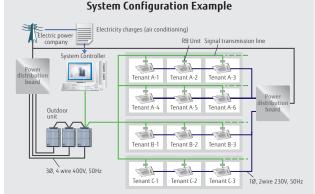
Displays the history of operation status and control.

#### 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.



#### **PRODUCT LINEUP: CONTROL SYSTEM-CENTRALISED CONTROL**

#### Features: System Controller/System Controller Light

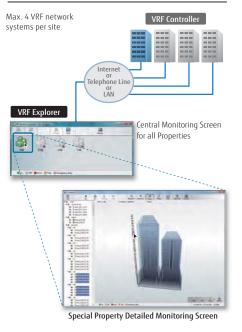
#### Remote management

Standard for System Controller

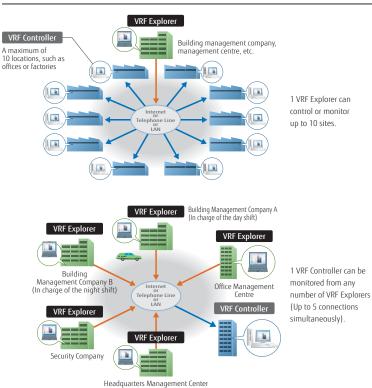
Option for System Controller Lite UTYPLGXR1

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



Remote central control



#### Energy saving management

Option for System Controller UTYPEGX

Option for System Controller Lite UTYPLGXE1

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	UTYAPGXZ1	Option					System controller lite				
		UTYPEGXZ1	UTYALGXZ1	Option UTYPLGXR2	Option UTYPLGXA2	Option UTYPLGXE2	Option UTYPLGXX2				
Max. VRF networks supported	4	-	1	_	_	_	-				
System Max. indoor unit / remote controller groups per VRF network	400	-	400	-		-	-				
max. outdoor units per system controller	100	-	100	_		_	-				
Max. Indoor units / remote controller groups per system controller	1600 400		400			_	-				
Max. outdoor units per System controller Multi site display	400		100								
Number of building / 1 site	20	_	10			_	_				
Number of floor per 1 site	200	_				_	_				
Number of floor per 1 building	50	_				_	_				
Site 3D graphical layout view		_				_	_				
supervision 2D graphical layout view	•	_	_	_	_	_	-				
List display	•	-	•	_	_	_	-				
Tree display	•	-	•	_	_	_	-				
Group display	•	-	•	_	_	_	-				
Error polification	•	-	•	-	_	-	-				
Ellol Audible alarm	•	-	•	-	_	-	-				
management Error e-mail notification	•	_	•	_	—	_	-				
Error history	•	-	•	_	_	_	-				
History Operation history	•	-	•	-	_	-	-				
Control history	•	-	•	-	-	-	-				
On/Off	•	-	•	-	_	_	-				
Operation mode	•	-	•	-	-	-	-				
Room temperature	•	-	•	-	-	-	-				
Fan speed	•	-	•	-	-	-	-				
Individual Air flow direction	•	-	•	-	-	-	-				
control Economy mode	•	_	•								
Operation Room temperature set point limitation		-	•	-		-	-				
control Test operation		-	•	-		-					
Outdoor unit low noise setting		_	•	—	_	_	-				
Remote control prohibition softing		_	•	_	_	_	_				
Individual Temperature upper and lower limit setting		_	•	-	_	_	_				
Filter sign reset	•	_	•	_	_	_	-				
Mamory aparation	•	_	•	_	_	_	-				
Other Pattern operation	•	-	•	-	-	-	-				
Annual Schedule	•	-	•	_	_	-	-				
Special day setting	•	-	•	-	-	-	-				
On /off per day	72	-	72	—	—	-	-				
Schedule On / off per week	504	-	504	-	-	-	-				
Day off	•	-	•	-	_	-	-				
Min. unit of timer setting (Minutes)	10	-	10	_		-	-				
Low noise mode Weekly schedule	•	-	•	-	-	-	-				
Remote monitoring	•	-	-	•	-	-					
Remote Operation control	•	_		•							
management Remote function setting Web Remote Controller	•	_		•							
Apportionment charge/bill calculation				•	•	_					
Topapt (block) sotting		_	_		•	_					
Electricity Common facilities apportionment setting		_			•	_	_				
charge Rated power consumption allotment setting	•	_	_	_	•	_	_				
apportionment Individual calculation at cooling and heating	_	•*	-	_	•	_	-				
Electricity meter supported	-	•	_	_	•	_	-				
Indoor unit rotation	-	•	-	-	-	۲	-				
Peak cut control	-	•	-	-	-	•	-				
Energy Outdoor unit capacity save	-	٠	-	-	-	٠	-				
saving Record of energy saving operation	-	•	—	—	-	۲	-				
management Energy saving information	-	•	-	-	-	•	-				
Power consumption monitor	-	•	-	-	-	•	-				
Electricity meter supported		•		-	-	•	-				
External Device Monitor	•	-	-	-	_	-	•				
Control Control	•	-	-				•				
Database import/export	•	-	•	-	_	-	-				
Others Automatic clock adjustment	-	-		-		-	-				
Multi language	7 languages	-	7 languages	-	-	_	-				

••: Available. -: Not available. \*: Power calculation application software is necessary, please contact the local FGL representative.

#### Personal computer system requirements

	System Controller	Sustem Controller Lite				
	1	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 Vista® and 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					

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.)

#### Packing List

	For System controller		For System controller Lite					
Type System Controller		Option		Option				
	Energy manager	System Controller Lite	Remote access	Electricity charge apportionment	Energy saving	Central Control		
Model name	UTYAPGXZ1	UTYPEGXZ1	UTYALGXZ1	UTYPLGXR1	UTYPLGXA1	UTYPLGXE1	UTYPLGXX2	
WHITE-USB-KEY	1	1	1	1	1	1	1	
List Price £	6222	2561	2557	926	761	922	992	

\*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.

#### **PRODUCT LINEUP: CONTROL SYSTEM-CONVERTOR/ADAPTOR**

### **BACnet®** Gateway

UTYABGXZ1





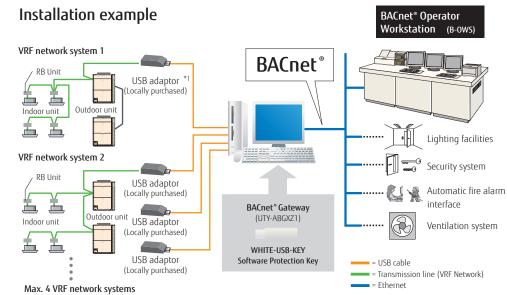


#### Max. Controllable 4 **VRF** network systems

Max. Controllable 400 outdoor units

#### Max. Controllable 1,600 indoor units

- It is possible to connect medium to large sized BMS to VRF network system via BACnet®, a global standard for open networks.
- A maximum of 1600 indoor units with 4 VRF network systems (a maximum of 400 indoor units & 100 outdoor units for one network system) can be connected to one BACnet<sup>®</sup> Gateway.
- It is possible to control or monitor VRF network system from BMS via BACnet® Gateway.
- Compatible with BACnet<sup>®</sup> (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<sup>®</sup> 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.



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

#### Personal computer system requirements

	UTY-ABGX & 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	<ul> <li>2 GB or more (for Windows<sup>®</sup> 7 [32-bit])</li> <li>4 GB or more (for Windows<sup>®</sup> 7 [64-bit], Windows<sup>®</sup> 8.1, and Windows<sup>®</sup> 10)</li> </ul>
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)     I 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

#### Packing list

Packing list			
Name and shape Quantity		Quantity	Application
WHITE-USB-KEY 1		1	Includes the software and manuals, license for BACnet® Gateway.
List Price £			3113

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.)

### BACnet<sup>®</sup> Gateway

UTYVBGX

VRF

VRF Indoor unit

VRF Indoor unit

VRF Outdoor unit

Max.128 indoor units & Max.32 refrigerant system

• BACnet<sup>®</sup> Gateway enables to connect a BMS and FG VRF system.

Installation example

BACnet® Operator Workstation (B-OWS)

• A maximum of 128 indoor units and 32 refrigerant system can be connected to a single BACnet® Gateway.

BACnet® Gateway

(Hardware)

**BACnet**®

- Compatible with BACnet® (ANSI / ASHRAE-135-2012) application specific controller (B-ASC). • Compatible with BACnet®/IP over Ethernet.

#### Max. Controllable VRF network system

Max. Controllable 32 refrigerant system

#### Max. Controllable 128 indoor units

#### Specifications

Model name		UTYVBGX		
Number of controllable indoor units		128	Model name	UTYVBGX
Number of controllable refrigerant system		32	Power Supply	208-240V 50/60Hz, single phase
Number of controllable VRF network		1	Power Consumption (W)	-
Number of connectable units / one VRF network		4	Dimensions (H $\times$ W $\times$ D) (mm)	10-1/4 × 2-5/16 × 5-11/16 (260 × 59 × 145)
List Price £		2397	Weight (g)	_

Lighting facilities

Security system 🗐 🛫

Windows blind

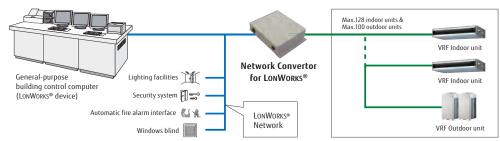
Automatic fire alarm interface \, 👢 🦋

#### 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



#### Specifications

Model name		UTYVLGX	
Power Supply		208-240V 50/60Hz, Single phase	
Power Consumption (W)		4.5	
Dimensions (H $\times$ W $\times$ D) (mm)		67 × 288 × 211	
Weight (g)		1,500	
List Price	£	3113	

#### 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.)	

VRF

### MODBUS<sup>®</sup> Convertor for Indoor Unit

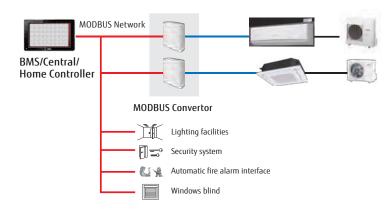
UTYVMSX

### SPLITS/MULTI



### 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.

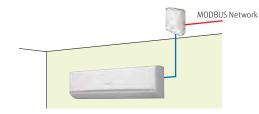


#### **Basic control**

- 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.



#### Specifications

Model name	UTYVMSX		
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 nu per 1 MODBUS Convertor	1		
List Price	234		

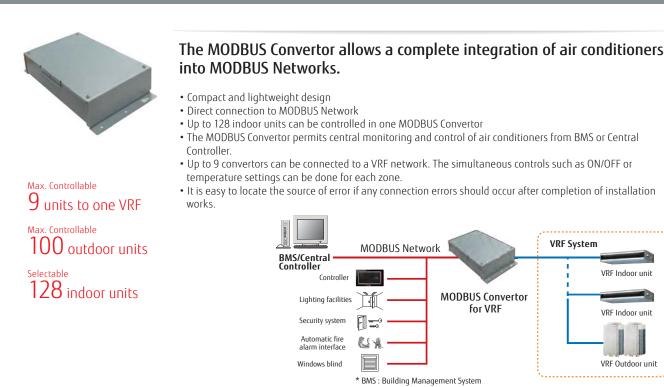
#### Modbus communication specifications

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)

### Max. Connectable 1 Single indoor unit

### **MODBUS®** Convertor

UTYVMGX



### MODBUS<sup>®</sup> Interface

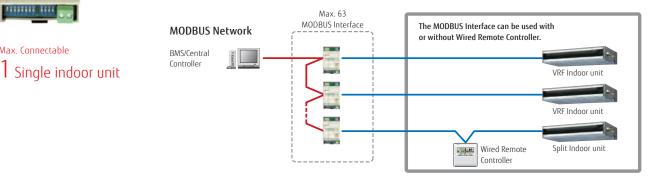
FJRCMBS1



Max. Connectable

#### 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.



#### Specifications

Model name		UTYVMGX	
Power Supply		AC220/240V 50/60Hz	
Input power (W)		Max. 2	
Dimensions (H × W × D) (mm)		54 × 260 × 150	
Weight (g)		1,100	
List Price £		530	

Model name		FJRCMBS1		
Dimensions (H × W × D) (mm)		93×53×58		
Weight (g)		85		
List Price	£	234		

### SPLITS/MULTI/VRF

VRF

#### PRODUCT LINEUP: CONTROL SYSTEM-CONVERTOR/ADAPTOR

### KNX<sup>®</sup> Convertor for VRF

UTYVKGX



Max. Controllable 100 outdoor units Selectable 128 indoor units

#### KNX Convertor is useful for centralised control in a system.

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



# KNX<sup>®</sup> Convertor for Indoor Unit



#### 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



# KNX<sup>®</sup> Interface

Single indoor unit

### SPLITS/MULTI/VRF

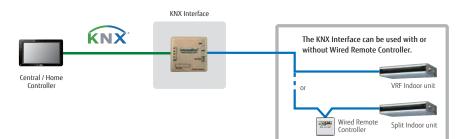


Max. Controllable

Max. Connectable

### 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.



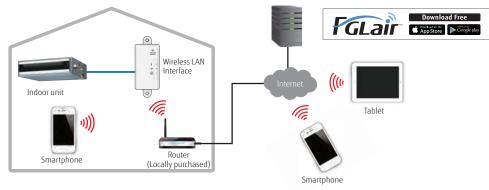
Model name		UTYVKGX	UTYVKSX	FJRCKNX1i
Power supply		220-240 V 50/60 Hz	(DC 12 V)	DC12V fed from indoor unit
Power consumption (W)		1.5	0.6	-
Dimensions (H × W × D) (mm)		54 × 260 × 150	140 × 117 × 43	70 × 70 × 28
Weight (g)		1,200	215	70
List Price £		1273	267	265

### Wireless LAN Interface

### SPLITS/MULTI/VRF

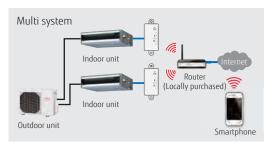


- It is the most advanced solution to remotely manage an Air Conditioning system using all sort of mobile devices such as Smartphones, and tablets.
- No separate external power supply required
- Can be used for single indoor units and multi system indoor units



#### **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.



specifications						
Model name		UTYTFNXZ1	UTYTFSXZ1	UTYTFSXW1		
Usage with		SPLITS	SPLITS & VRF	R32 SPLITS		
Dimensions (H $\times$ W $\times$ D) (mm)		71 × 38 × 15	71 × 38 × 15	71 × 38 × 15		
Weight (g)		85	85	35		
List Price £		143	143	126		

### Wireless LAN Interface

FJRCWIFI1 - Must be used if using a Hard Wired Controller

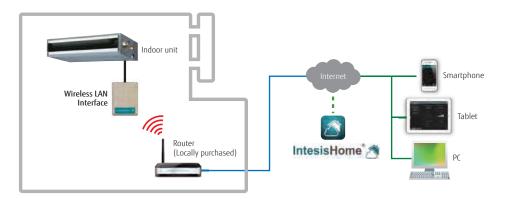
### SPLITS/MULTI/VRF



#### IntesisHome A

- 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
- 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)

Model name		FJRCWIFI1
Dimensions (H × W × D) (mm)		108 × 70 × 28
Weight (g)		80
List Price	£	234

### **External Switch Controller**



Max. Controllable

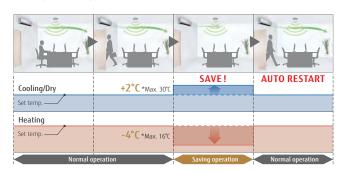
### Air conditioner switching can be controlled by connecting other sensor switches

- 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 locally purchased parts.
- 2-wire type
- The set temperature can be specified at two points for cooling and heating individually (4 points).

#### 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.

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



#### Specifications

Model name		UTYTERX	UTYTEKX
Usage with		VRF	SPLITS & MULTI
Power Supply		DC 6.5-16 V	DC 6.5-16 V
Dimensions (H × W × D) (mm)		140 × 117 × 43	140 × 117 × 43
Weight (g)		250	250
List Price £		90	90

DC 12 V is supplied by the indoor unit.

### Signal Amplifier

UTYVSGXZ1

- 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	UTYVSGXZ1				
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				
List Price	£	729			

VRF

### Network Convertor for Single Split Control via VRF

• Compact and light weight design

Installation example.

VRF network System

UTYVTGX / UTYVTGXV

Network Convertor for 2 remote controller

C230V

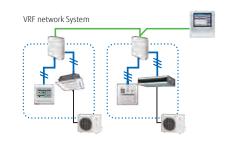


UTYVTGX DC power supply type



Max. Controllable 16 single indoor units Max. Controllable 100 Network Convertors

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



• The network convertors are required when connecting single split system to VRF network system.

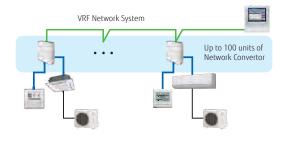
Network Convertor

mote controller)

• Connectable to both types of 2-wire and 3-wire remote controllers

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.

 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)



Model name		UTY	/TGX	UTYVTGXV					
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 × 1	17 × 43	54 × 260 × 150					
Weight (g)		25	50	1,100					
List Price	£	42	27	584					



# **CONTROL SYSTEM LIST**

For SPLIT & MULTI SPLIT For VRF

#### PRODUCT LINEUP: CONTROL SYSTEM

### 

			Indoor unit Wall Mounted Cassette										
			Flagship Range	Designer Range	Designer Standard Range Range		Designer Range				ECO Range	4-way Flow Compact	
	Туре		ASYG 09/12KXCA	ASYG 07/09/12/14 KGTA	ASYG 07/09/12/14 KMTA	ASYG 09/12LTCA	ASYG 07/09/12/14 LUCA	ASYG 07/09/12/14 LMCE	ASYG 18LFCA, ASYG24LFCC	ASYG 30/36LMTA	ASYG 09/12 LLCE	AUYG 12/14/18 LVLB, AUYG24LVLA	
Controllers				UTY-RNRYZ2+ UTY-TWRXZ2						UTY-RNRYZ2+ UTY-TWRX			
	Wired Remote	<b>W</b> , <b>*</b>		UTY-RLRY+ UTY-TWRXZ2						UTY-RLRY+ UTY-TWRX			
	Controller					UTY-R	UTY-RVNYM+ UTY-TWBXF		UTY-RVNYM	UTY-RVNYM+ UTY-XWNX		UTY-RVNYM	
					UTY-RNNYM+ UTY-TWBXF	UTY-R	UTY-RNNYM+ UTY-TWBXF		UTY-RNNYM	UTY-RNNYM+ UTY-XWNX		UTY-RNNYM	
	Simple Remote Controller	2-wire type		UTY-RSRY, UTY-RHRY	UTY-RSNYM+ UTY-TWBXF	UTY-R	UTY-RSNYM+ UTY-TWBXF		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											
		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	T T T				● FJ-RC-KNX-1i			FJ-RC-KNX-1i			FJ-RC-KNX-1i	
	Wireless LAN			UTY-TF	- SXW1			• UTY-TFNXZ1			UTZ-TFNXZ1		
	Interface							Fj-RG-WIFI-1				FJ-RC-WIFI-1	
	External Switch Controller			UTY-				UTY-TEKX				UTY-TEKX	



(	, T			Dı	Indoor unit						Outdoor unit Single Phase
Cassette Circular Flow 4-	Mini	Slim	Du Medium Static Pressure	Medium Static Pressure	High Static Pressure	Big	Floor	Floor/Ceiling	Ceiling	5-6 Rooms Multi	
18/24/30/ 36//5/5/	AUYG 80/36LRLE, 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
UTY-RNRYZ2		UTY-RNRYZ2		UTY-RNRYZ2			UTY-RNRYZ2				
UTY-RLRY		• UTY-RLRY		UTY-RLRY			UTY-RLRY				
UTY-RVNYM											
					UTY-RNNYM				1		
UTY-RSRY, UTY-RHRY, UT UTY-RSNYM	● JTY-RSNYM	UTY-RSRY, UTY-RHRY, UTY-RSNYM	• UTY-RSNYM	UTY-RSRY, UTY-RHRY, UTY-RSNYM	UTY-R		UTY-RSRY, UTY-RHRY, UTY-RSNYM	SNYM			
											UTY-DMMYM
UT	• ITY-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			
F)	J-RC-MBS-1		● FJ-RC-MBS-1		FJ-RC-I	MBS-1			FJ-RC-/	MBS-1	
UTY-VKSX		UTY-VKSX		UTY-VKSX			UTY-VKSX	♥ FJ-RC-KNX-1i			
F)-	J-RC-KNX-1i		● FJ-RC-KNX-1i		FJ-RC-I	NX-1i			FJ-RC-KNX-1i		
UTZ-TFNXZ	Z1	UTZ-TFSXZ1 UTZ-TFNXZ1 UTZ-TFSXZ1 UTY-TFNXZ1									
F)-RC-WIFI-	FJ-RC-WIFI-1 FJ-RC-WIFI-1 FJ-RC-WIFI-1										
UTY-TEKX											

#### **PRODUCT LINEUP: CONTROL SYSTEM**

### CONTROL SYSTEM LIST for VRF

			Lindoor unit Cassette Duct													
			Compact	Cas 4-way		Circular Flow	Duct Bulkhead Slim Medium Static High Static									
		Туре	Grid type /Standard type	(Slim)	4-way (Large)	(Large)	(With drain pump)	(With drain pump)	Pressure	Pressure						
		Туре	AUXB 04GBLH, AUXB 07/09/12/ 14/18/24 GALH	AUXD 18/24GALH	AUXA 30//36/45/54 GALH	AUXK 018/024/030/ 036/045/054 GLAH	ARXK 07/09/12 GCLH	ARXD 04/07/09/ 12/14/18/24 GALH	ARXA 24/30/36/45 GBLH	ARXC 36GBTH, ARXC 45/60GATH						
Controllers	Wired Remote					UTY-RNR	YZ2									
	Controller	1967 <sup>11</sup> 11				UTY-RLI	RY									
	Simple Remote Controller	2-wire type				UTY-RSRY, UTY-RHRY, UT	'Y-RSKY, UTY-RHKY									
	Wireless Remote Controller			UTY-LNHY												
	Group Remote Controller		UTY-CGGY + UTY-VGGXZ1													
	Central Remote Controller		UTY-DCGY													
	Touch Panel Controller		UTY-DIGYZ1													
	System Controller, System Controller Lite					UTY-APGXZ1, UT	UTY-APGXZ1, UTY-ALGXZ1									
	IR Receiver Unit			UTY-L	€ RHYB1	UTY-LBHXD										
Interface	MODBUS Convertor			UTY-VMGX		UTY-VMGX UTY-VMSX										
	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					UTY-TFSXZ1										
	Interface			FJ-RC-WIFI-1		FJ-RC-WIFI-1										
	External Switch Controller					UTY-TEF	RX									

#### • UTY-RLRY UTY-RSRY, UTY-RHRY, UTY-RSKY, UTY-RHKY • UTY-LNHY • UTY-CGGY + UTY-VGGXZ1 • UTY-DCGY • UTY-DTGYZ1 • UTY-APGXZ1, UTY-ALGXZ1 UTB-YWC UTY-VMGX UTY-VMSX UTY-VMGX UTY-VMSX UTY-VMGX UTY-VMSX UTY-VMGX UTY-VMGX UTY-VMGX FJ-RC-MBS-1 ● FJ-RC-MBS-1 • UTY-VKGX UTY-VKSX • UTY-VKGX UTY-VKSX • UTY-VKGX • UTY-VKGX • 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

Indoor unit

• UTY-RNRYZ2

ASYA 004/007/009 GTAH

Ceiling

ABYA 30/36/45/54 GATH Wall Mounted

ASYA 18/24GBCH

ASYA 012/014GCAH

Duct

High Static Pressure

ARXC 72/90GBTH, ARXC 96GATH Floor

\_\_\_\_

AGYA 007/ 009/012/014 GCAH Ceiling/ Floor

ABYA 12/14/18/24 GATH

ASYA 030/034GTAH

• UTY-TERX

### **PRODUCT LINEUP: OPTIONAL PARTS**

# Auto Louvre Grille Kit

#### UTDGXSAW / UTDGXSBW / UTDGXSCW

# SPLITS/MULTI/VRF



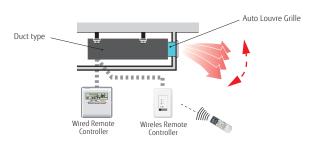
Simple flat Auto Louvre will provide comfort airflow and harmonise with luxury interior.



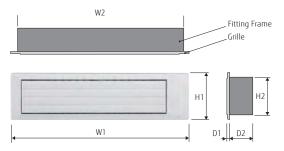
#### **Flexible Control**

- 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



					l	Jnit:mm
Model Name	W1	W2	H1	H2	D1	D2
UTDGXSAW	683	645				
UTDGXSBW	883	845	180	148	9	84
UTDGXSCW	1,083	1,045	1			

#### Specifications

Model name			UTDGXSAW	UTDGXSBW	UTDGXSCW			
Applicable Indoor U	Init		ARYG07/09LLTA ARYG12/14LLTB ARXD04/07/09/12/14GALH (For VRF) ARXK07/09/12GCLH (For VRF)	ARXD24GALH (For VRF)				
Power Supply				Connecting with Control box of indoor unit				
Fixing of Auto Louvr	e Grille			Screw fixing to Flange or Square Duct				
Extension Square Du	uct Limit		1.0r	m (Max. duct length between indoor unit and Gri	lle)			
Net Dimension (H × W × D)		mm	180×683×(84+9)	180×883×(84+9)	180×1083×(84+9)			
W/-:	Net	kg	2.0 (4.4)	2.5 (5.6)	3.0 (6.7)			
Weight	Gross	(lbs)	3.0 (6.7)	3.5 (7.8)	4.0 (8.9)			
Color				White				
Louvre Motor				Stepping Motor				
Accessories				Fitting Frame, etc.				
	Cooling	°C	18 to 32					
Operation range	Operation range Cooling		80% or less					
	Heating	°C	16 to 30					
List Price		£	135	151	187			

# **OPTIONAL PARTS LIST**

For SPLIT & MULTI SPLIT For VRF FUNCTION LIST SEPARATION TUBE etc.

### **PRODUCT LINEUP: OPTIONAL PARTS**

# OPTIONAL PARTS LIST for SPLIT/MULTI SPLIT



			Cassette		Indoor unit Duct							
		4-way Flow Compact	Circular Flow	4-way Flow	Mini	Slim	Medium Static Pressure	Medium Static Pressure	High Static Pressure	Big	Floor	Ceiling
		AUYG 12/14/18 LVLB, AUYG 24LVLA	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	ABYG 30/36LRTE, ABYG 36/45/54 LRTA
Human Sensor Kit	1		UTY-SHZXC									
Remote Sensor Unit	New amenity space can be offered by installing the Remote sensor.						UTY-	XSZX				
Cassette Grille	UTG-UFYD-W UTG-UGYA-W UTG-UKYA-W UTG-UKYC-W	UTG-UFYD-W	UTG-UKYA-W UTG-UKYC-W	UTG-UGYA-W								
Auto Louvre Grille Kit					UTD-GXSA UTD-GXS	-W (12/14) B-W (18)						
Long Life Filter							UTD-LFNA UTD-LFNB UTD-LFNC	UTD-LF25NA	UTD-LF60KA (45/54)	UTD-LFKA		
Flange	0—							UTD-SF045T UTD-RF204				UTD-RF204
Drain Pump Unit								UTZ-PX1NBA		UTZ-PX1NAB		UTR-DPB24T
Fresh Air Intake Kit	For Compact For Cassette Cassette	UTZ-VXAA	UTZ-V									

• There are no optional parts for Floor/Ceiling type and Wall Mounted type.

# OPTIONAL PARTS LIST for VRF

							Indoor unit					
			Cass	ette				Duct			Floor	
		Compact Grid type / Standard type	4-way (Slim)	4-way (Large)	Circular Flow (Slim)	Bulkhead (With drain pump)	Slim (With drain pump)	Medium Static Pressure	High Stati	c Pressure	_	Ceiling
		AUXB 04GBLH, AUXB 07/09/12/ 14/18/24 GALH	AUXD 18/24GALH	AUXA 30/36/45/54 GALH	AUXM 018/024/030 GLAH	ARXK 07/09/12 GCLH	ARXD 04/07/09/ 12/14/18/24 GALH	ARXA 24/30/36/45 GBLH	ARXC 36GBTH, ARXC 45/60GATH	ARXC 72/90GBTH, ARXC 96GATH	AGYA 007/ 009/012/014 GCAH	ABYA 30/36/45/54 GATH
Human Sensor Kit	1				UTY-SHZXC							
Remote Sensor Unit	New amenity space can be offered by installing the Remote sensor.							UTY-XSZX				
Cassette Grille	UTG-UFYE-W UTG-UFYC-W UTG-UKYC-W	UTG-UFYE-W UTG-UFYC-W			UTG-UKYC-W							
Auto Louvre Grille Kit						UTD-GZ UTD-GXS UTD-GXS	KSA-W, B-W (18),					
Long Life Filter								UTD-LF25NA	UTD-LF60KA			
Flange	0—							UTD-SF045T UTD-RF204				UTD-RF204
Drain Pump Unit								UTZ-PX1NBA				UTR-DPB24T
Fresh Air Intake Kit <sup>* 1</sup>	For Compact Cassette	UTZ-VXAA	UTZ-	VXRA	UTZ-VXRA							

• There are no optional parts for Floor/Ceiling type and Wall Mounted type.

# FUNCTION LIST for VRF

**External Inputs & Outputs** 

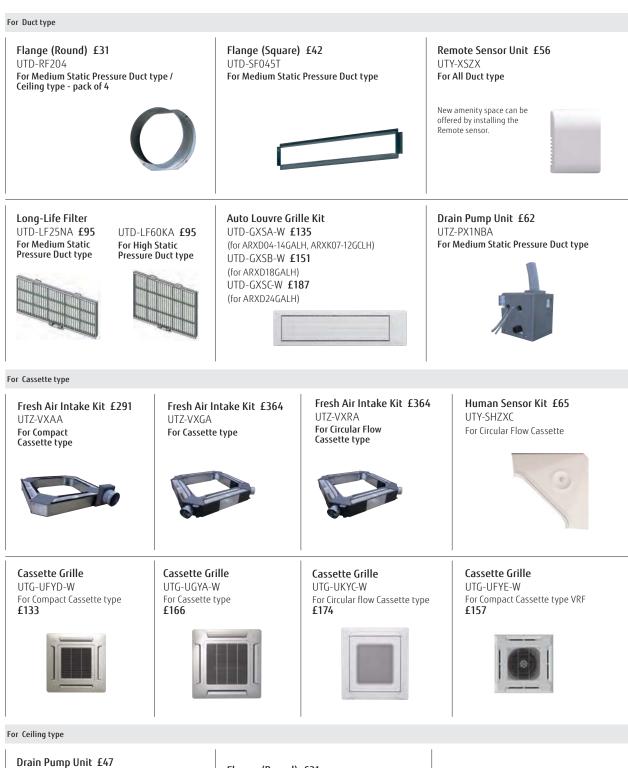
For Indoor unit £9 each		For Outdoor unit £9 each
UTY-XWZXZ7	UTY-XWZXZD	UTY-XWZXZ6
UTY-XWZXZB	UTY-XWZXZE	UTY-XWZXZ9
UTY-XWZXZC		UTY-XWZXZF
1	1	1
For RB unit £9 each	For Central Remote Controller £9 each	For Touch Panel Controller £9 each
For RB unit £9 each	For Central Remote Controller £9 each	For Touch Panel Controller £9 each
UTY-XWZXZ6		
_		

#### **Function list**

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

•: Dry Contact O: Apply Voltage

\*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.



UTR-DPB24T For Ceiling type



Flange (Round) £31 UTD-RF204 For Ceiling type pack of 4



**CONTROL SYSTEM** 

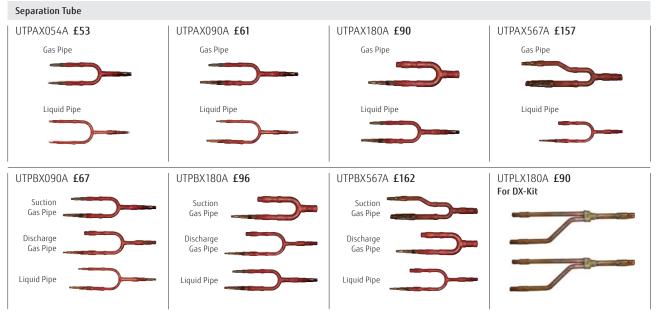
### **PRODUCT LINEUP: OPTIONAL PARTS**

# SEPARATION TUBE etc.

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



#### For VRF







TPDX567A **£162** Suction Gas Pipe



Outdoor Unit Strip & Rebuild From £1800 (Terms & Conditions Apply)



#### For VRF



RB Unit

UTPRX01AH **£337** / UTP-RX01BH **£372** / UTPRX01CH **£427** Single type



UTPRX04BH **£1345** Multi type



# Specifications

Model name		UTPAX054A	UTPAX090A	UTPAX180A	UTPAX567A		
Total cooling capacity of indo	oor unit (kW)	19.6 or less	28.0 or less	28.1 to 56.0	56.1 or more		
List Price	£	53	61	90	157		
Model name		UTPBX090A	UTPI	BX180A	UTPBX567A		
Total cooling capacity of indo	 oor unit (kW)	28.0 or less	28.1	to 56.0	56.1 or more		
List Price	£	67		96	162		
Header							
Madal a service	3-6 Branches	UTRH	0906L	UTRH	1806L		
Model name	3-8 Branches	UTRH	0908L	UTRH	1808L		
Total cooling capacity of indo	oor unit (kW)	28.0	or less	28.1	to 56.0		
System List Price	£	163	/ 167	165	/ 171		
	3-6 Branches	UTPI	0906A	UTPI	1806A		
Model name	3-8 Branches		0908A		1808A		
Total cooling capacity of indo			or less		to 56.0		
List Price	£	218	/ 229	224	/ 234		
Outdoor unit Branch ki	it						
Model name		UTPCX567A	(for V-III)	UTPDX567	A (for VR-II)		
Number of outdoor unit	2 outdoor units			1			
	3 outdoor units			2			
List Price	£		157	162			
EV Kit							
Model name		UTRE	V09XB	UTRE	V14XB		
Application model		ASYE	D4GACH D7GACH D9GACH	ASYE12GACH ASYE14GACH			
List Price	£		71	71			
RB Unit							
Туре			Single type		Multi type		
Model name		UTPRX01AH	UTPRX01BH	UTPRX01CH	UTPRX04BH		
Power source	V/Ø/Hz		230	// 1 / 50			
Input power	W	17	24	31	96		
Number of branches		1	1	1	4		
Maximum capacity of connec indoor units (Q)	table <sub>kW</sub>	$Q \ge 8.0$	Q ≦ 18.0	Q ≦ 28.0	$Q \leq 56.1^{*1}$		
Maximum capacity of connec indoor units per branch (Q)	KW	$Q \ge 8.0$	Q ≦ 18.0	Q ≦ 28.0	Q ≦ 18.0		
Maximum number of connect indoor units per branch	table	3	8	8	8		
			100 200 200		260×658×428		
Dimensions (H×W×D)	mm		198×298×268		200~038~420		

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)

Note: Older Version UTY-ASGX will be sent our while stocks last

Differences between the versions are the software on the original is on a CD rom and the product key USB is a different colour

### 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 for 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 🛛 🤘
- 🖌 Super heat volume normal value 🛛
- 🖌 High pressure pipe normal value 🛛 🧹
- 🖌 Low pressure pipe normal value 🛛 ...etc.

An error occurs at local system.



### Remote technical support & maintenance

On-site check screen can be shared with the engineer on site. 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.

# remote location FRROR Technical support nstaller / Administrato

#### Personal computer system requirements

UTYASGXZ1
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)
1 GHz or higher
<ul> <li>1 GB or more (for Windows Vista®, Windows® 7 [32-bit], Windows® 8.1 [32-bit], and Windows® 10 [32-bit])</li> <li>2 GB or more (for Windows® 7 [64-bit], Windows® 8.1 [64-bit], and Windows® 10 [64-bit])</li> </ul>
40 GB or more of free space
1366 x 768 or higher resolution
2 USB ports     - 1 USB port is required for software protection key connection     - 1 USB port is required for Echelon® U10 USB Network Interface
Internet Explorer® 11 or Microsoft Edge / Adobe® Reader® 9.0 or later

#### Dacking list

Tacking lise				
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.		
List Price	£	629		

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.)

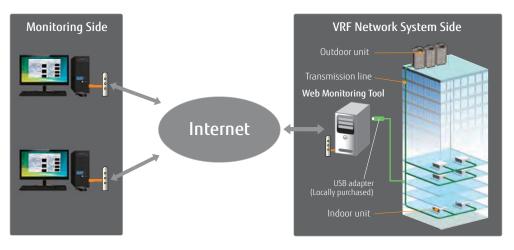
#### **Product features**

- 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.

Note: Older Version UTY-AMGX will be sent our while stocks last Differences between the versions are the software on the original is on a CD rom and the product key USB is a different colour

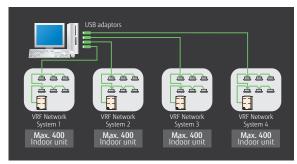
### Web Monitoring System



#### 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

UTYAMGXZ1
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)
1 GHz or higher
<ul> <li>1 GB or more (for Windows Vista®, Windows® 7 [32-bit], Windows® 8.1 [32-bit], and Windows® 10 [32-bit])</li> <li>2 GB or more (for Windows® 7 [64-bit], Windows® 8.1 [64-bit], and Windows® 10 [64-bit])</li> </ul>
40 GB or more of free space
1366 x 768 or higher resolution
USB port (for 10 USB Network Interface Max.4, Software protection key)     Either of the following interface is required for remote connection:     - Internet using LAN: Ethernet port is required
Internet Explorer® 11 or Microsoft Edge / Adobe® Reader® 9.0 or later

#### Dacking list

i deking lise				
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.		
List Price	£	РОА		

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 (hydroflurocarbons) 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.

SYSTEM	LEAK ALARM		SYSTEM	LEAK ALARM	
	•	1ST FLOOR	•		STH FLOOR
		2ND FLOOR	•	٠	STH FLOOR
•	•	SRD FLOOR	•	•	TTH FLOOR
		4TH FLOOR	•		

### 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
Auidble Alarm (minimum dB)		75	85	85	85
Gases Detected		Halocarbon Refrigerants	-	-	-
Detection Range		10000 PPM (factory set 1000-5000)	_	_	_
Dimensions (H × W × D) (mm)		85 × 146 × 50	364 × 284 × 120	364 × 284 × 120	364 × 284 × 120
Weight (Kg)		0.3	1 approx.	1 approx.	1 арргох.
List Price	£	288	2271	2574	1969