

TENTATIVE
FUJITSU GENERAL LIMITED

# High performance compact outdoor unit realizing high efficiency and comfort

Flexible multi system contains high-level functions in a compact body to comfortably control 8 rooms. An indoor unit connection capacity from 11.2 kW to 18.2 kW is possible, and indoor units with a capacity of 2.0 kW to 7.0 kW can be selected and combined to meet the application. Installation is easy and saves space, so we can recommend this system for a wide range of applications including community housing, single-unit residences, and stores.







• Broad lineup of indoor unit



Outdoor unit





# **Compact Outdoor Unit**





Compact and lightweight outdoor unit is easy to carry in. It can be installed in various obscure places.









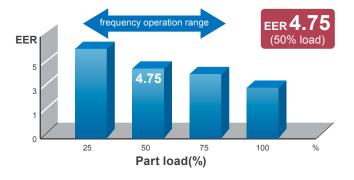


# High seasonal efficiency

The actual performance is conducted under various outside temperatures depending on weather and seasons, furthermore, especially for multi system, not all the rooms are operated all the time. So over 90% of actual operation time, air conditioners are operated at partial capacity instead of rated capacity.

Considering these, we focused on energy-saving performance which is based on actual use.

Efficiency of part load performance was drastically improved by developing ALL DC and our own inverter system.



#### Innovated technology



High efficiency large fan :

New high efficiency fan is mounted.



High efficiency DC twin rotary compressor :

A high performance, low noise, large capacity DC twin rotary compressor is used.



DC fan motor:

High performance and high efficiency has been realized by using a small DC fan motor.



Heat exchanger :

Reduced compact size and energy saving has been realized by utilizing high density piping design and 3-Row heat exchanger.

#### **More Comfort**

#### Quick comfort by optimized refrigerant control

Every room meets set point most quickly and comfortably by optimized refrigerant control.

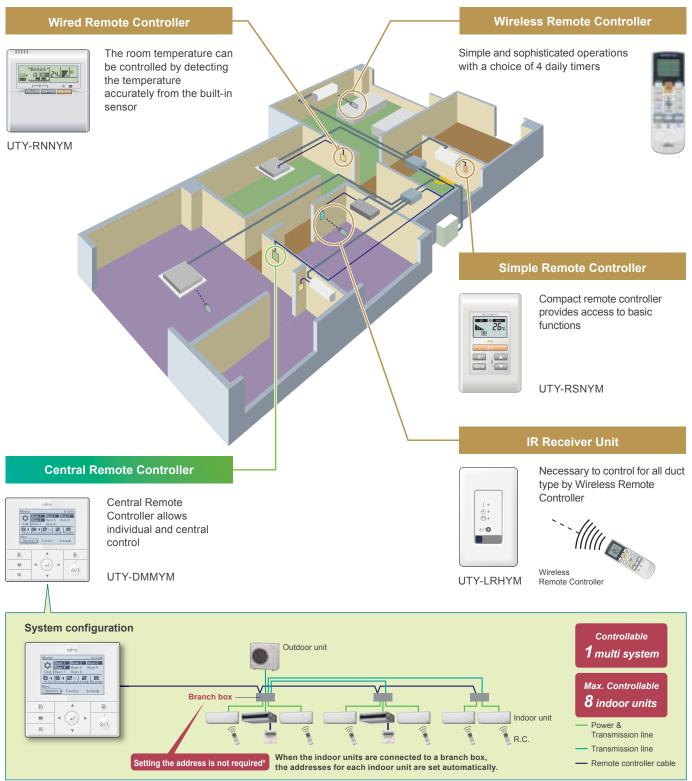


# Convenient control system



# System overview

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.



# Central Remote Controller



Central remote controller developed for residential applications.

All indoor units can be batched controlled using simple operations. Schedule management and other functions can be used to achieve even greater energy savings.



#### **Central & Individual Control**

Batched control of up to 8 indoor units. The temperature, airflow volume, and remote control prohibition settings of all indoor units can be batched.

## **User-friendly operation**

- Large backlight LED screen
- · Large easy-to-see operation panel

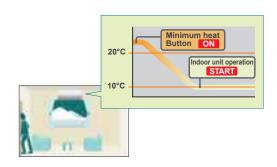
### Multiple language support

Corresponds to 9 different languages (English, German, French, Spanish, Russian, Portuguese, Italian, Greek, and Turkish)

#### **Comfort control**

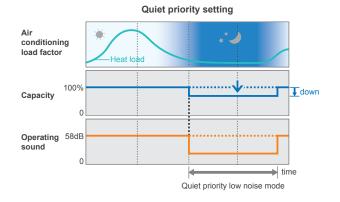
#### 10°C heat operation

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



#### Low noise operation

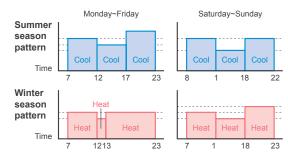
Users can choose from 4 low noise levels, depending on the installation environment. The operation time can be set using the timer.



#### Convenience

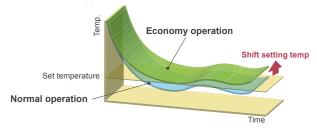
#### Weekly schedule timer

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.



#### **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**

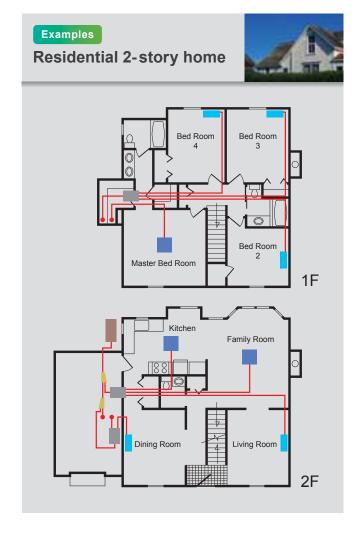
The remote controller operation of all indoor units comes with a lock function to prevent unapproved operations in the various rooms. The central remote controller also has a key lock function to prevent children from playing with it, etc

# Flexible Design



A variety of installation patterns can be supported using the branch box connection method.

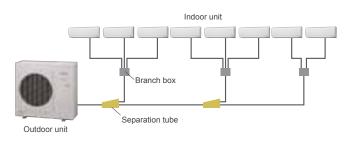




# Outdoor unit 2.5 kW Indoor unit 2.0 kW Indoor unit Branch box

#### Large capacity connection

Up to 8 indoor units can be connected to one outdoor unit. A maximum of 130% indoor unit connectable capacity. Match any room layout



Connectable indoor unit capacity
Ratio up to 130%

Connectable indoor unit number

Up to **8** 

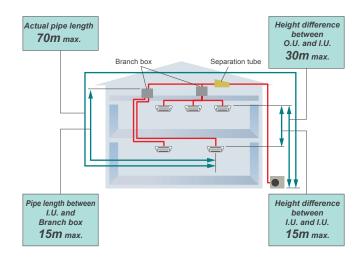
\*At least 2 units must be connected.

#### Long piping design

Can be installed in high rise condominium or commercial building

Total pipe length

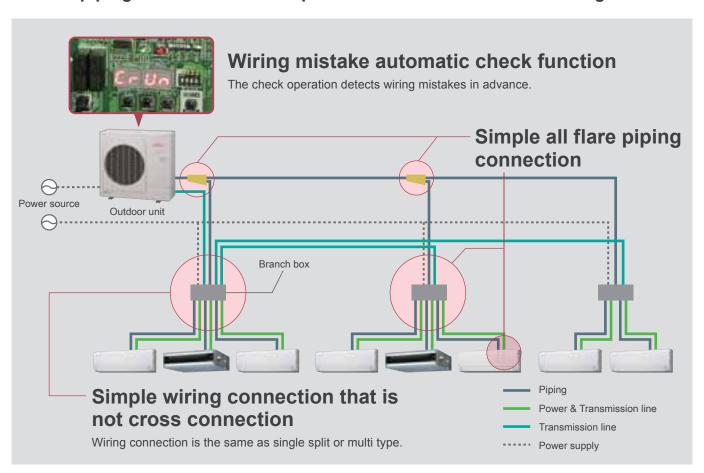
115m max.



# Easy Installation

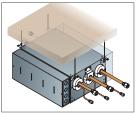


All flare piping connection and simple installation that minimizes wiring mistakes.



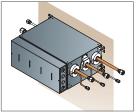
#### **Branch Box**

#### **Allowed Branch Box Mounting Direction**



Hanging from the ceiling

Do not hang from the ceiling when performing a vertical installation.



Horizontal Wall Mounting

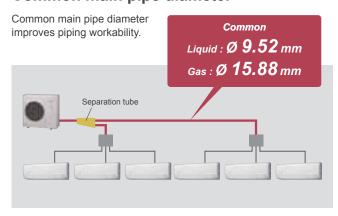
Install the unit with its top side facing upwards.



Vertical Wall Mounting

Install the unit with the control box facing upwards.

#### Common main pipe diameter



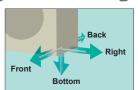
#### Lightening of outdoor unit

Can be carried by 2 people



# 4-way piping connection

Four directions piping connection is possible. The perfect route can be selected according to the installation.



# Flexible Multi System Outdoor unit

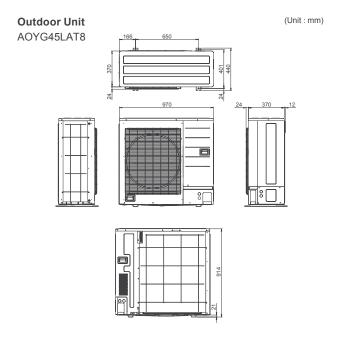
AOYG45LAT8 DC



# Specifications

Model name	AOYG45LAT8			
Maximum Connectable Indoor L	Init		8	
Indoor unit connectable capacity	Cooling	kW	11.2 - 18.2	
Power source		V/Ø/Hz	230/1/50	
Rated Capacity	Cooling	kW	14.0	
Rateu Gapacity	Heating		16.0	
Input Power	Cooling	kW	5.20	
Iliput Fowei	Heating	NVV	5.07	
Air flow rate	Cooling	m³/h	4,650	
All llow rate	Heating	111711	4,800	
0	Cooling	-ID(A)	56	
Sound pressure level	Heating	dB(A)	58	
Heat exchanger fin			Plate fin coil	
Net Dimensions H x W x D		mm	914 x970x370	
Weight		kg(lbs)	98 (217)	
Piping Connections (Small / Larg	ge)	mm	9.52/15.88	
Max Pipe Length			115 (Total)	
Max Height Difference (O.U $\sim$ I	.U)	m	30	
Operating range	Cooling	*ODD	-5 to 46	
Operating range	Heating	°CDB	-15 to 24	
Refrigerant			R410A	

### Dimensions



# **Connectable Indoor unit lineup**

Full lineup of 6 types and 20 models

Class	<b>7,000BTU</b> 2.0kW	<b>9,000BTU</b> 2.5kW	<b>12,000BTU</b> 3.5kW	<b>14,000BTU</b> 4.0kW	<b>18,000BTU</b> 5.0kW	<b>24,000BTU</b> 7.0kV
Compact					1	
Wall Mounted	ASYG07LJCA	ASYG09LJCA	ASYG12LJCA			
Wall Mounted						
					ASYG18LFCA	ASYG24LFCA
Floor						
		AGYG09LVCA	AGYG12LVCA	AGYG14LVCA		
Floor / Ceiling						
- Tool / Colling				ABYG14LVTA	ABYG18LVTA	
Compact Cassette	1		111	1 11		
	AUYG07LVLA	AUYG09LVLA	AUYG12LVLA	AUYG14LVLA	AUYG18LVLA	
Slim Duct						
Silli Duct	ARYG07LLTA	ARYG09LLTA	ARYG12LLTA	ARYG14LLTA	ARYG18LLTA	9

# **Feature Explanation**

#### **Comfortable function**



#### Up / down swing flaps

The up/down flaps automatically swing up and



#### Auto restart

In the event of a temporary power failure, the air conditioner will automatically restart in the same operating mode as before, once the power supply is restored.



#### Connectable fresh air duct



#### **Double swing automatic**

Complex swing action of flaps enables automatically to swing both horizontal and vertical directions.



#### Auto-changeover

The unit automatically switches between heating and cooling modes based on your temperature setting and the room temperature.



#### Fresh air intake

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



#### Automatic air flow adjustment

The micro-computer automatically adjusts the air flow effectively to follow the changes of room temperature.



#### 10°C HEAT operation

The room temperature can be set to go no lower than 10°C, thus ensuring that the room does not get too cold when not occupied.



#### **Economy mode**

Limits the maximum operation current, and performs operation with the power consumption suppressed.

#### **Clean function**



#### Long-life ion deodorization filter

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



#### Apple-catechin filter

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



#### Washable panel

#### **Convenient function**



#### Sleep timer

The micro-computer gradually changes the room temperature automatically to afford a comfortable night's sleep.



#### Program timer

This digital timer allows selection of one of four options:
ON, OFF, ON→OFF or OFF→ON.



#### Weekly + setback timer

Weekly + Setback timer can set temperature for two times spans and for each day of the



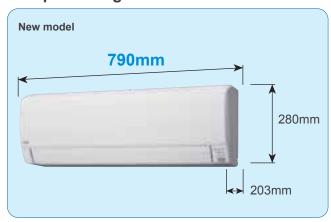
#### Filter sign

Indicates the filter cleaning period by lamp. To enable Filter sign, it has to be selected on the function setting.



# Compact Wall Mounted Type simple design with energy saving. ASYG07LJCA ASYG09LJCA ASYG12LJCA Optional Optional

#### Compact design



#### Air conditioner filter features



Long-life\*
ion deodorization filter

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

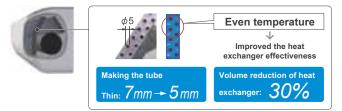
\*The filter can be used for approx. 3 years if it is washed under water to restore its surface action when it is dirty.



Apple-catechin filter

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

#### High density heat transfer tube arrangement



#### Easy maintenance



#### **More Comfort & Convenience**

- Powerful cooling & heating by using DC fan motor
- Auto-restart function memorizes the operating mode as before, once the power supply is restored.
- Comfortable timer (ON, OFF, PROGRAM, SLEEP)

#### Optional parts

Wired Remote Controller: UTY-RNNYM Simple Remote Controller: UTY-RSNYM External Connect Kit: UTY-XWZX Communication Kit: UTY-XCBXZ1

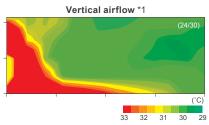
Apple Catechin Filter: UTR-FA16 (Replacement parts) Ion Deodorization Filter: UTR-FA16-2 (Replacement parts)

Model No.			ASYG07LJCA ASYG09LJCA		ASYG12LJCA		
Power source V/ø/Hz		V/ø/Hz	230/1/50	230/1/50	230/1/50		
Air flow rate (C/H) High m³/h		m³/h	560/560	600/600	660/660		
Sound pressure level (C/H)	High	IB(A)	36/36	37/37	40/40		
	Med		32/32	33/33	36/36		
	Low	dB(A)	29/29	29/29	30/31		
	Quiet		25/25	25/25	25/25		
Dimensions H x W x D Net Weight mm kg(lbs)		mm	280×790×203				
		kg(lbs)	8(18)				
0	Liquid	mm		ø6.35			
Connection pipe diameter	Gas	]	ø9.52				

# Wall Mounted Type Simple & elegant appearance design ASYG18LFCA **ASYG24LFCA**

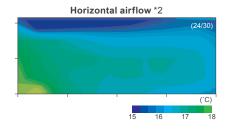
"Vertical airflow" provides powerful floor level heating & "Horizontal airflow" does not blow cool air directly at the occupants in the room

# \*1 : Outside air conditions: 2°C 60% (Max set temp) 30°C, airflow Hi, Air direction downward and front (full open)



Operation contents: Heating, Set temperature



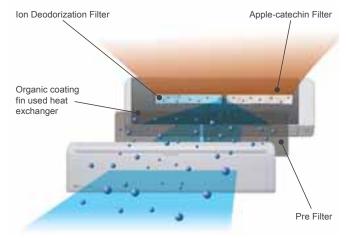


\*2 : Outside air conditions: 35°C 40% Operation contents: Cooling, Set temperature (Min set temp) 18°C, airflow Hi, Air direction downward and front

#### **Easy maintenance**

Simplification of drain pan cleaning improves maintenance-ability.

#### Air conditioner filter features



Antibacterial deodorizing pre-filter with special ceramic powder

#### **Optional parts**

Wired Remote Controller: UTY-RNNYM Simple Remote Controller: UTY-RSNYM External Connect Kit: UTY-XWZX

Apple Catechin Filter: UTR-FA13-1 (Replacement parts) Ion Deodorization Filter: UTR-FA13-2 (Replacement parts)

Model No.	Model No.		ASYG18LFCA	ASYG24LFCA	
Power source	Power source V/ø/Hz		230/1/50	230/1/50	
Air flow rate (C/H)	High	m³/h	900/900	1,100/1,120	
	High		43/42	47/48	
Cound pressure level (C/LI)	Med	4D(A)	37/37	42/42	
Sound pressure level (C/H)	Low	dB(A)	33/33	37/37	
	Quiet		26/25	32/32	
Dimensiona II v W v D Not W	laiabt	mm	320 × 998 × 228		
Dimensions H X W X D Net W	Dimensions H x W x D Net Weight kg		14(31)		
	Liquid	mm	ø6.35		
Connection pipe diameter	Gas		ø12.70	ø15.88	

# Floor Simple & Thin design harmonizes with the interior

AGYG09LVCA **AGYG12LVCA AGYG14LVCA** 























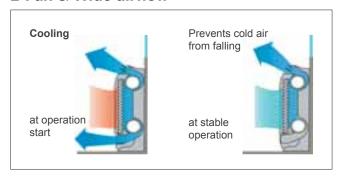


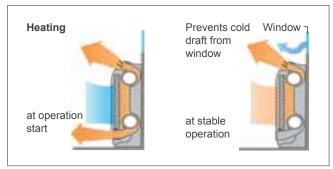






#### 2-Fan & Wide airflow





# Filter features



Long-life\* ion deodorization filter

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

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







#### Apple-catechin filter

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

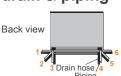
#### Easy maintenance

Washable panel removable

Removable panel



Flexible piping connection 6 direction of drain & piping



#### Flexible & easy installation



### **Optional parts**

Wired Remote Controller: UTY-RNNYM Simple Remote Controller: UTY-RSNYM Half Concealed Kit: UTR-STA External Connect Kit: UTY-XWZX

Apple Catechin Filter: UTR-FC03-2 (Replacement parts) Ion Deodorization Filter: UTR-FC03-3 (Replacement parts)

Model No.			AGYG09LVCA	AGYG12LVCA	AGYG14LVCA	
Power source V/ø/Hz		V/ø/Hz	230/1/50	230/1/50	230/1/50	
Air flow rate (C/H)	Air flow rate (C/H) High m³/h		530/530	600/600	650/650	
	High	dB(A)	39/39	42/42	44/44	
0	Med		34/35	36/38	38/39	
Sound pressure level (C/H)	Low		28/30	30/32	31/33	
	Quiet		22/22	22/22	22/22	
Dimensiona II v W v D Not W	laiabt	mm	600×740×200			
Dimensions H x W x D Net Weight		kg(lbs)	14(			
	Liquid	mm	ø6.35			
Connection pipe diameter	Gas	]	ø9	.52	ø12.70	

# Floor / Ceiling

ABYG14LVTA ABYG18LVTA



#### Flexible installation

Example for floor installation

Floor console



#### **Easy installation**

Main work settings can be done easily from the remote controller at installation  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +\left$ 

#### - Main work settings

- High ceiling setting
- Auto restart
- Temperature adjustment when cooling / heating



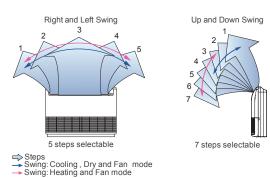
## Example for ceiling installation

Under ceiling



#### **Double auto swing**

A combination of right/left and up/down directional swing allows 3-dimensional air direction control



#### Optional parts

Wired Remote Controller: UTY-RNNYM Simple Remote Controller: UTY-RSNYM External Connect Kit: UTY-XWZX

Model No.			ABYG14LVTA	ABYG18LVTA		
Power source	Power source V/ø/Hz		230/1/50	230/1/50		
Air flow rate (C/H)	High	m³/h	640/640	780/780		
	High	dB(A)	36/36	41/41		
0	Med		34/34	38/38		
Sound pressure level (C/H)	Low		33/33	34/34		
	Quiet		29/29	32/32		
Dimensiona II v W v D Not W	laiabt	mm	199 x 990 x 655			
Differsions if x w x d net w	Dimensions H x W x D Net Weight kg		27(60)			
	Liquid	mm	ø6.35			
Connection pipe diameter	Gas		ø12.70			

# Compact Cassette Powerful wide air flow & Quiet operation

**AUYG07LVLA AUYG09LVLA AUYG12LVLA AUYG14LVLA AUYG18LVLA** 



#### **Easy maintenance**

#### Maintenance of fan motor and fan

Maintenance of the fan motor and fan can be done easily after taking off the panel as the bell mouth of the fan can be removed easily.

A : Fan motor B: 2-stage turbo fan

C: Bell-mouth D: Panel

#### 2 Long life filter

: standard equipment



#### Adaptation of transparent drainage parts

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

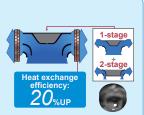
#### 2-stage turbo fan

High efficiency design by 2 stage structure



#### 2-stage turbo fan

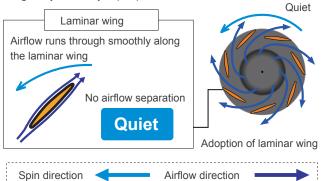
A evenly spread air distribution across the heat exchanger is possible due to the new 2 stage turbo fan which produces two separate airflow streams.



#### **Quiet quality**

Optimization of wing form (laminar wing type) and wing number (7 blades each)

Designed by CFD-analysis (fluid) simulations



#### Optional parts

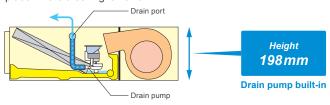
Wired Remote Controller: UTY-RNNYM Simple Remote Controller: UTY-RSNYM Air Outlet Shutter Plate: UTR-YDZB Fresh Air Intake Kit: UTZ-VXAA Insulation Kit For High Humidity: UTZ-KXGC External Connect Kit: UTY-XWZX

Model No.			AUYG07LVLA	AUYG09LVLA	AUYG12LVLA	AUYG14LVLA	AUYG18LVLA	
Power source		V/ø/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	
Air flow rate (C/H)	High	m³/h	540/540	540/540	610/610	680/700	750/800	
	High		33/34	33/34	37/37	40/40	42/44	
Cound procesure level (C/LI)	Med	dB(A)	31/32	31/32	33/33	35/37	37/41	
Sound pressure level (C/H)	Low	ub(A)	29/29	29/29	31/31	32/34	33/37	
	Quiet		26/27	26/27	27/28	27/29	27/30	
Dimensiona II v W v D Not W	laiabt	mm	245×570×570					
Dimensions H x W x D Net W	eigni	kg(lbs)	15(33)					
Connection nine diameter	Liquid mm ø6.35							
Connection pipe diameter Gas		] '''''	ø9.52 ø12.70					
Panel	•				UTG-UFYD-W			

# Slim Duct •Slim design with drain pump •Increase static pressure range •Dual concealed type ARYG07LLTA ARYG09LLTA ARYG12LLTA ARYG12LLTA ARYG18LLTA ARYG18LLTA Wireless R.C. Wireless R.C.

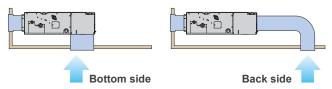
#### Slim design

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



#### Air-intake

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



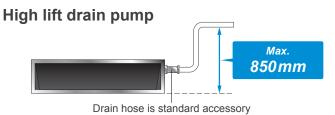
# Selectable with a wide range of static pressure

By using DC fan motor, it is possible to change the static pressure range 0 to 90Pa.

The change of static pressure range is possible by remote controller.

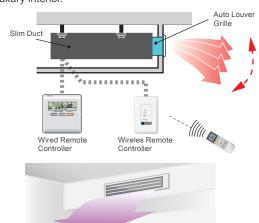


Static pressure range 0 to 90 Pa



#### **Auto Louver Grille Kit (Option)**

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



#### Flexible installation





#### Optional parts

Simple Remote Controller: UTY-RSNYM IR Receiver Unit: UTY-LRHYM

Remote Sensor Unit: UTY-XSZX FUTURE RELEASE

External Control Set: UTD-ECS5A

Auto Louver Grille Kit UTD-GYSA (for ARYG07/09/12/14LATU)

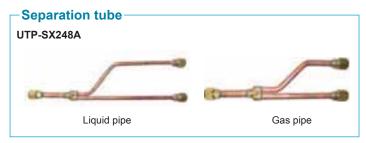
UTD-GYSB (for ARYG18LATU)

Model No.			ARYG07LLTA	ARYG09LLTA	ARYG12LLTA	ARYG14LLTA	ARYG18LLTA
Power source		V/ø/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Air flow rate (C/H)	High	m³/h	550/550	600/600	650/650	800/800	940/940
Static pressure range		Pa			0 to 90		
	High		28/28	28/28	29/29	32/32	32/33
Sound pressure level (C/H)	Med	4D(A)	25/25	27/26	28/28	30/30	31/32
	Low	dB(A)	24/24	26/25	27/27	28/28	30/31
	Quiet	1	22/22	25/24	26/24	26/24	29/29
Di	/-:-I-4	mm		198 × 900 × 620			
Dimensions H x W x D Net Weight		kg(lbs)	18(40)	18(40) 19(41) 23(			
Connection pipe diameter Liqu Gas		mm		ø6.35			
		] '''''	ø9.52			ø12.7	

# Optional Parts

#### Connection Units





#### Controllers •









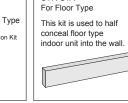
#### Others — Grille Kit











UTR-STA

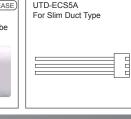
Half Concealed Kit











**External Control Set:** 

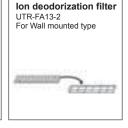






















Fujitsu General (Shanghai) Co., Ltd.







The colors may be different from the actual colors because this catalog is printed matter. Product specifications are subject to change without notice.

Distributed by :

# FUJITSU GENERAL LIMITED

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