

Intelligent, Innovative and Interactive with AI Technology

MULTI V™ i



Superior customer experience

MULTI V™ i

With the innovative AI technology, the MULTI V i AI engine has become intelligent, innovative, and interactive. It provides revolutionary energy-saving logic and offers solutions optimized for various environments with a more pleasant user experience and convenient usability.

What is the AI in MULTI V™ i?

Artificial Intelligence (AI) is computer-based technology to implement human intellectual abilities, such as thinking and learning. Using innovative AI technology, MULTI V i finds optimal solutions by itself.

Artificial Intelligence



Any technique mimicking the intelligence or behavioral pattern of human

Machine Learning



A technique by which a computer can "learn" from data, without using a complex set of different rules

Deep Learning



A technique to perform information processing based on artificial neural networks (multiple layers)



Highlight of MULTI V™ i

- INTELLIGENT	04
- INNOVATIVE	06
- INTERACTIVE	08
- ONLY & BEST	12

Line up

- Outdoor Units	14
- Indoor Units	15
- Control Solutions	16

Specifications

18

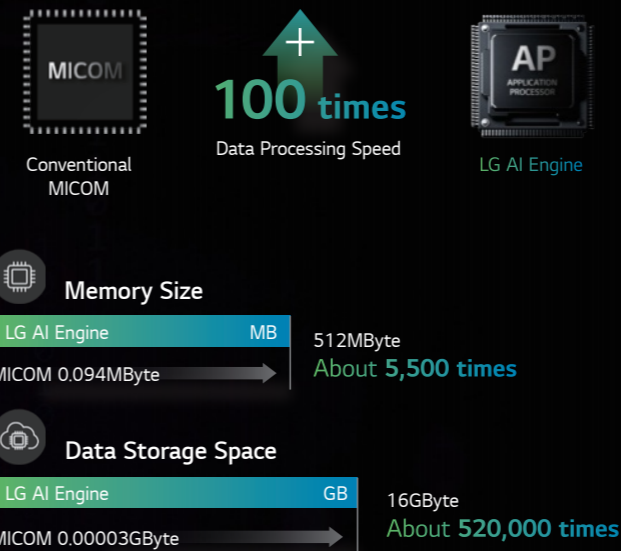
Highlight of **MULTI V™ i**

Efficiency Up with AI Engine

INTELLIGENT

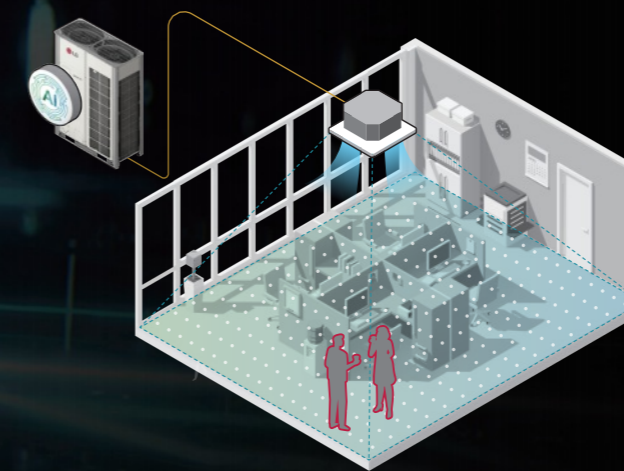
AI Engine

A central processing unit (AP) for mobile phones and computers is mounted. By Deep Learning and Machine Learning, it improves the performance of artificial intelligence by itself.

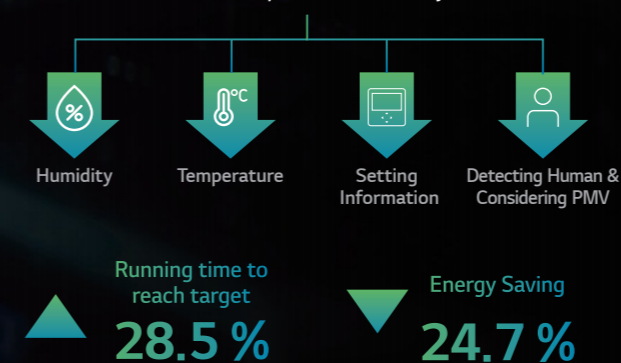


AI Smart Care

MULTI V i is capable of autonomous adaptation to various situations. When no one is in the space, power saving mode automatically turns on. MULTI V i is equipped with deep learning algorithms enabling it to self-learn.

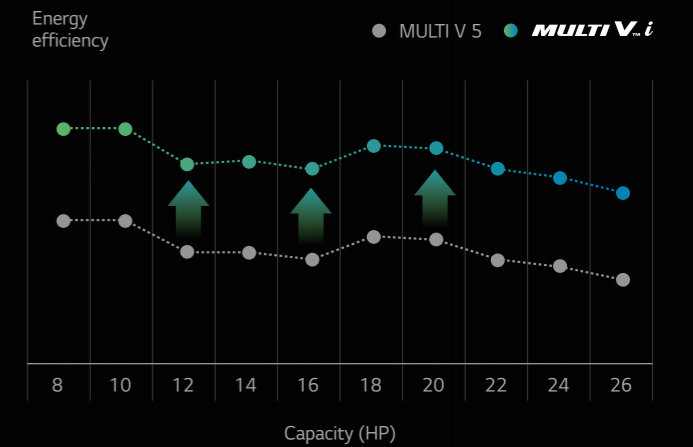
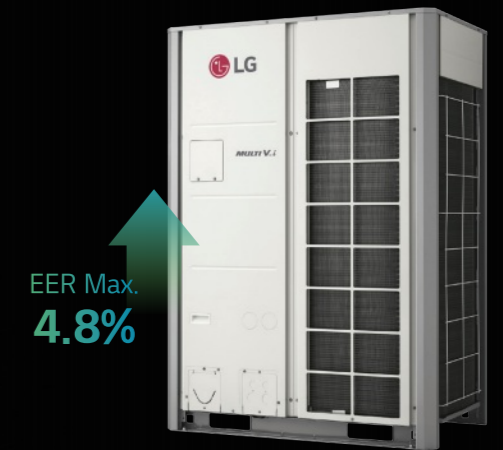


Power-saving control in situations with few people and low temperature and humidity



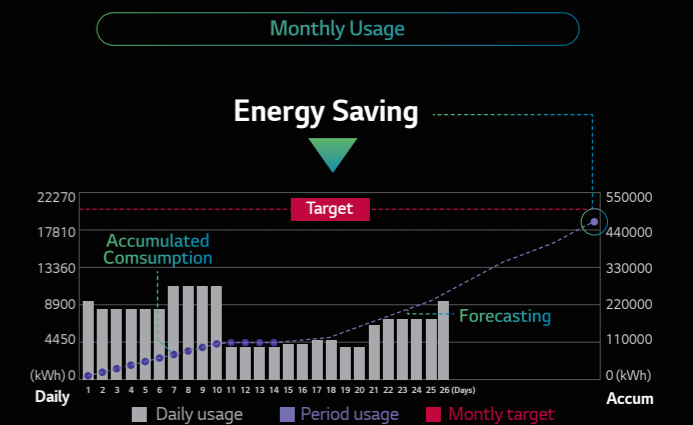
Powerful Performance

MULTI V 5 has very competitive efficiency levels in EU, and MULTI V i is even able to exceed the levels of its predecessor.



AI Energy Management

MULTI V i is able to preset monthly energy usage and consume power according to the target that has been previously set. By Comparing and analyzing previous power consumption of the current month and planned daily energy usage, overuse of the HVAC system operational costs can be prevented by AI Energy management.



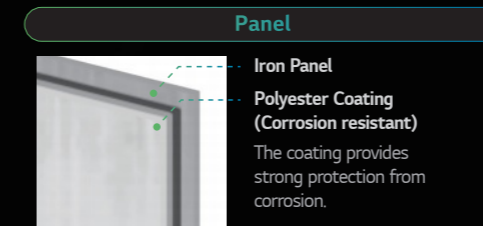
Highlight of **MULTI V™ i**

Innovative Performance Realization

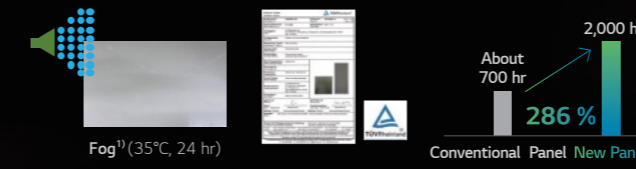
INNOVATIVE

Corrosion Resistance

"Corrosion Resistance Black Fin" heat exchanger is designed for improved corrosion resistance. Body panels are also designed for improved corrosion resistance. 2,000 hours for body panels and 10,000 hours for heat exchanger make the product more reliable for customers.



Salt Spray Test (SST) × Process repeated
5% Area of defects compared to initial state.



※ Verification of corrosion resistance performance
- Test Method B of ISO21207
- ASTM B117 / (2,000 hours)(Last updated : Jul. 2022)

Test process is conducted according to ASTM B117.
1) Salty water concentration : NaCl aqueous solution (5%)

Salt Spray Test (SST) × Process repeated
5% Area of defects compared to initial state.



※ Verification of corrosion resistance performance
- Test Method B of ISO21207
- ASTM B117 / ISO 9227 (5,000 hours →10,000 hrs.)
(Last updated : Dec. 2020)

Test process is conducted according to ASTM B117.
1) Salty water concentration : NaCl aqueous solution (5%)

※ The product is not fully anticorrosive. To install near the sea, additional measures can be required.

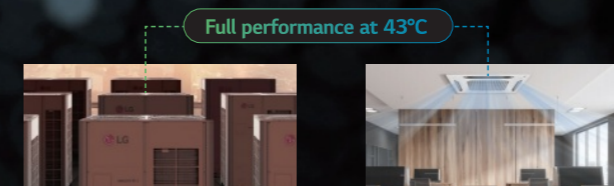
Maximum 26HP for a Single Outdoor Unit

LG MULTI V i saves space, time, and installation costs by offering a larger capacity single outdoor unit.



Powerful Cooling Performance

Reliable cooling operation up to 52°C, with full performance at 43°C. End users are able to enjoy comfortable indoor environment even in case of extreme weather conditions outside.



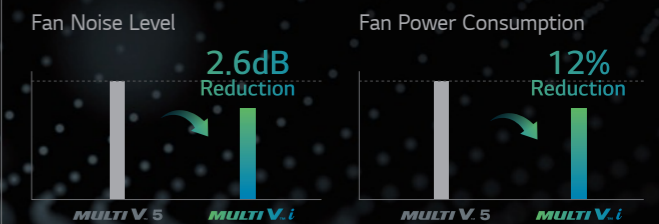
※ Final specifications may change slightly.

Powerful & Stable Cooling Performance

	MULTI V i	MULTI V.5
Cooling Operation Range	-15 ~ 52°C	-15 ~ 48°C
Performance at 43°C	Full	92 %

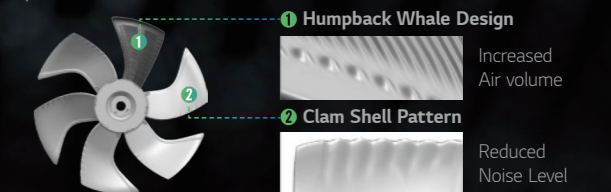
Newly Designed Compact Fan

The design of a new biomimetic fan was inspired from nature. It brings more air volume and less noise with the same air flow rate compared to the conventional system.



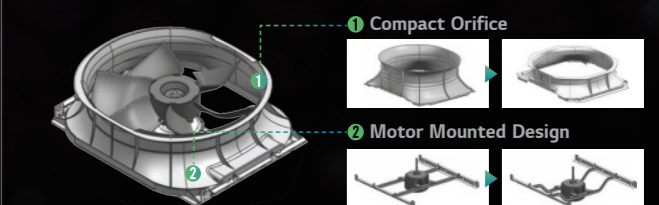
Designed Biomimetic Fan

The new biomimetic fan has 6 blades that can reduce noise level and power consumption.



Compact Aero-Design

With an optimal air flow, the noise level and power consumption is reduced.



Highlight of **MULTI V™ i**

Upgrading & Evolutionary System According to Customer

INTERACTIVE



Flexible Outdoor Units Combination

Flexible combination can contribute to realize faster delivery and installation. It provides more options for designing according to customers' preferences.

Applicable Free Combination

2 Units : 28~36 HP
3 Units : 50~56 HP
4 Units : 70~76 HP

Standard Combination **Flexible Combination** **Flexible Combination**

18HP + 12HP 20HP + 10HP 16HP + 14HP

For Customer
Faster Delivery & Installation

For Consultant
Flexible Design for higher efficiency

※ The UXC chassis models are not applicable to free combination.
※ The 26 HP model of UXC chassis cannot be combined with other models.
※ More information can be checked in the LATS tool.

Noise Target Control

The outdoor unit's noise can be restricted by the set sound level in advance, allowing customers to enjoy comfortable conditions while avoiding disturbing their neighbors and complying with the local noise regulations.

Controlled by a Remote Controller

Available Setting
50 / 55 / 60 / 65 / 70 dB

Noise Level

Function OFF Function ON

Background Noise

Product Noise

65 dB
60 dB
55 dB

time

Weather Information Interlocking Control

LG MULTI V i provides more comfort and convenience by checking ambient weather conditions.

Severe fine-dust conditions outside **Pleasant indoors, as always**

AccuWeather

ThinQ Sever Wi-Fi Modem

Remote Controller

Automatic Air cleaning

Remote controller displaying outdoor and indoor conditions

Hot and humid outside, with heavy rain **Pleasant indoors, as always**

Humidity Temperature Humidity Temperature

Automatic Comfort / Energy Saving mode

AI Smart Diagnosis

AI Smart Diagnosis saves service time and provides for reliable LG MULTI V i operation by automatically analyzing and visualizing the product's performance status.

Mobile LGMV

Service Time **Reliability**

Product Status Index

96/100

Performance Ref. Comp.

Communication Sensors/Parts

OK Check Needed Check Immediately

※ UI may be changed without notification.

Auto Tuning System

LG MULTI V i provides a new experience to customers with faster and easier installation and service with AI engine which is automatically upgradable when the compressor and motor are replaced.

Replacing with the latest version of compressor

Automatically recognizing when the compressor is replaced with the latest version

Service Time **Reliability**

Large Capacity Black Box

Operation data can be saved for up to 6 months before the system failure, contributing to quick service of the product.

Service Time **Reliability**

LGMV → Smart phone → Data Analysis

Mobile LGMV

Recording operation data for

- Max. 6 months before system failure!
- Saved for 1 hour before and after the error occurred

Data Saving Period

Multi V 5 170 sec → **MULTI V i** Max. 6 months

※ UI may be changed without notification.

Remote Upgrade System

Like a smart phone, LG MULTI V i upgrades itself remotely! You can opt for the latest version of software immediately without on-site service.

Conventional

Upgrade by On-site visit

※ Upgrade manually with a laptop (Off-line SVC)

MULTI V i

Upgrade by Network

※ Remote upgrade by BECON Cloud

Central controller

BECON cloud

ACP 5 AC Smart 5

V 2.4 S/W Upgrade

V 2.4 S/W Upgrade

※ LG BECON Cloud is needed.

Highlight of **MULTI V™ i**

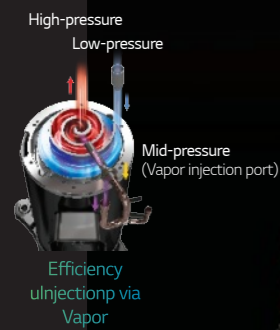
Advantages of 6th Generation Compressor

ONLY & BEST

01 Increased performance

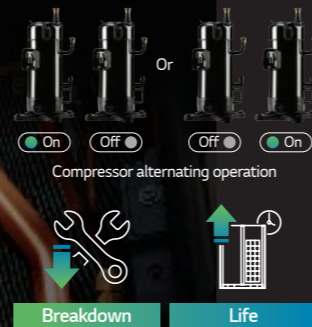
Wide operating range from 10Hz to 165Hz

- Minimum operating temperature → Enhanced heating capacity
- Vapor Injection → Improved efficiency



02 Compressor balancing control

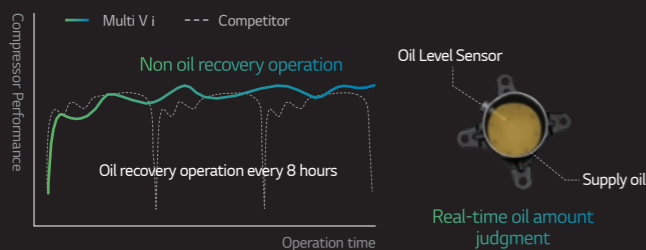
Minimize breakdowns by managing the accumulated operating time of the compressor



03 Smart Oil Management

Oil sensor that allows oil balancing and oil return

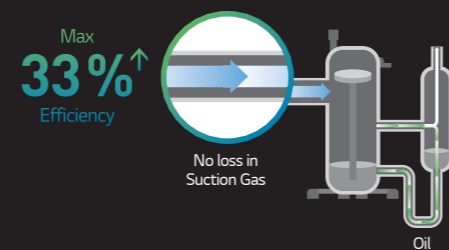
- Reduce supply oil time within 120s → 10s
- Reducing the number of oil return operations → continuous heating



04 HiPOR™ (High Pressure Oil Return)

Maximized reliability & Efficiency of compressor

- Minimize energy losses → Efficiency up
- Return directly oil into the compressor



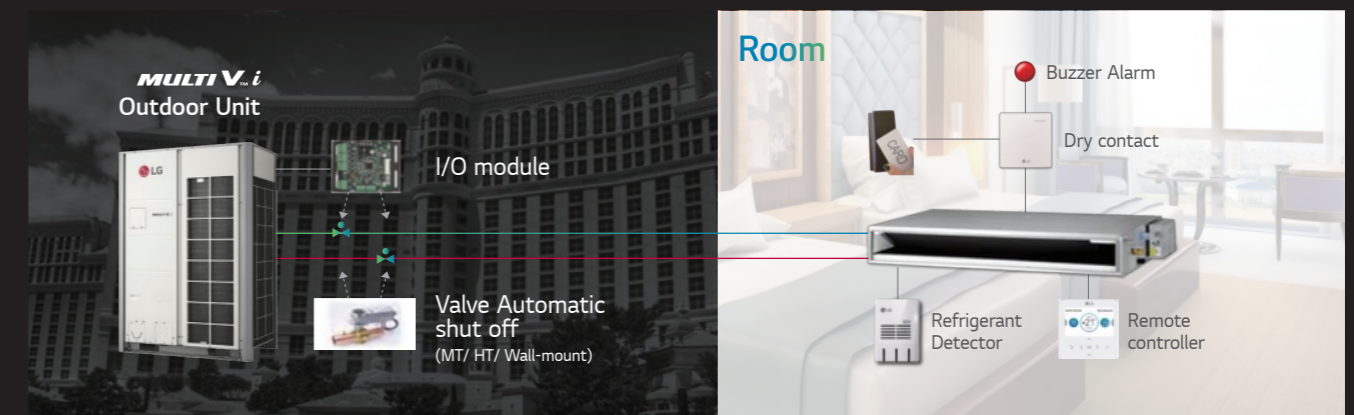
Air Purification Solution

Air purification with cutting edge total HVAC solution is available to serve customer satisfaction.



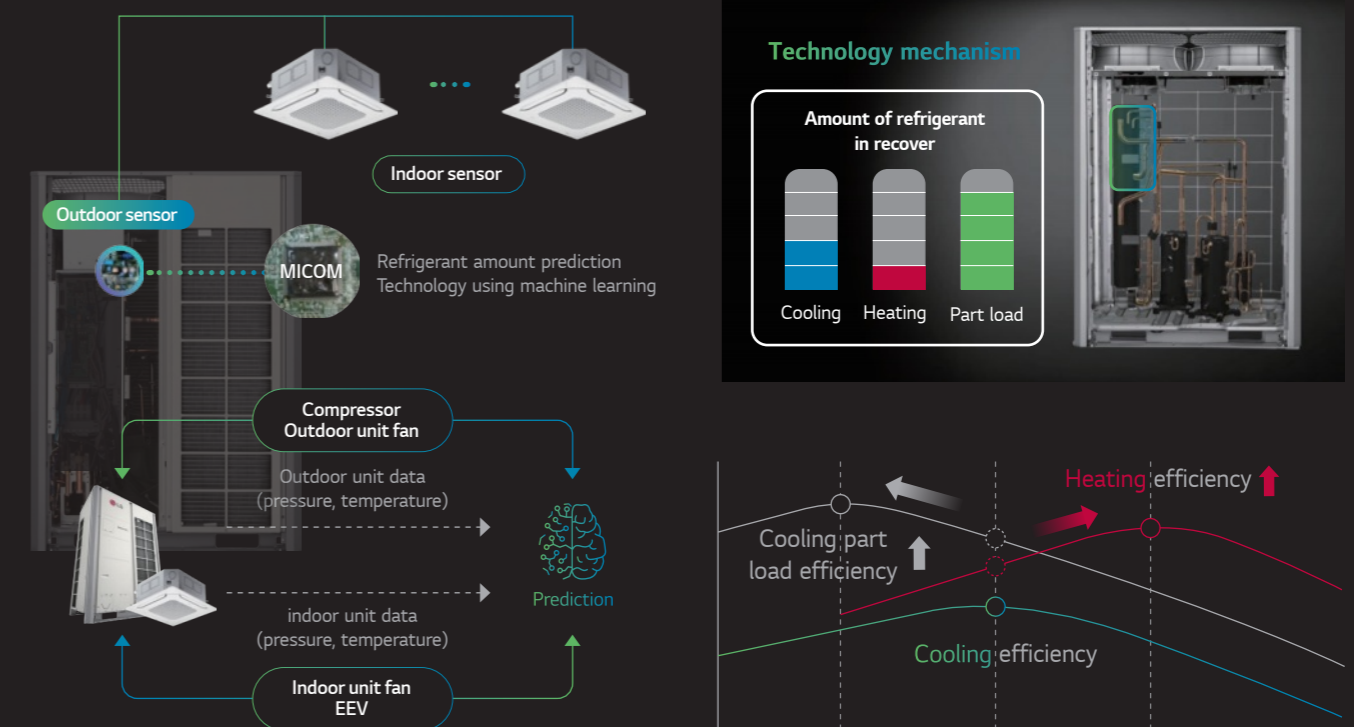
Safety Level Improvement with Refrigerant Leak Sensor

Customers can use MULTI V i with LG leakage detector to confidently keep the indoor space safe.




Active Refrigerant Control


Widens the ambient temperature range at which stable operation & Sustaining most efficient operation occurs.




OUTDOOR UNITS




8 - 12 HP
380V, 3Ø




14 - 26 HP
380V, 3Ø




28 - 48 HP
380V, 3Ø

















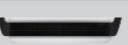









50 - 72 HP
380V, 3Ø























74 - 96 HP
380V, 3Ø





























INDOOR UNITS

		kW															
		1.5	2.2	2.8	3.6	4.5	5.6	6.2	7.1	8.2	9.0	10.6	12.3	14.1	15.8	22.4	28.0
		5k	7k	9k	12k	15k	18k	21k	24k	28k	30k	36k	42k	48k	54k	76k	96k
4 th generation Wall Mounted	Artcool Gallery 		●	●	●												
	Artcool Mirror 	●	●	●	●	●	●		●								
	Standard 	●	●	●	●	●	●		●		●	●					
4 th generation Ceiling Mounted Cassette	4 Way Cassette (570 x 570) 	●	●	●	●	●	●	●									
	4 Way Cassette (840 x 840) 								●	●	●	●	●	●			
	4 Way Cassette High Sensible (840 x 840) 	●	●	●	●	●	●		●	●		●	●	●			
	Round Ceiling Cassette 								●			●		●			
	2 Way Cassette 		●	●	●	●	●		●								
1 Way Cassette 		●	●	●	●	●		●									
4 th generation Ceiling Concealed Duct	Mid / High Statics 		●	●	●	●	●		●	●		●	●	●	●	●	●
	Low Static (Slim) 	●	●	●	●	●	●	●		●							
	High Sensible 		●	●	●	●	●		●	●		●	●	●			
4 th generation Fresh Air Intake 																●	●
4 th generation Ceiling & Floor Convertible 			●	●													
4 th generation Ceiling Suspended 								●		●		●		●			
4 th generation Console 		●	●	●	●												
4 th generation Floor Standing	Floor Standing with Case 		●	●	●	●	●		●								
	Floor Standing without Case 		●	●	●	●	●		●								
Floor Standing (PAC) 															●		●
4 th generation HYDRO KIT	Wall-Mounted 							●		●		●					
	Low Temperature 													●			●
	High Temperature 													●		●	
4 th generation Energy Recovery Ventilator with DX Coil	with Humidifier 					●			●		●						
	without Humidifier 					●			●		●						

CONTROL SOLUTIONS

Individual Control		Centralized Control			
Wired Remote Controller		Wireless Remote Controller	Display	Platform	Gateway
Standard	Simple		AC Ez	ACP 5	Modbus RTU gateway
 PREMTB100	 PQRCVCL0QW	 PWLSSB21H (Heat Pump) PWLSSB21C (Cooling Only)	 PQCSZ250S0 (Indoor Unit - 32)	 PACP5A000 (Indoor Unit - 256) BACnet IP / Modbus TCP * -64, Lonworks with U60FT	 PMBUSB00A (Indoor Unit - 64)
Standard III (Black)			Wi-Fi Modem	AC Ez Touch	AC Manager 5
 PREMTBB10	 PQRCVCL0Q	 For Indoor Unit PWFMD200	 PACEZA000 (Indoor Unit - 64)	 PACM5A000 (Indoor Unit - 8,192)	 INKNXLGE0160036 (Indoor Unit - 16) INKNXLGE0640036 (Indoor Unit - 64)
Standard II (White)			AC Smart 5		 INKNXLGE001R000 (For Indoor Unit)
 PREMTB001	 PQRCHCA0QW (Simple for Hotel)		 PACS5A000 (Indoor Unit - 128) BACnet IP / Modbus TCP		
Standard II (Black)				PI485	 For Indoor Unit (ERV) PHNFP14A0
 PREMTB001	 PQRCHCA0Q (Simple for Hotel)				
Premium				 For AWHP PP48SA001	
 PREMTA000 PREMTA000A PREMTA000B				 For Outdoor Unit (SINGLE / MULTI / THERMA V) PMNFP14A1	

Centralized Control	Integration Device				
Facility Integrator	Indoor Unit		Outdoor Unit	AHU Kit	
	Dry Contact	Control Accessory	IO Module (Input / Output Module)	Communication Kit	
PDI (Power Distribution Indicator)	 Premium (8 ports) PQNUD1S40 Standard (2 ports) PPWRDB000	 Simple Dry Contact PDRYCB000	 PZCWRG3	 For MULTI V IV, 5, i PVDSMN000	 Return / Room Air Control PAHCMR000
ACS IO Module (Input / Output Module)	 PEXPMB000	 Dry Contact for Thermostat PDRYCB320	 PQRSTA0	 Variable Water Flow Control Kit For MULTI V WATER 5 PWFCKN000	 Discharge / Supply Air Control PAHCMS000
ACU IO Module I/O	 PEXPMB300	 2 Points Dry Contact (For Setback) PDRYCB400	Zone Controller  4 Zones by thermostat ABZCA	Low Ambient Kit  For MULTI V IV, 5, i PRVC2	Controller Module  Main Module PAHCM000
UO	 PEXPMB200	 For Modbus PDRYCB500 / PDRYCB510 (w/o case)	Multi-tenant Power Module  PINPMB001	Cool / Heat Selector  PRDSBM	 Communication Module PAHCMC000
UI	 PEXPMB100				Control Kit  PAHCNM000 (Max. 3 Outdoor Units)
					Water Communication Module  PAHCMW000
			EEV Kit (Electronic Expansion Valve)		
	 PRLK048A0 (~ 28 kW) PRLK096A0 (~ 56 kW)	 PRLK396A0 (~ 112 kW)	 PRLK594A0 (~ 168kW)		

SPECIFICATIONS

ARUN080LTE6 / ARUN100LTE6 / ARUN120LTE6 /
ARUN140LTE6 / ARUN160LTE6 /



HP			8	10	12	14	16
Model Name	Independent unit		ARUN080LTE6	ARUN100LTE6	ARUN120LTE6	ARUN140LTE6	ARUN160LTE6
Capacity	Cooling (Rated)	kW	22.4	28.0	33.6	39.2	44.8
		Btu/h	76,400	95,500	114,600	133,800	152,900
	Heating (Rated)	kW	25.2	31.5	37.8	44.1	50.4
		Btu/h	86,000	107,500	129,000	150,500	172,000
Input	Cooling (Rated)	kW	4.39	5.49	7.55	8.71	10.30
	Heating (Rated)	kW	4.67	5.63	7.89	9.61	11.22
EER (Rated)			5.10	5.10	4.45	4.50	4.35
COP (Rated)			5.40	5.60	4.79	4.59	4.49
Power Fatcor	Rated		0.93	0.93	0.93	0.93	0.93
Exterior	Color		Morning Gray / Dawn Gray	Morning Gray / Dawn Gray	Morning Gray / Dawn Gray	Morning Gray / Dawn Gray	Morning Gray / Dawn Gray
	RAL code		RAL 7038 / RAL 7037	RAL 7038 / RAL 7037	RAL 7038 / RAL 7037	RAL 7038 / RAL 7037	RAL 7038 / RAL 7037
Compressor	Motor Outout x Number	W x No.	5,300 x 1	5,300 x 1	5,300 x 1	5,300 x 1	5,300 x 1
	Type		Propeller Fan	Propeller Fan	Propeller Fan	Propeller Fan	Propeller Fan
Fan	Motor Outout x Number	W x No.	1,200 x 1	1,200 x 1	1,200 x 1	900 x 2	900 x 2
	Air Flow Rage (High)	m ³ /Min	220 x 1	220 x 1	220 x 1	320 x 1	320 x 1
		Ft ² /Min	7,769 x 1	7,769 x 1	7,769 x 1	11,301 x 1	11,301 x 1
	External Static Pressure (Max.Pa)		80	80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Discharge	Side / Top	TOP	TOP	TOP	TOP	TOP	
Pipe	Liquid Pipe	mm (inch)	9.52 (3/8)	9.52 (3/8)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)
Connections	Gas Pipe	mm (inch)	19.05 (3/4)	22.2 (7/8)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)
Dimensions (W x H x D)		mm	(930 x 1,745 x 760) x 1	(930 x 1,745 x 760) x 1	(930 x 1,745 x 760) x 1	(1,240 x 1,745 x 760) x 1	(1,240 x 1,745 x 760) x 1
Net Weight		kg	186 x 1	186 x 1	186 x 1	220 x 1	220 x 1
		lbs	414 x 1	414 x 1	414 x 1	485 x 1	485 x 1
Sound Pressure	Cooling (Rated)	dB (A)	57	57.5	59	60	60.5
	Heating (Rated)	dB (A)	58	58.5	60	61	61.5
Sound Power	Cooling (Rated)	dB (A)	78	78	79	82	83
	Heating (Rated)	dB (A)	78	79	80	83	85
Communication Cable		mm ² x No.	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Name		R410A	R410A	R410A	R410A	R410A
	Precharged amount	kg	8.0	8.0	8.0	11.0	11.0
		lbs	17.6	17.6	17.6	24.3	24.3
	t-Co ₂ .eq		16.7	16.7	16.7	23.0	23.0
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply			380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of Maximum Connectable Indoor Units			13 (20)	16 (25)	20 (30)	23 (35)	26 (40)

※ Some specifications may change due to on-going development.

ARUN180LTE6 / ARUN200LTE6 / ARUN220LTE6 /
ARUN240LTE6 / ARUN260LTE6



HP			18	20	22	24	26
Model Name	Independent unit		ARUN180LTE6	ARUN200LTE6	ARUN220LTE6	ARUN240LTE6	ARUN260LTE6
Capacity	Cooling (Rated)	kW	50.4	56.0	61.6	67.2	72.8
		Btu/h	172,000	191,000	210,200	229,300	248,400
	Heating (Rated)	kW	56.7	63.0	69.3	74.3	74.3
		Btu/h	193,500	215,000	236,500	253,400	253,400
Input	Cooling (Rated)	kW	10.5	11.79	14.16	16.00	18.67
	Heating (Rated)	kW	11.84	15.07	17.11	18.67	19.20
EER (Rated)			4.80	4.75	4.35	4.20	3.90
COP (Rated)			4.79	4.18	4.05	3.98	3.87
Power Fatcor	Rated		0.93	0.93	0.93	0.93	0.93
Exterior	Color		Morning Gray / Dawn Gray	Morning Gray / Dawn Gray	Morning Gray / Dawn Gray	Morning Gray / Dawn Gray	Morning Gray / Dawn Gray
	RAL code		RAL 7038 / RAL 7037	RAL 7038 / RAL 7037	RAL 7038 / RAL 7037	RAL 7038 / RAL 7037	RAL 7038 / RAL 7037
Compressor	Motor Outout x Number	W x No.	5,300 x 2	5,300 x 2	5,300 x 2	5,300 x 2	5,300 x 2
	Type		Propeller Fan	Propeller Fan	Propeller Fan	Propeller Fan	Propeller Fan
Fan	Motor Outout x Number	W x No.	900 x 2	900 x 2	900 x 2	900 x 2	900 x 2
	Air Flow Rage (High)	m ³ /Min	320 x 1	320 x 1	320 x 1	320 x 1	320 x 1
		Ft ² /Min	11,301 x 1	11,301 x 1	11,301 x 1	11,301 x 1	11,301 x 1
	External Static Pressure (Max.Pa)		80	80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Discharge	Side / Top	TOP	TOP	TOP	TOP	TOP	
Pipe	Liquid Pipe	mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	19.05 (3/4)
Connections	Gas Pipe	mm (inch)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)	34.9 (1-3/8)	34.9 (1-3/8)
Dimensions (W x H x D)		mm	(1,240 x 1,745 x 760) x 1	(1,240 x 1,745 x 760) x 1	(1,240 x 1,745 x 760) x 1	(1,240 x 1,745 x 760) x 1	(1,240 x 1,745 x 760) x 1
Net Weight		kg	260 x 1	260 x 1	276 x 1	276 x 1	276 x 1
		lbs	573 x 1	604 x 1	604 x 1	608 x 1	608 x 1
Sound Pressure	Cooling (Rated)	dB (A)	61	62	64.5	65	65
	Heating (Rated)	dB (A)	62	63.5	64.5	66	66
Sound Power	Cooling (Rated)	dB (A)	85	86	86	88	88
	Heating (Rated)	dB (A)	86	87	88	89	89
Communication Cable		mm ² x No.	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Name		R410A	R410A	R410A	R410A	R410A
	Precharged amount	kg	13.0	13.0	16.0	16.0	16.0
		lbs	28.7	28.7	35.3	35.3	35.3
	t-Co ₂ .eq		27.1	27.1	33.4	33.4	33.4
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply			380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of Maximum Connectable Indoor Units			29 (45)	29 (45)	35 (56)	39 (61)	42 (64)

※ Some specifications may change due to on-going development.