

SINGLE SPLIT

# APPLICATION **SOLUTIONS**



# Ducted

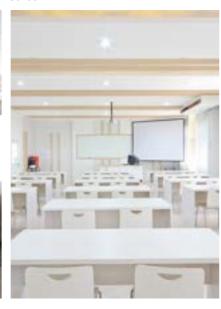




Hotel



School





Retail



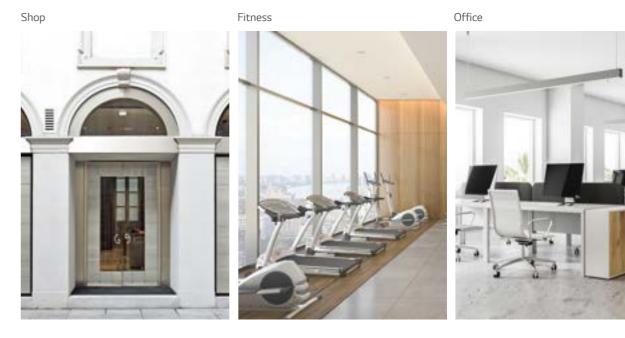








# Cassette





# Single Package

Mal







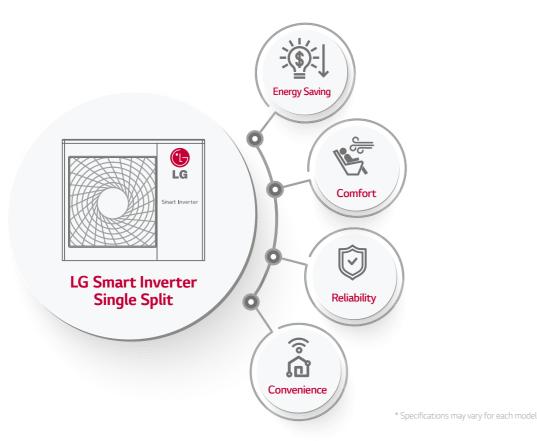
Factory





# WHY LG SMART INVERTER?

LG Inverter technology is applied to various electronics including refrigerators and washing machines which continuously draw global attention. The best quality is the excellent level of technology provided by LG, a reputable electronic provider. LG is also known for its comprehensive HVAC provider. LG's latest Smart Inverter Single Split solutions are all equipped with the company's advanced Smart Inverter Technology.



## ENERGY SAVING





Comfort cooing is a energy saving function that changes evaporation temperature in accordance with temperature & humidity.



ø

#### **Human Detection Sensor**

Automatic direction of air flow & operation by sensing human body.



#### **Quick Cooling**

At the same condition, the inverter reaches the set temperature about 30% faster than the constant speed.





#### Low Noi

Inverter makes lower noise than constant speed due to adjustable frequency according to the



### High and Low Voltage Protection

Below low voltage limit, inverter compressor reduces frequency (Hz) and boost DC voltage, over high voltage limit, cuts off the relay to prevent damage of DC capacitor.

#### RELIABILITY



#### Corrosion Resistant Heat Exchanger

The fin of heat exchanger covered with gold-colored special coating prevents corrosion, extending the lifespan of the unit.



#### ThinQ

Control your air conditioners via using the smart internet devices such as Android or iOS based smartphones. This advanced technology provides you the best convenience.

#### **CONVENIENCE**



#### Simple Test Run Via LGMV

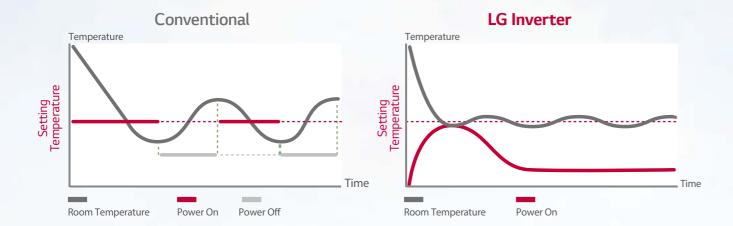
Fast and accurate auto test run can be executed and the professional installer running the test can receive test results via email, which shortens installation hours and increases overall efficiency in installation processes.

WHY LG SMART INVERTER WHY LG SMART INVERTER

# WHY LG SMART INVERTER

## **COMFORTABLE OPERATION**

Once the desired temperature is achieved, unlike conventional air conditioners that turn the compressor on and off, LG inverter units adjust and constantly vary the compressor speed to maintain the desired temperature with minimal fluctuation to ensure that your comfort is not compromised.



**Recognizing** the importance of saving energy, LG has taken the initiative to develop new and, more efficient inverter technology. In addition to consuming less electricity, the company's advanced inverter systems also boast powerful performance and enhanced reliability.

**LG's Inverter** Single Split lowers energy usage and operational costs, illustrating how smart technology can make a real difference. New model, designed for commercial spaces such as offices and retail stores, can operate for extended periods of time, while providing exceptional energy efficiency.

**The Inverter** Single Split is able to produce an impressive volume of cool air, helping to create the perfect indoor temperature quickly. as well as delivering fast and efficient cooling. LG's latest solution can also minimize electricity consumption.



# **LG CONTROL SOLUTIONS**

LG HVAC offers a diverse range of effective control solutions that satisfy specific needs of each building and its user scene. These controlling systems are equipped with user friendly interface, flexible interlocking environment, energy management and smart individual controller for optimized controlling conditions and smart building management.





# **Feature Functions**

Controller Name		Wired Remote Controller					Wireless	Wi-Fi
		Premium	Standard III	Standard II	Simple	Simple(Hotel)	Remote Controller	Controller
Model Name		20 20	0-0	. 6 . 6	5 7			**************************************
		PREMTA000 PREMTA000A PREMTA000B	PREMTB100 PREMTBB10	PREMTB001 PREMTBB01	PQRCVCL0Q PQRCVCL0QW	PQRCHCA0Q PQRCHCA0QW	PWLSSB21H (H/P) PWLSSB21C (C/O)	PWFMDD200
	On/Off	0	0	0	0	0	0	0
	Fan Speed Control	0	0	0	0	0	0	0
	Temperature Setting	0	0	0	0	0	0	0
	Mode Change	0	0	0	0	-	0	0
	Auto Swing	0	0	0	0	0	0	
Basic	Vane Control (Louver Angle)	0	0	0	0	0	0	0
	E.S.P (External Static Pressure)	0	0	0	0	0	-	-
	Electric Failure Compensation	0	0	0	0	0	-	0
	Indoor Temperature Display	0	0	0	0	0	0	
	ALL Button Lock (Child Lock)	0	0	0	0	0	-	-
	Schedule/Timer	Weekly~Yearly	Weekly~Yearly	Weekly	-	-	Sleep / On / Off	Weekly
	Additional Mode Setting 1)	0	0	0	-	-	-	-
	Time Display	0	0	0	-	-	0	-
	Humid. Display	0	0	-	-	-	-	-
	Advanced Lock (Mode, Set point, Set point range, On / Off Lock)	Advanced Lock	Advanced Lock	-	-	-	-	-
Advanced	Filter Sign	0	0	0	-	-	-	-
	Energy Management <sup>2)</sup>	0	0	0	-	-	-	-
	Dual Set Point	0	0	-	-	-	-	-
	Human Detection	-	0	-	-	-	-	-
	Temp, Humidity Compensation	0	0	-	-	-	-	-
	Wi-Fi AP Mode Setting	0	0	0	0	0	0	-
	Operation Status LED	0	0	0	0	0	-	-
	Wireless Remote Controller Receiver	○3)	-	○3)	O <sub>3)</sub>	○3)	-	-
ETC	Display	5 inch Color	4.3 inch Color	4.3 inch mono	2.6 inch mono	2.6 inch mono	2 inch mono	-
	Size (W x H x D, mm)	137 x 121 x 16.5	120 x 120 x 16	120 x 120 x 16	64 x 120 x 15	64 x 120 x 15	51 x 153 x 26	-
	Black Light Control for Screen Saver	0	0	-	-	-	-	-

<sup>\*\*</sup> O : Applied, - : Not Applied

1) It might not be indicated or operated at the partial product.

2) Centralized control (PACEZA000 / PACS5A000 / PACP5A000 / PLNWKB000) and PDI (PQNUD1S40 / PPWRDB000) should be installed for this function.

3) For ceiling type duct

Note : 1. Indoor unit should have functions requested by the controller.

2. If you need more detail, please refer to the manual of product. (http://partner.lge.com: Home> Doc.Library> Manual)

## INDIVIDUAL CONTROL

## 3th Standard Wired Remote Controller

#### Features & Benefit

4.3 inch Color screen with a modern design.





#### PREMTB100 (White)

- ullet The optimized controller for MULTI V 5
- Humidity sensor embedded
- Comfort cooling setting
- Smart Load Control setting
- Outdoor unit low noise setting
- Defrost mode setting
- New modern design & easy interface
- Seamless design / Touch button
- 4.3 inch color LCD / Intuitive GUI
- Energy saving functions
- Instantaneous power monitor
- Energy consumption check (Power consumption, Operation time)
- Temp. Setback timer, time limit control
- Target setting (ODU capacity, Instantaneous power...etc)
- Group control
- Up to 16 Indoor units can be controlled with one remote control
- External device On / Off (1 point)
- Customized interlocking control with indoor unit is possible without dry contact
- 2 set points control
- Increase convenience and comfort
- Auto changeover, Setback (Home leave)

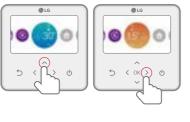
Model Name	PREMTB100 / PREMTBB10			
On / Off	0			
Fan Speed Control	0			
Temperature Setting	0			
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan			
Additional Mode Setting 1)	Energy-Saving Cooling / Robot Cleaning / Heater / Humidification / Comfort Cooling			
Auto Swing	0			
Vane Control (Louver direction)	0			
E.S.P (External Static Pressure) 2)	0			
Reservation	Simple / Sleep / On & Off Timer / Weekly / Yearly / Holiday			
Time Display	0			
Electric Failure Compensation	0			
Lock	All / On & Off / Mode / Set Temperature Range			
Filter Sign	○ (Remain time + Alarm)			
Energy Management	Check Energy Usage 37 / Check Operation Time / Target Setting (Energy, Operation Time) / Time Limit Operation / Alarm Popup / Initialization Usage Data			
Operation Status LED	0			
Indoor Temperature Display	0			
Indoor Humidity Display	0			
Human Detection	0			
Display	4.3 inch TFT color LCD (480 x 272)			
Size (W x H x D, mm)	120 x 120 x 16			
Black light for Screen saver	0			
Home Leave	2 set points control			

- Note: 1. Indoor unit needs to have functions requested by the controller.
  - 2. 2 set points control works normally with MULTI V Heat Recovery and Single Split Heat Pump. But in case of MULTI V Heat Pump, It may not work properly.

※ ○ : Applied, - : Not Applied

This function is available for duct type.
 This function requires PDI (PQNUD1S40 / PPWRDB000) to be installed.

# ψ



Touch Button





Heat





Fan





Comfort Level



**Energy Contents** 



Error History

#### **Energy Saving Function**

#### **Energy Management**

- Energy Monitoring & Alarm
- Real-time and day / week / month / year energy usage monitoring is possible. In addition, it can set target for energy usage and operation time, and alarm will be displayed when exceeded.
- \* PDI (PQNUD1S40 / PPWRDB000) is required.

#### Time Limit Control

- The time-limit operation controls product by amount of time. By setting the device operation time in advance, you can control for how long a device works and have it stop automatically.





LG CONTROL SOLUTIONS

Instantaneous Power Check

**Energy Usage Target Setting** 



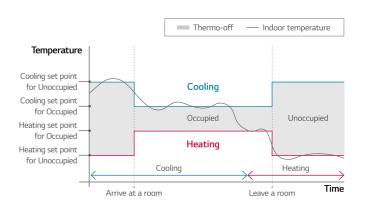
#### 2 Set Points Control

#### Auto Changeover (Convenience)

-The indoor unit automatically manages room temperature with heating and cooling with extended setting temperature ranges. With setting heating and cooling set temp. just one time, comfortable condition will continue at all times.

#### Setback (Home Leave) (Energy saving & Comfort)

- In the absence, room temperature can be kept in the range of 2 set points instead of power off. It provides comfortable indoor environment quickly when the mode is changed to occupied.
- % This function is for Heat Recovery system or Single heat pump. Otherwise it is not guaranteed.



#### External Device On / Off



External Equipment Control User can turn on or off the external equipment through contact point output.



**Customized Interlocking Control** User can make control scenario. For example when temperature is under 10 degree, turn on the external heater.

#### **Schedule Function**



Easy Checking Schedule Standard III remote controller provides clock type daily schedule.



**Exception Day Settings** Possible to set up exceptional date on regular schedule.

106

## INDIVIDUAL CONTROL

## **Premium Wired Remote Controller**

#### Features & Benefit

5 inch full touch screen with a premium design.



#### PREMTA000<sup>1)</sup> / PREMTA000A<sup>2)</sup> / PREMTA000B<sup>3)</sup>

- 1) English / Portuguese / Spanish / French
- 2) English / Italian / Russian / Chinese 3) English / German / Polish / Czech
- Full Touch screen
- The Optimized Controller in MULTI V 5
- Comfort cooling setting
- Smart Load Control setting
- Outdoor unit low noise setting
- Defrost mode setting
- · Design with User's Convenience
- Intuitive GUI
- Main display simple mode
- 5 inch color LCD Energy Saving Functions
- Instantaneous power monitor
- Energy consumption check (Power consumption, Operation time)
- Temp. Setback Timer, Time Limit Control
- Target setting (ODU Capacity, Instantaneous power...etc) Group Control
- Up to 16 Indoor units can be controlled with one remote control
- 2 Set Points Control
- Increase convenience and comfort
- Auto changeover, Setback (Home leave)

Model Name	PREMTA000 / PREMTA000A / PREMTA000B			
On / Off	0			
Fan Speed Control	0			
Temperature Setting	0			
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan			
Additional Mode Setting 1)	Energy-Saving Cooling / Robot Cleaning / Heater / Humidification			
Auto Swing	0			
Vane Control (Louver direction)	0			
E.S.P (External Static Pressure) 2)	0			
Reservation	Simple / Sleep / On / Off / Weekly / Yearly / Holiday			
Time Display	0			
Electric Failure Compensation	0			
Child Lock	0			
Filter Sign	○ (Remain time + Alarm)			
Energy Management	Check Energy Usage <sup>3)</sup> / Check Operation Time / Target Setting (Energy, Operation Time) / Time Limit Operation / Alarm Popup / Initialization Usage Data			
Operation Status LED	0			
Indoor Temperature Display	0			
Wireless Remote Controller Receiver	O <sup>4)</sup>			
Display	5 inch TFT color LCD (480 x 272)			
Size (W x H x D, mm)	137 x 121 x 16.5			
Black Light for Screen Saver	0			
Home Leave	2 set points control			

- (a) This hour prime represents the partial product.

  2) This function is available for duct type.

  3) This function requires PDI (PQNUD1S40 / PPWRDB000) to be installed.

- 4) For ceiling type ducted unit.

  Note: 1. Indoor unit needs to have functions requested by the controller.

  2. 2 set points control works normally with MULT V Heat Recovery and Single Split Heat Pump. But in case of MULTI V Heat Pump, It may not work properly.

# HOR HOR Full Touch ---Screen

#### Easy Energy Management

- Check the operation hour or electricity usage
- Comparison of usage compared to last year
- Set the target usage and time

#### Easy Scheduling

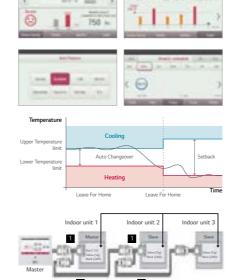
- Daily, Weekly, Yearly schedule function
- Schedule pattern setting
- Schedule copy

#### 2 Set points Control

- Auto changeover switching the operation mode automatically
- Setback (Home Leave) Changing status by occupied / unoccupied
- \* This function is only for Heat Recovery system and Single heat pump.

#### Group Control

- Max. 16 Indoor units by one remote controller.



## 2nd Standard Wired Remote Controller

#### Features & Benefit

Providing easy control of one or a group of indoor units with various functions.





PREMTB001 (White)

PREMTBB01 (Black)

· Wired remote controller that can implement various functions such as schedule, filter sign.

Model Name	PREMTB001 / PREMTBB01
On / Off	0
Fan Speed Control	0
Temperature Setting	0
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Additional Mode Setting	Energy-Saving Cooling / Robot Cleaning / Heater / Humidification
Auto Swing	0
Vane Control (Louver direction)	0
E.S.P (External Static Pressure)	0
Reservation	Simple / Sleep / On / Off / Weekly / Holiday
Time Display	0
Electric Failure Compensation	0
Child Lock	0
Filter Sign	○ (Remain time + Alarm)
Operation Status LED	0
Indoor Temperature Display	0
Wireless Remote Controller Receiver	O <sup>1)</sup>
Size (W x H x D, mm)	120 x 120 x 16
Blacklight	Ō
Power Consumption Monitoring	O <sup>2)</sup>
Check Model Information	0

- 1) For ceiling type ducted unit.
  2)This function requires PDI (PQNUD1S40 / PPWRDB000) to be installed.
  Note: Indoor unit needs to have functions requested by the controller.

## **Simple Wired Remote Controller**

#### Features & Benefit

A simple way to control office or hotel systems in a compact design







PQRCVCL0QW (White) / PQRCVCL0Q (Black)

PQRCHCA0QW (White) / PQRCHCA0Q (Black)

Model Name	PQRCVCL0QW / PQRCVCL0Q	PQRCHCA0QW / PQRCHCA0Q	
On / Off	0	0	
Fan Speed Control	0	0	
Temperature Setting	0	0	
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan	-	
Auto Swing	0	0	
Vane Control (Louver direction)	0	0	
E.S.P (External Static Pressure)	0	0	
Electric Failure Compensation	0	0	
Child Lock	0	0	
Indoor Temperature Display	0	0	
Wireless Remote Controller Receiver	O <sup>1)</sup>	O <sup>1)</sup>	
Size (W x H x D, mm)	70 x 121 x 16	70 x 121 x 16	
Blacklight	0	0	
W C - A   E   - N   - A   E		·	

※ ○ : Applied, - : Not Applied 1) For ceiling type ducted unit.

Note: Indoor unit needs to have functions requested by the controller.

## Wireless Remote Controller

#### Features & Benefit



NEW PWLSSB21H (H/P) NEW PWLSSB21C (C/O)

• Easy to use while moving. • Main functions are available.

Model Name	PWLSSB21H (H/P) / PWLSSB21C (C/O)
On / Off	0
Fan Speed Control	O <sup>1)</sup>
Temperature Setting	0
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Additional Mode Setting	Plasma Purification / Energy-Saving Cooling / Robot Cleaning / Auto Dry
Auto Swing	0
Vane Control (Louver direction)	0
Reservation	Sleep / On / Off
Time Display	0
Indoor Temperature Display	0
Sleep Mode Auto	Max. 7 hours
Size (W x H x D, mm)	51.4 x 153 x 26

- ※ : Applied, : Not Applied
- 1) For some products, you can use "slow" fan speed function.

108

<sup>·</sup> Small remote control with minimal functionality.

# **LG HVAC CONTROL LINE-UP**

	INDIVIDUAL CONTROL			CENTRALIZED CONTROL			
	Wired Remote Controller		Display	Platform	Gateway		
Standard	Simple	Controller					
Standard III (White)	-	10.07	AC Ez	ACP 5	ACP LonWorks		
0000		200		-	Name of Street		
	8.4	#11 F25	Light .	SHIP OF THE PARTY OF	-		
PREMTB100	PQRCVCLOQW	NEW PWLSSB21H (H/P) NEW PWLSSB21C (C/O)	PQCSZ250S0 (Indoor Unit -32)	PACP5A000 (Indoor Unit ~256) BACnet IP/Modbus TCP Gateway	PLNWKB000 (Indoor Unit ~64)		
		Wi-Fi Controller					
Standard III (Black)  PREMTBB10	PQRCVCL0Q	LG Wi-Fi Modem For Indoor Unit PWFMDD200	PACEZA000 (Indoor Unit ~64)	AC Manager 5  PACM5A000 (Indoor Unit -8,192)	Modbus RTU Gateway PMBUSB00A		
Standard II (White)			AC Smart 5		PI-485		
PREMTB001	PQRCHCA0QW (Simple for Hotel)		PACS5A000 (Indoor Unit ~128) BACnet IP/Modbus TCP Gateway		For Indoor Unit (ERV) PHNFP14A0		
Standard II (Black) PREMTBB01	PQRCHCA0Q (Simple for Hotel)						
Premium							
PREMTA000 PREMTA000A PREMTA000B							

CENTRALIZED CONTROL  Facility Integrator	Indoor Units		ON DEVICE Outdoor Units	AHU Kit		
PDI	Dry Contact	Control Accessory	IO Module			
(Power Distribution Indicator)		Group Control Wire	(Input / Output Module)	Communication Kit		
		(9)				
Premium (8 port) PQNUD1S40 Standard (2 port) PPWRDB000	Simple Dry Contact PDRYCB000	PZCWRCG3	For MULTI V 5 PVDSMN000	Return / Room Air control PAHCMR000		
ACS IO Module (Input / Output Module)		Remote Temperature Sensor	Variable Water Flow Control kit			
PEXPMB000	Dry Contact for Thermostat	PORSTAO	For MULTI V WATER IV	Discharge / Supply Air control		
TEXT MIDOGO	PDRYCB300	I QNSIAU	PWFCKN000	PAHCMS000		
Chiller Option Kit		Low Profile Remote Temperature Button Sensor	Low Ambient Kit	Controller Module		
PCHLLN000	Dry contact for Thermostat (For using universal input) NEW PDRYCB320	ZRTBS01	For MULTI V IV, 5 PRVC2	Main Module NEW PAHCMM000		
ACU IO Module		Zone Controller	Cool / Heat Selector			
-		1	10 C			
UIO PEXPMB300	2 Points Dry Contact (For Setback) PDRYCB400	4 Zones by thermostat ABZCA	PRDSBM	Communication Module  NEW PAHCMC000		
			Water Communication Module	Control kit		
•			•	. =		
UO PEXPMB200	For Modbus PDRYCB500		NEW PAHCMW000	NEW PAHCNM000 (Max. 3 Outdoor Units)		
				EEV Kit		
•				• 4		
UI PEXPMB100				PRLK048A0 (- 28 kW) PRLK096A0 (- 56 kW)		
				NEW PRLK396A0 (~112 kW)		
				+ 22		
				DDI VEO 440 ( 160 I/M)		

NEW PRLK594A0 (~168 kW)

Note
1. AC Smart 5 & ACP 5 provides BACnet IP / Modbus TCP. 2. KNX Gateway is provided by INTESIS.
3. If you need more detail, please refer to the manual of product(or BECON PDB) (http://partnerlge.com/global/index.lge , Home→DocLibrary→Product →Control(BECON)