

CONTROLS & ACCESSORIES 2017



ABOUT LG



About LG Electronics USA, Inc.

LG Electronics USA, Inc., based in Englewood Cliffs, NJ, is the North American subsidiary of LG Electronics, Inc., a \$48 billion global force and technology leader in consumer electronics, home appliances and mobile communications. LG Electronics, a proud ENERGY STAR® Partner of the Year for five consecutive years, sells a range of stylish and innovative home entertainment products, mobile phones, home appliances, commercial displays, air conditioning systems and solar energy solutions in the United States, all under LG’s “Life’s Good” marketing theme. For more news and information on LG Electronics, please visit www.LG.com.

LG Electronics USA Air Conditioning Technologies

The LG Electronics USA Commercial Air Conditioning business is based in Alpharetta, GA. LG is a leading player in the global air conditioning market, manufacturing both commercial and residential air conditioners and providing total sustainability and building management solutions. From consumer and individual units to industrial and specialized air conditioning systems, LG provides a wide range of products for heating, ventilating and air conditioning. For more information, please visit www.lghvac.com.

By utilizing advanced control strategies, LG Air Conditioning systems not only save energy, they also increase operational convenience and living standards.

LG offers a variety of controls, including individual zone control, central control, and building management system integration control options that scale easily to meet the requirements of jobs small to large. User-friendly controllers from LG allow users to control and monitor their entire system at the touch of a button. Centralized controllers provide building owners, facilities managers and maintenance personnel with the ability to manage the entire LG air conditioning system from a single location. This allows convenient management of air conditioning units and other facilities equipment—even in multiple sites—which helps ensure the highest energy savings are realized from the system.



LG building controllers allow for interfacing with third-party building management systems and also control sub-market segments such as lighting control, security control and access control. Built to be compatible with the entire family of LG Air Conditioning Technologies products, LG controls are the best way to achieve the highest performance from LG systems.

ENHANCED ENERGY SAVINGS

While LG Air Conditioning systems are engineered for efficiency, there are many ways that LG controls can help save even more energy with advanced features like scheduling and setpoint range limiting.

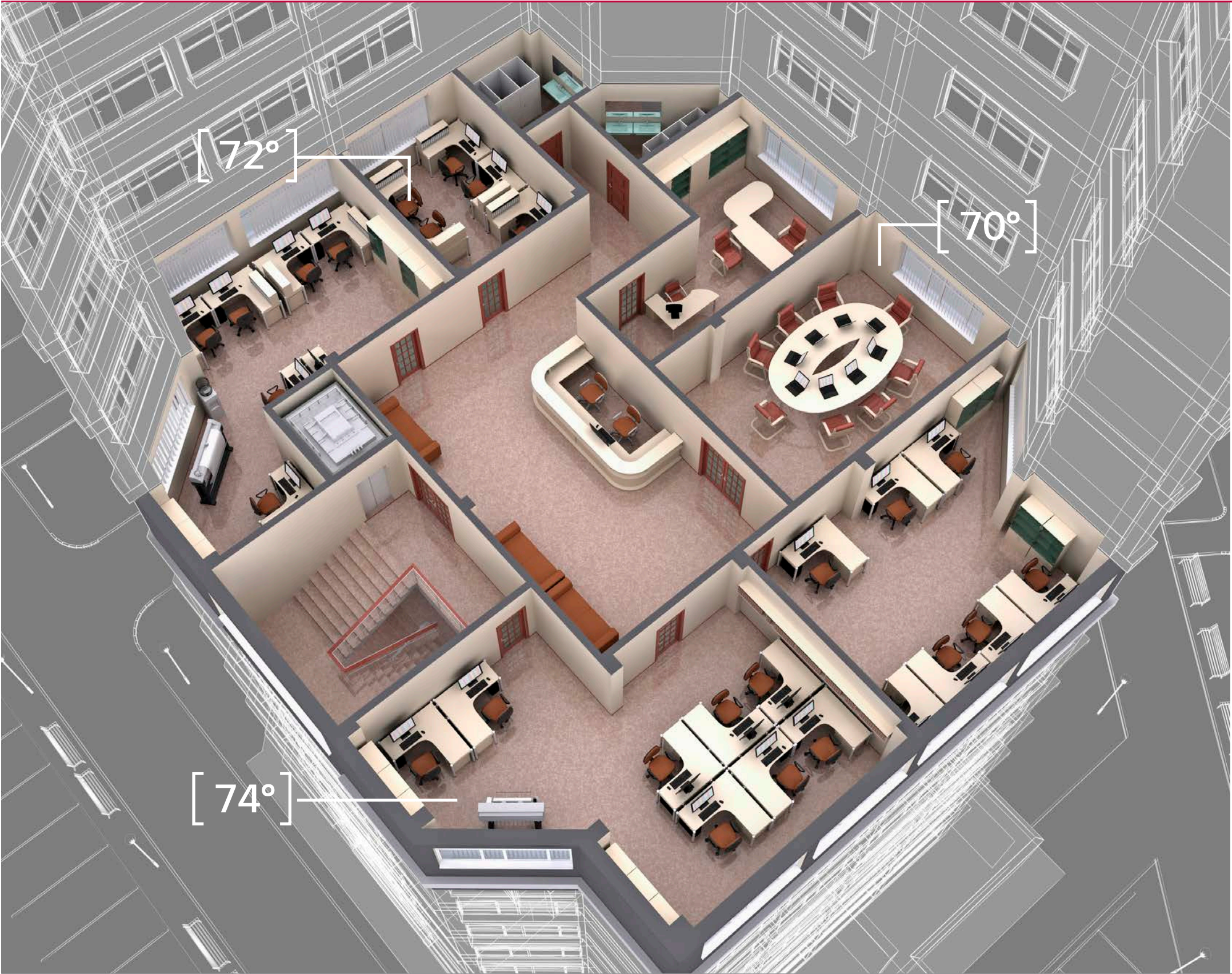
CONVENIENCE

LG controls come with features that make them easy to use and make LG systems easy to control. From our touch screen interface on the AC Smart BACnet to modes like auto-changeover, you are sure to be pleased with the aesthetic appeal of the control as well as its ease of use.

EASY TO INSTALL

The LG communications network is based on simple two-wire, daisy chain architecture that reduces installation cost and complexity. This allows the system to be installed by the mechanical contractor, eliminating the need for costly building management system integration contractors and specialists.

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CONTROLS

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CONTROLS Lineup

INDIVIDUAL CONTROLLERS		CENTRAL CONTROLLERS	SYSTEM INTEGRATION DEVICES		Accessories						
Remote Controllers		System	Gateway	Application Controllers	Control Accessory	MultiSITE CRC1 Accessories	MultiSITE CM Accessories	Outdoor Unit	Water Source	AHU Kit	ERV
LG MultiSITE™ CRC1+  PREMTBVC1	Simple  PQRCVCLOQW	AC Smart IV  PACS4B000	LG MultiSITE™ Communications Manager  PBACNBTR0A	Dry Contact for Thermostat  PDRYCB300	Remote Temperature Button Sensor  ZRTBS01	ZigBee Pro Wireless Card  ZVRCZPWC1	LON Module  ZHWLONWK0	Low Ambient Kit  PRVC2	Variable Water Flow Control Kit  PWFCKN000 PRVC1	Communication Kit  PRCKAM	PI-485 For ERV  PSNFP14A0
LG MultiSITE™ CRC1  PREMTBVC0	Simple  PQRCVCLOQ	ACP IV  PACP4B001	AC Smart IV BACnet  PBACNA000	Dry Contact for Economizer  PQDSB1	Group Control Wire  PZCWRC1	Wireless Door/Window Switch  ZVRCZDWS1	Wall Power Adapter  ZHWPWADTR	Cool / Heat Selector  PRDSBM		Communication Kit  PRDCAM	CO2 Sensor  PEXPMB000
Premium  PREMTA000	Simple  PQRCHCA0QW		ACP IV BACnet  PQNFB17C2	Simple Dry Contact  PDRYCB100	Extension Cable  PZCWRC1	Wireless Wall Occupancy Sensor  ZVRCZWOC1		Variable Water Flow Control Kit  PWFCKN000		EEV Kit  PRLK048A0 (8 Ton) PRLK096A0 (16 Ton)	
Standard  PREMTB10U			ACP LonWorks  PLNWKB100	PDI (Power Distribution Indicator)  Premium (8 port) PQNUD1S41 Standard (2 port) PPWRDB000		Wireless Ceiling Occupancy Sensor  ZVRCZCOC1					
Wireless Remote Controller  PQWRHQ0FDB				IO Module (Input / Output Module)  PEXPMB000							

AIR CONDITIONING
TECHNOLOGIES

INDIVIDUAL
CONTROLLERS



INDIVIDUAL CONTROLLERS

LG MultiSITE™ CRC1+
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LG MultiSITE™ CRC1
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Premium Wired
Remote Controller
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Standard Wired
Remote Controller
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Wireless
Remote Controller
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Simple Wired
Remote Controller
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Remote Controller Lineup

Model Name	 PREMTBVC1	 PREMTBVC0	 PREMTA000	 PREMTB10U	 PQWRHQ0FDB	 PQRCVCLOQW PQRCVCLOQ PQRCHCA0QW
On / Off	•	•	•	•	•	•
Fan Speed Control	•	•	•	•	•	•
Temperature Setting	•	•	•	•	•	•
Mode Change	•	•	•	•	•	•
Additional Mode Setting	•	•	•	•	•	•
Auto Swing	•	•	•	•	•	•*
Vane Control (Louver Direction)	•	•	•	•	•	-
E.S.P (External Static Pressure)	•	•	•	•	-	•
Scheduling	Weekly / Yearly	Weekly / Yearly	Weekly / Yearly	Simple / Sleep / On / Off / Weekly / Holiday	Sleep, on / off	-
Child Lock	•	•	•	•	-	•
Settings Recovery	•	•	•	•	-	•*
Time Display	•	•	•	•	•	-
Filter Sign	Time Remaining & Alarm	Time Remaining & Alarm	Time Remaining & Alarm	•	-	-
Energy Management**			•	•	-	•
Setback	Two set points control	Two set points control	Two set points control	-	-	-
On-Board Motion Sensor (PIR)	•					
On-Board Humidity Sensor	•					
ZigBee Wireless	•	•				
BACnet MS/TP	•	•				

* This feature is not available for PQRCHCA0QW
** A central controller and PDI are required for this function.
NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

MULTISITE REMOTE CONTROLLER (CRC1+)

PREMTBVC1

Features

The MultiSITE CRC1+ Remote Controller is a part of the LG MultiSITE Controls Suite. Featuring a customizable home screen with a highly intuitive user interface, the MultiSITE CRC1+ Remote Controller allows customers to tailor the functions and appearance to meet the needs of their application.

In addition to the flexibility of the user interface, the CRC1+ Remote Controller allows integration to a Building Management System via its onboard BACnet® MS/TP connectivity. The touch screen, built in Occupancy and Humidity sensor coupled with Zigbee wireless compatibility provides a complete out of the box solution.



Model Name	PREMTBVC1
BACnet MS/TP	●
ZigBee Pro Wireless Network	●
Motion (PIR) Sensor	●
Humidity Display	●
Function Code Search Tool	●
Configurable Home Screen	●
Screen Saver	●
On / Off	●
Fan Speed Control	●
Temperature Setting	●
Mode Change	●
Additional Mode Setting	●
Auto Swing	●
Vane Control (Louver Direction)	●
E.S.P. (External Static Pressure)	●
Scheduling	●
Digital Color Display	●
Indoor Temperature Display	●
Time Display	●
Date Display	●
Occupancy Status	●
Multilanguage Support	●
Electric Failure Compensation	●
Child Lock	●
Filter Sign Time Remaining & Alarm	●
Operation Status LED	●
Dimensions WxHxD (in)	3.39 x 4.72 x 1.06
Backlight	●

NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

Accessories

Description	Model
ZigBee Pro Wireless Card	ZVRCZPWC1
Wireless Door & Window Switch	ZVRCZDWS1
Wireless Ceiling Mounted Occupancy Sensor	ZVRCZWOC1
Wireless Wall Mounted Occupancy Sensor	ZVRCZCOC1

MULTISITE REMOTE CONTROLLER (CRC1)

PREMTBVCO

Features

The MultiSITE CRC1+ Remote Controller is a part of the LG MultiSITE Controls Suite. Featuring a customizable home screen with a highly intuitive user interface, the MultiSITE CRC1+ Remote Controller allows customers to tailor the functions and appearance to meet the needs of their application.

In addition to the flexibility of the user interface, the CRC1+ Remote Controller allows integration to a Building Management System via its onboard BACnet® MS/TP connectivity. The touch screen, coupled with Zigbee wireless compatibility provides a complete out of the box solution.



Model Name	PREMTA000
BACnet MS/TP	●
ZigBee Pro Wireless Network	●
Function Code Search Tool	●
Configurable Home Screen	●
Screen Saver	●
On / Off	●
Fan Speed Control	●
Temperature Setting	●
Mode Change	●
Additional Mode Setting	●
Auto Swing	●
Vane Control (Louver Direction)	●
E.S.P. (External Static Pressure)	●
Scheduling	●
Digital Color Display	●
Indoor Temperature Display	●
Time Display	●
Date Display	●
Occupancy Status	●
Multilanguage Support	●
Electric Failure Compensation	●
Child Lock	●
Filter Sign Time Remaining & Alarm	●
Energy Management	●
Operation Status LED	●
Dimensions WxHxD (in)	3.39 x 4.72 x 1.06
Backlight	●

NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

Accessories

Description	Model
ZigBee Pro Wireless Card	ZVRCZPWC1
Wireless Door & Window Switch	ZVRCZDWS1
Wireless Ceiling Mounted Occupancy Sensor	ZVRCZWOC1
Wireless Wall Mounted Occupancy Sensor	ZVRCZCOC1

PREMIUM WIRED REMOTE CONTROLLER

PREMTA000

Features

- Designed to optimize user experience
 - Full touch/Intuitive GUI (graphical user interface)
 - Main display simple mode/Touch buzzer
 - Two set points control
 - Improved scheduling
 - Timer/Daily/Weekly/Yearly/Holiday
- Self-management for energy saving
 - Time limit operation/Power consumption monitoring
 - Weekly/Monthly/Yearly trend tracking
 - Target alert alarm
 - Temperature range setting



Model Name	PREMTA000
On / Off	●
Fan Speed Control	●
Temperature Setting	●
Mode Change	●
Additional Mode Setting	●
Auto Swing	●
Vane Control (Louver Direction)	●
E.S.P. (External Static Pressure)	●
Scheduling	●
Digital Color Display	●
Indoor Temperature Display	●
Time Display	●
Occupancy Status	●
Electric Failure Compensation	●
Child Lock	●
Filter Sign Time Remaining & Alarm	●
Energy Management	●
Operation Status LED	●
Wireless Remote Controller Receiver	●
Dimensions WxHxD (in)	5-1/2 x 4-3/4 x 3/4
Backlight	●

NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

STANDARD WIRED REMOTE CONTROLLER

PREMTB10U



Features

Model Name	PREMTA000
On / Off	●
Fan Speed Control	●
Temperature Setting	●
Mode Change	●
Additional Mode Setting	●
Auto Swing	●
Vane Control (Louver Direction)	●
E.S.P. (External Static Pressure)	●
Scheduling	●
Indoor Temperature Display	●
Time Display	●
Date Display	●
Occupancy Status	●
Electric Failure Compensation	●
Child Lock	●
Filter Sign Time Remaining & Alarm	●
Energy Management	●
Operation Status LED	●
Dimensions WxHxD (in)	4-3/4 x 4-3/4 x 5/8
Backlight	●

** A central controller and PDI are required for this function.
NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

SIMPLE WIRED REMOTE CONTROLLER

With Mode Selection



PQRCVCL0QW
(White)



PQRCVCL0Q
(Black)

Without Mode Selection



PQRCHCA0QW
(White)

Features

Model Name	PQRCVCL0QW / PQRCVCL0Q	PQRCHCA0QW / PQRCHCA0Q
On / Off	●	●
Fan Speed Control	●	●
Temperature Setting	●	●
Mode Change	●	●
Auto Swing	●	●
Vane Control (Louver Direction)	●	●
E.S.P. (External Static Pressure)	●	●
Child Lock	●	●
Wireless Remote Controller Receiver	●	●
Dimensions WxHxD (in)	2-3/4 x 4-3/4 x 5/8	2-3/4 x 4-3/4 x 5/8

NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

WIRELESS REMOTE CONTROLLER

PQWRHQ0FDB



Features

Model Name	PQWRHQ0FDB
On / Off	●
Fan Speed Control	●
Temperature Setting	●
Mode Change	●
Additional Mode Setting	●
Auto Swing	●
Vane Control (Louver Direction)	●
Scheduling	●
Indoor Temperature Display	●
Dimensions WxHxD (in)	2-3/16 x 1-3/16 x 6-3/16

NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

AIR CONDITIONING TECHNOLOGIES

CENTRAL CONTROLLERS

CENTRAL CONTROLLERS

AC Smart IV

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ACP IV

> Page 17



Central Controller Lineup

Model Name	 PACS4B000	 PACP4B001
Maximum Number of Indoor Units	128	256
Individual / Group Control (On/Off, Mode, Set Point, Fan Speed)	●	●
Ventilation Control	●	●
Individual Controller Lock	●	●
Error Check	●	●
Schedule	●	●
Operation History	●	●
Visual Navigation	●	●
Operation Time Limit	●	●
Temperature Limit	●	●
Internet Access ¹⁾	●	●
Auto Changeover/Setback	●	●
Power Consumption Monitoring (with PDI)	●	●
Interlock Control	●	●
Virtual Group Control	●	●
Emergency Pattern Display	●	●
IO Module Interlocking	●	●

¹⁾ An IP address is required to access the central controller through the internet.
NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

AC SMART IV

Large 10.2 inch touch screen with intuitive GUI (Graphic User Interface) for easy system control.

PACS4B000

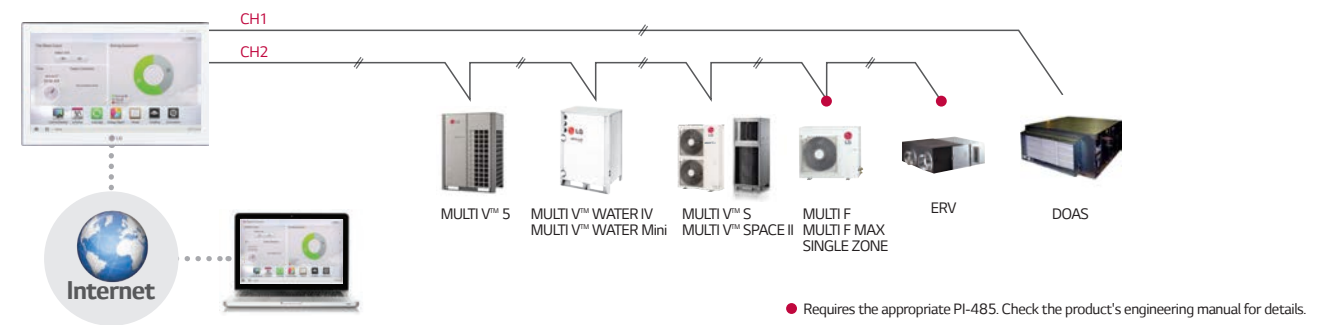


Features

Model Name	PQCS4B000
Maximum Number of Indoor Units	Up to 128
Individual / Group Control	●
Ventilation Control	●
Individual Controller Lock	● (Temperature / Mode / Fan / All)
Error Check	Self Diagnosis
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Schedule	Daily / Weekly / Monthly / Yearly / Exception Day
Operation History	●
Visual Navigation	●
Operation Time Limit	●
Temperature Limit	●
Internet Access ¹⁾	●
Auto Changeover / Setback	● (Two set)
Power Consumption Monitoring (with PDI)	●
Interlock Control	●
Virtual Group Control	●
Emergency Alarm Display	●
IO Module Interlocking	●
External IO Port No.	DI 2 / DO 2
Dimensions WxHxD (in)	10 x 6-5/8 x 1-3/16
Weight	

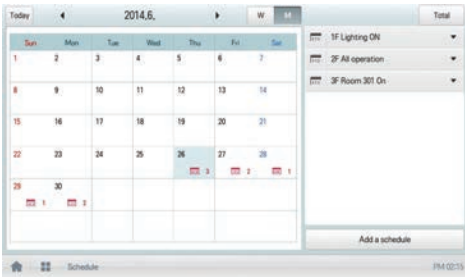
¹⁾ An IP address is required to access the central controller through the internet.
NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

System Communication Architecture



AC SMART IV

Functions



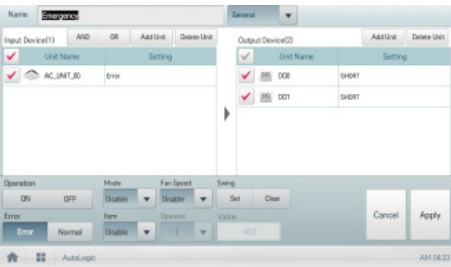
Schedule

You can set a schedule for system air conditioner in advance for timed events. Optimize system performance by enabling system operation only as needed from centralized control management.



Energy Statistics (with PQNUD1S41 or PPWRDB000)

Statistics of operational status (time and energy management) are provided to help make intelligent system operation decisions.



Interlocking

Allows interlocked operation of devices or between digital inputs and outputs on the AC Smart IV.



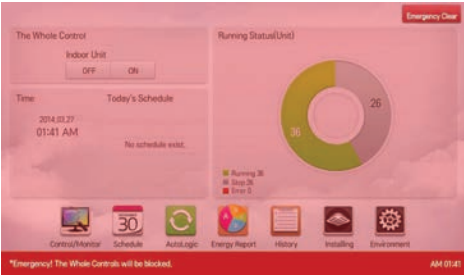
Visual Navigation

Provides one view of the system's operation status for the building's floor plan.

Report					
Total Control Error 2014.03.26 ~ 2014.06.26					
✓	Date	Time	UnitName	Code	Detail Information
✓	2014-06-26	14:15:50	Room 303	S	COOL/HEAT C/OFF by NONE
✓	2014-06-26	14:15:43	Room 302	S	COOL/HEAT C/OFF by NONE
✓	2014-06-26	14:15:43	Room 303	S	COOL/HEAT C/OFF by NONE
✓	2014-06-26	14:15:42	Room 101	S	COOL/HEAT C/OFF by NONE
✓	2014-06-26	14:15:42	Room 105	S	COOL/HEAT C/OFF by NONE
✓	2014-06-26	14:14:03	Room 303	S	COOL/HEAT C/ON by U_System_admin
✓	2014-06-26	14:14:00	Room 302	S	COOL/HEAT C/ON by U_System_admin
✓	2014-06-26	14:13:56	Room 303	S	COOL/HEAT C/ON by U_System_admin

Operation Report

A report including control status and other information is provided to allow for operation history review. Data can be sent by e-mail or stored externally via USB.



Emergency Display

The entire display will show a red alert in an emergency situation while all other control signals are disabled.

ACP IV (ADVANCED CONTROL PLATFORM)

PACP4B001



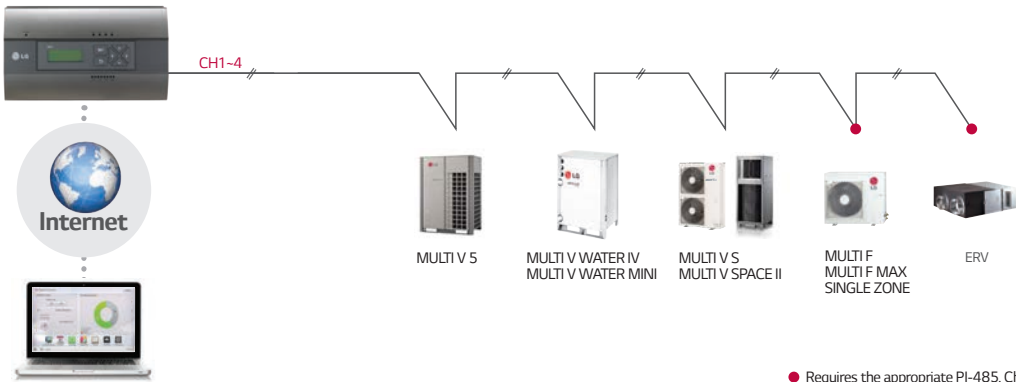
CENTRAL CONTROLLERS

Features

Model Name	PACP4B001
Maximum Number of Indoor Units	Up to 256
Individual / Group Control	●
Ventilation Control	●
Individual Controller Lock	● (Temperature / Mode / Fan / All)
Error Check	Self Diagnosis
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Schedule	Daily / Weekly / Monthly / Yearly / Exception Day
Operation History	●
Visual Navigation	●
Operation Time Limit	●
Temperature Limit	●
Internet Access ¹⁾	●
Auto Changeover / Setback	● (Two set)
Power Consumption Monitoring (with PDI)	●
Interlock Control	●
Virtual Group Control	●
Emergency Alarm Display	●
IO Module Interlocking	●
External IO Port No.	DI 10 / DO 4
Dimensions WxHxD (in)	10-11/16 x 6-3/16 x 2-5/8
Weight	

¹⁾ An IP address is required to access the central controller through the internet.
NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

System Communication Architecture



● Requires the appropriate PI-485. Check the product's engineering manual for details.

SYSTEM INTEGRATION DEVICES

GATEWAY

MultiSITE Communications Manager



PBACNBTR0A

AC Smart IV BACnet



PBACNA000

ACP IV BACnet



PQNFB17C2

ACP LonWorks



PLNWKB100

APPLICATION CONTROLLERS

Dry Contact for Thermostat



PDRYCB300

Dry Contact for Economizer

PQDSBC1

Simple Dry Contact



PDRYCB100

PDI
(Power Distribution Indicator)



Premium (8 port)
PQNUD1S41
Standard (2 port)
PPWRDB000

IO MODULE
(Input / Output Module)



PEXPMB000

MULTISITE COMMUNICATIONS MANAGER

PBACNBTR0A

The MultiSITE Communications Manager is a compact and powerful controller that allows Third party integration of an LG HVAC system into any Building Management System via BACnet, LonWorks and Fox protocols. The MultiSITE Communications Manager is a network-ready, out-of-the-box integration solution and includes the LG pre-engineered, graphical user interface. The MultiSITE Communications Manager is easily configurable and requires no additional software.

Features

- Integrates Multi V, Multi F, and select single zone systems with third-party building management systems using BACnet, LonWorks and Fox protocols
- Controls up to 128 indoor units
- Provides graphical user interface that allows centralized control



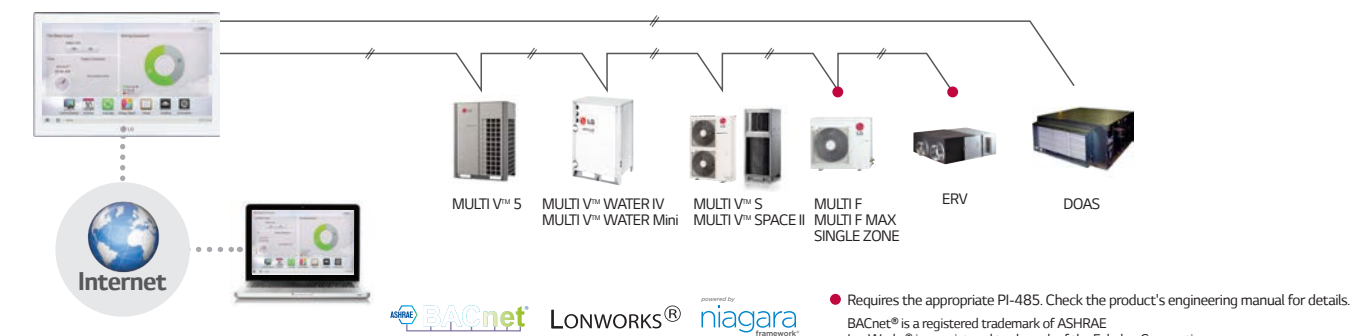
Control	Monitor
On/Off Command	On/Off Status
Operation Mode Setting	Operation Mode Status
Fan Speed Setting	Fan Speed Status
Lock Setting	Lock Status
Air Flow Setting	Air Flow Status
Temperature setpoint	Temperature setpoint status
●	Current Space Temperature Status
●	Error Status
User Mode Setting	User Mode Status
●	Accumulator Power Distribution Status
Upper Limit Temp. Setting	Upper Limit Temperature Status
Low Limit Temp. Setting	Low Limit Temperature Status
Mode Lock Setting	Mode Lock Status
AC Operation Mode Setting	AC Operation Mode Status
AC On/Off Command	AC On/Off Status
Occupied/Unoccupied	Occupied/Unoccupied
Dual Temperature Setpoint Setting	Dual Temperature Setpoint Status
2SetAuto	●
●	2SetAuto
Override	●
OccSensor	●
●	OccSensorInstalled
●	2SetFuncSupport

NOTE: Available functions/features may differ based on the connected system.
Due to our commitment to continued innovation, some specifications may be changed without notification.

Accessories

Description	Model
LON Module	ZHWLONWK0
Wall Power Adapter	ZHWPWADTR

System Communication Architecture



AC SMART IV BACNET GATEWAY

PBACNA000



Features

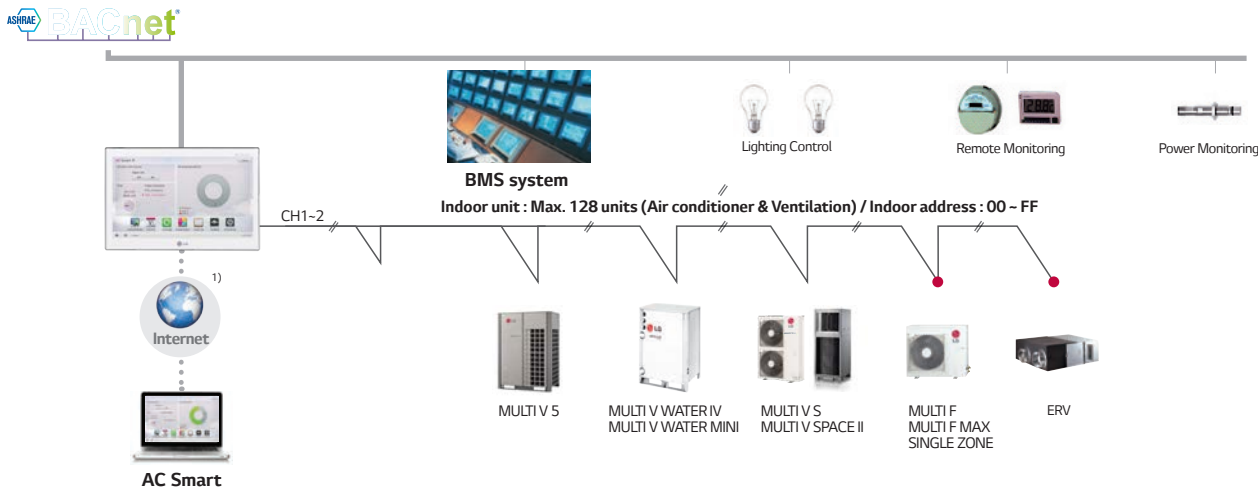
- Controls up to 128 indoor units
- Controls up to 16 AHU Control kits
- Provides graphical user interface that allows centralized control
- BTL Listed (B-ASC)
- Integrates Multi V and select Mini and Multi Split systems with third-party building management systems using a large 10.2-inch touch screen with intuitive GUI (graphical user interface).

Dimensions (W X H X D): 10" x 6-5/8" x 1-3/16"

NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

Controlling	Monitoring Items
On/Off Command	On/Off Status
Operation Mode Setting	Operation Mode Status
Fan Speed Setting	Fan Speed Status
Lock Setting	Lock Status
Air Flow Setting	Air Flow Status
Temperature setpoint	Temperature setpoint status
-	Current Space Temperature Status
-	Error Status
User Mode Setting	User Mode Status
-	Accumulator Power Distribution Status
Upper Limit Temp. Setting	Upper Limit Temperature Status
Low Limit Temp. Setting	Low Limit Temperature Status
Mode Lock Setting	Mode Lock Status
AC Operation Mode Setting	AC Operation Mode Status
AC On/Off Command	AC On/Off Status
Occupied/Unoccupied	Occupied/Unoccupied
Dual Temperature Setpoint Setting	Dual Temperature Setpoint Status

System Communication Architecture



● Requires the appropriate PI-485. Check the product's engineering manual for details.
1) Assignment of an IP address is required to access central controller through the Internet.
BACnet® is a registered trademark of ASHRAE

ACP IV BACNET GATEWAY

PQNFB17C2



Features

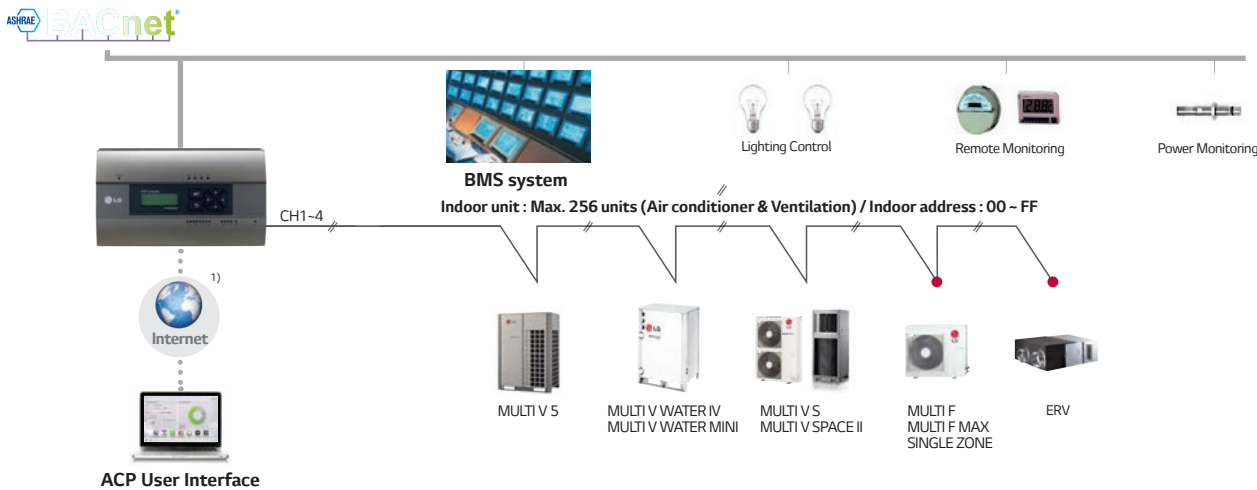
- Controls up to 256 indoor units
- Controls up to 16 AHU Control kits
- Provides graphical user interface that allows centralized control
- BTL Listed (B-ASC)

Dimensions (W X H X D): 10-11/16" x 6-3/16" x 2-5/8"

NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

Controlling	Monitoring Items
On/Off Command	On/Off Status
Operation Mode Setting	Operation Mode Status
Fan Speed Setting	Fan Speed Status
Lock Setting	Lock Status
Air Flow Setting	Air Flow Status
Temperature setpoint	Temperature setpoint status
-	Current Space Temperature Status
-	Error Status
User Mode Setting	User Mode Status
-	Accumulator Power Distribution Status
Upper Limit Temp. Setting	Upper Limit Temperature Status
Low Limit Temp. Setting	Low Limit Temperature Status
Mode Lock Setting	Mode Lock Status
AC Operation Mode Setting	AC Operation Mode Status
AC On/Off Command	AC On/Off Status
Occupied/Unoccupied	Occupied/Unoccupied
Dual Temperature Setpoint Setting	Dual Temperature Setpoint Setting

System Communication Architecture



● Requires the appropriate PI-485. Check the product's engineering manual for details.
1) Assignment of an IP address is required to access central controller through the Internet.
BACnet® is a registered trademark of ASHRAE

ACP LONWORKS GATEWAY

PLNWKB100



Features

- Integrates Multi V, Multi F, and select single zone systems with third party building management systems.
- Controls up to 64 indoor units
 - Controls up to 16 AHU Control kits
 - Provides graphical user interface that allows centralized control
 - LonMark Certified

Dimensions (W X H X D): 10-11/16" x 6-3/16" x 2-5/8"

NOTE: Available functions/features may differ based on the connected system.
Due to our commitment to continued innovation, some specifications may be changed without notification.

Controlling	Monitoring Items
On / Off Command	On / Off Status
Operation Mode Setting	Operation Mode Status
Fan Speed Setting	Fan Speed Status
Lock Setting	Lock Status
Air Flow Setting	Air Flow Status
Set Temperature Setting	Set Temperature Status
-	Current Space Temperature Status
-	Error Status
-	Accumulator Power Distribution Status
Upper Limit Temp. Setting	Upper Limit Temperature Status
Low Limit Temp. Setting	Low Limit Temperature Status
Mode Lock Setting	Mode Lock Status
Peak Operation Ratio Setting	Peak Operation Ratio Status
All On / Off Setting	-
-	Total Accumulated Power Status

I/O MODULE (INPUT/OUTPUT MODULE)

PEXPMB000



CENTRAL CONTROLLERS

Features

Model Name		PEXPMB000
Linkable Products		AC Smart IV ACP IV
Communication	RS-485	1
I/O	DI	3
	DO	3
	UI	4
	AO	4

Interface Type		Min.	Max.
Analog Input	NTC 10k	0.68kΩ	177kΩ
	PT 1000	803kΩ	1573kΩ
	Ni 1000	871.7kΩ	1675.2kΩ
	DC (Voltage)	0V	10V
Analog Output	DC (Current)	0mA	20mA
	-	0V	10V
Digital Input	Binary Input (Dry Contact)	-	-
Digital Output	Normal open	-	30VAC / 30VDC, 2A

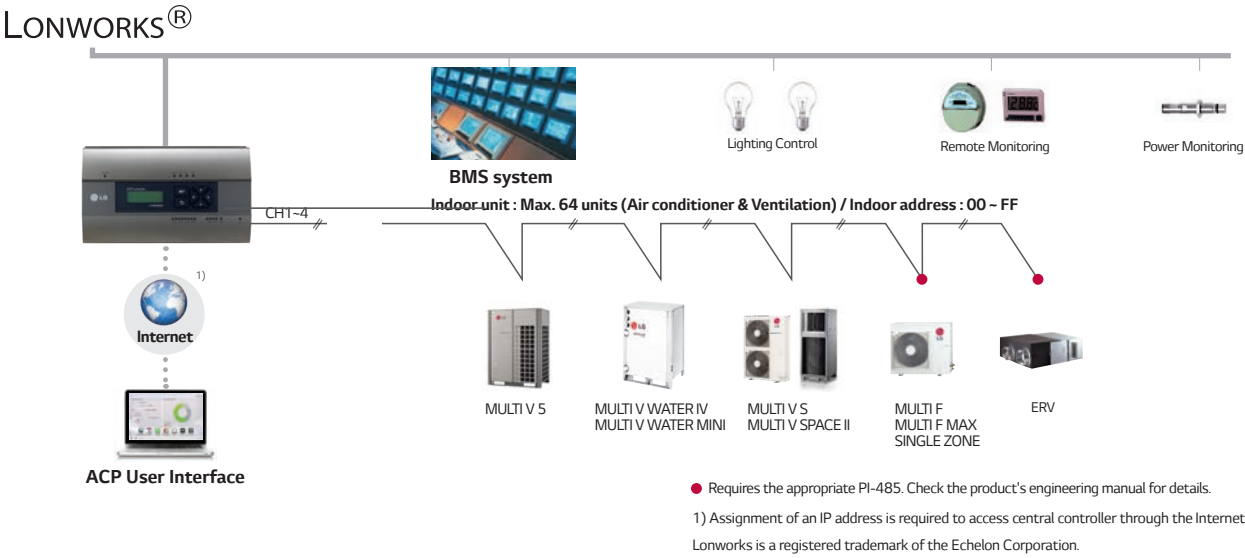
- Dimensions-
- Weight-

	AC Smart IV	ACP IV
Number of Indoor Units	64-128	128-256
Max. I/O Points	130	224
Maximum Number of Node	9	16

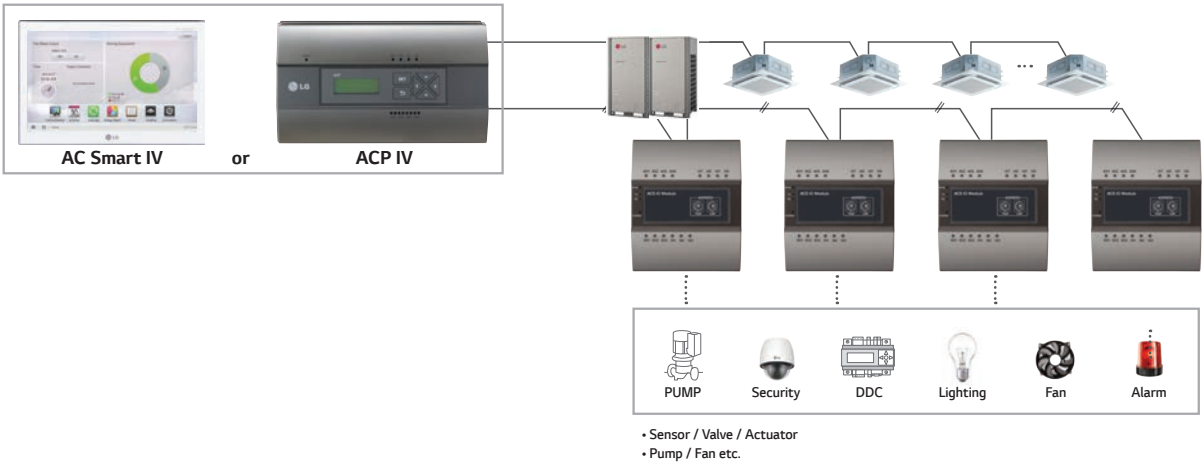
* Maximum number of Indoor units may be reduced by increasing the number of I/O points.

NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

System Communication Architecture



System Communication Architecture



NOTE: For a full list of compatible features, check the latest Engineering Manual.

PDI PREMIUM (POWER DISTRIBUTION INDICATOR)

Premium

PQNUD1S41 (8 port)

Standard

PPWRDB000 (2 port)

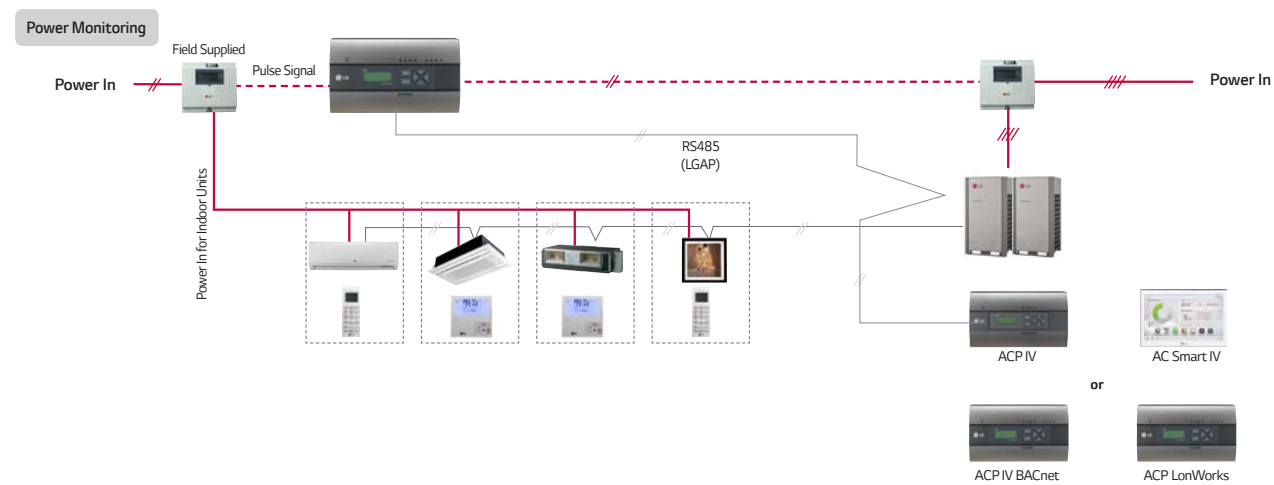


Features

- Power monitoring data is backed up in the event of a power outage
- Connector can be separated for convenient installation
- Linkable with RS485 communication type or pulse type power meter
- Shows power consumption of up to 128 indoor units.

NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

System Communication Architecture


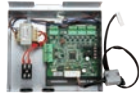











AIR CONDITIONING TECHNOLOGIES

ACCESSORIES

ACCESSORIES

Lineup

CONTROL ACCESSORY	WATER SOURCE SYSTEM	AIR SOURCE SYSTEM	AHU KIT	ERV
Remote Temperature Button Sensor  ZRTBS01	Variable Water Flow Control Kit  PWFCCKN000	Low Ambient Kit  PRVC2	Communication Kit  PRCKAM	CO2 sensor  PES-CORV0
Group Control Wire  PZCWRCG3	Variable Water Flow Control Kit PRVC1	Cool/Heat Selector  PRDSBM	Communication Kit  PRDCAM	PI-485  PSNFP14A0
Extension Cable  PZCWRC1			EEV Kit (Electronic Expansion Valve Kit)  PRLK048A0 / PRLK096A	

DRY CONTACT

Simple Dry Contact

PDRYCB100

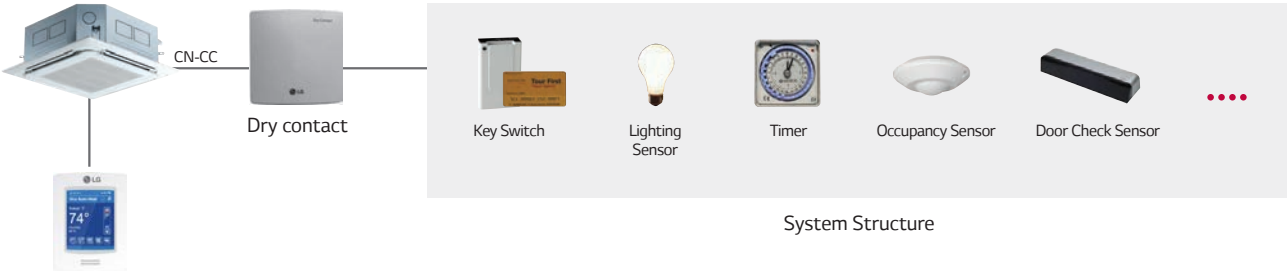


Features

Model Name	PDRYCB100
Contact Point	One Contact Point
Power Input	AC 24V
Voltage / Non Voltage Input	-
On / Off Control	●
Lock / Unlock	-
Thermo Off	-
Energy Saving	-
Temperature Setting	-
Error Monitoring	●
Operation Monitoring	●
Dimensions W x H x D (in)	4-1/8" x 3-1/16" x 1-3/8"

* Maximum operation AC : 3A
NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

System Communication Architecture



DRY CONTACT

Dry Contact for Economizer

PQDSBC1

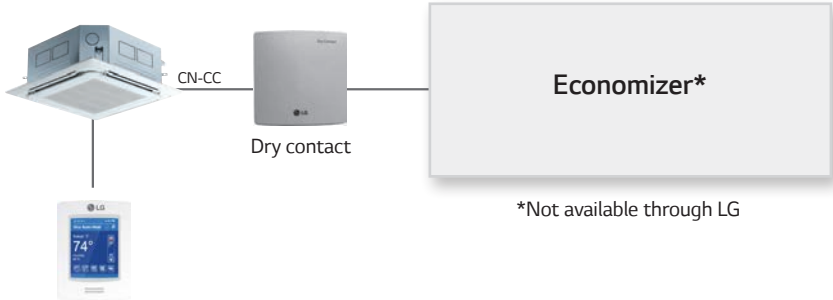


Features

Model Name	PQDSBC1
On / Off	●
Economizer	●
Occupied / Unoccupied	●
Remote Lock / Unlock	●
Compressor Stop	●
Dimensions W x H x D (in)	4-1/8" x 3-1/16" x 1-3/8"

* Maximum operation AC : 3A
NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

System Communication Architecture



DRY CONTACT

Dry Contact for Thermostat (5-12Vdc, 24Vac)

PDRYCB300

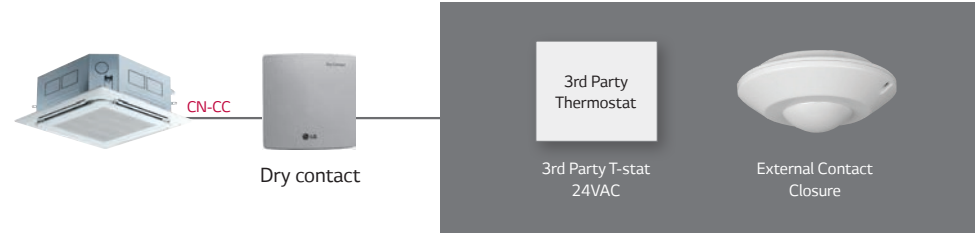


Features

Model Name	PDRYCB300
On / Off Control	●
Mode Control	● (Cool, Heat, Fan)
Fan Speed Setting	● (Low, Middle, High)
Thermo Off	●
Error Monitoring	●
Operation Monitoring	●
Rotary Switch 1	Operating Set Temperature Selection
Rotary Switch 2	Operating Logic Selection
Dimensions W x H x D (in)	4-1/8" x 3-1/16" x 1-3/8"
Power Input	24V AC

* Maximum operation AC : 3A
NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

System Communication Architecture



CABLES

PZCWRCG3
PZCWRC1



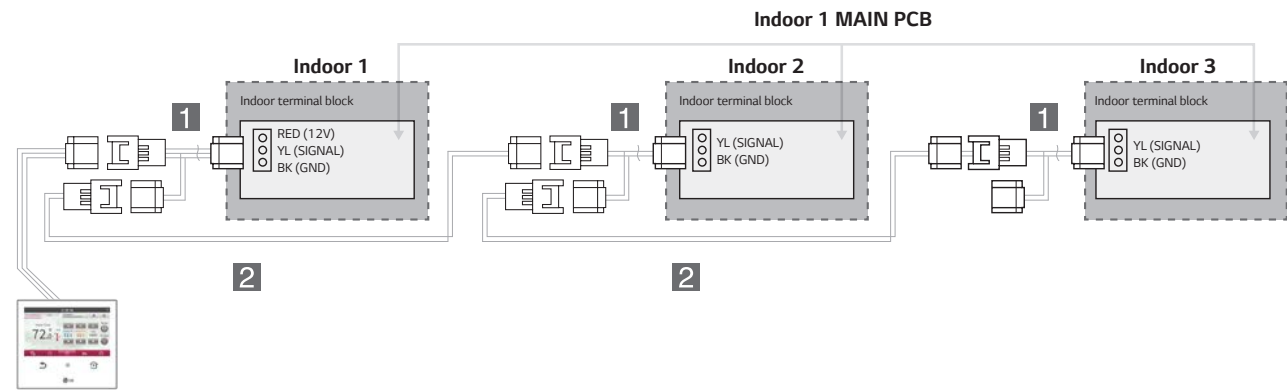
Features

Description	Model	Length (ft.)
Group Control Cable Kit	PZCWRCG3	0.82
Extension Cable	PZCWRC1	32.8

* Maximum operation AC : 3A
Connect up to 16 indoor units with the group control cable kit. Extend the control wire up to 32.8 ft with the extension cable.

NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

System Communication Architecture



Note : 1 Group Control Cable Kit
2 Extension Cable

REMOTE TEMPERATURE BUTTON SENSOR

ZRTBS01

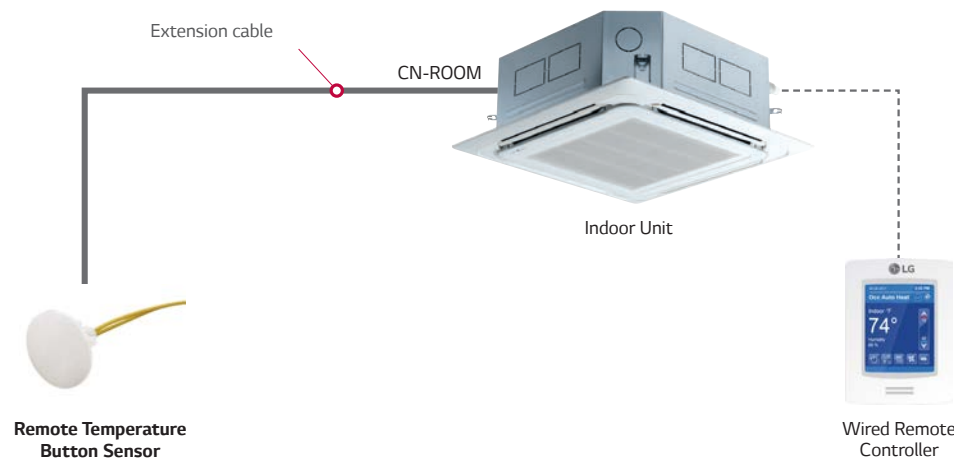


Features

- 0.8" Diameter (approximate size of a quarter) flush button mounts virtually anywhere
- Paintable with latex or oil base to match any decor
- Replaces IDU return air sensor for remote temperature sensing
- Connects to CN-ROOM on IDU PCB
- Compatible LG indoor units: All cassette and ducted IDUs for Multi V, Multi F, Multi F MAX, and Single Zone
- Applied to Ceiling Mounted Cassette, Ceiling Concealed Duct, and Hydro Kit
- Extension cable (49 ft) is included
- Dimensions-
- Weight-

NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

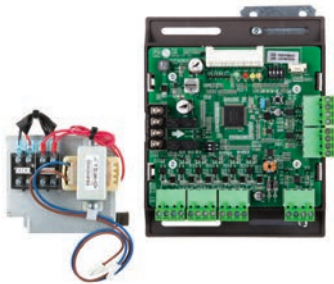
System Communication Architecture



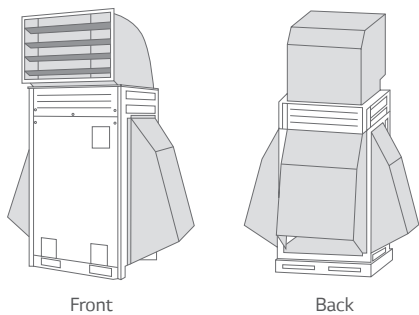
LOW AMBIENT CONTROL KIT

External integration module for cooling operation with -9 °F low ambient temperature.

PRVC2



Features

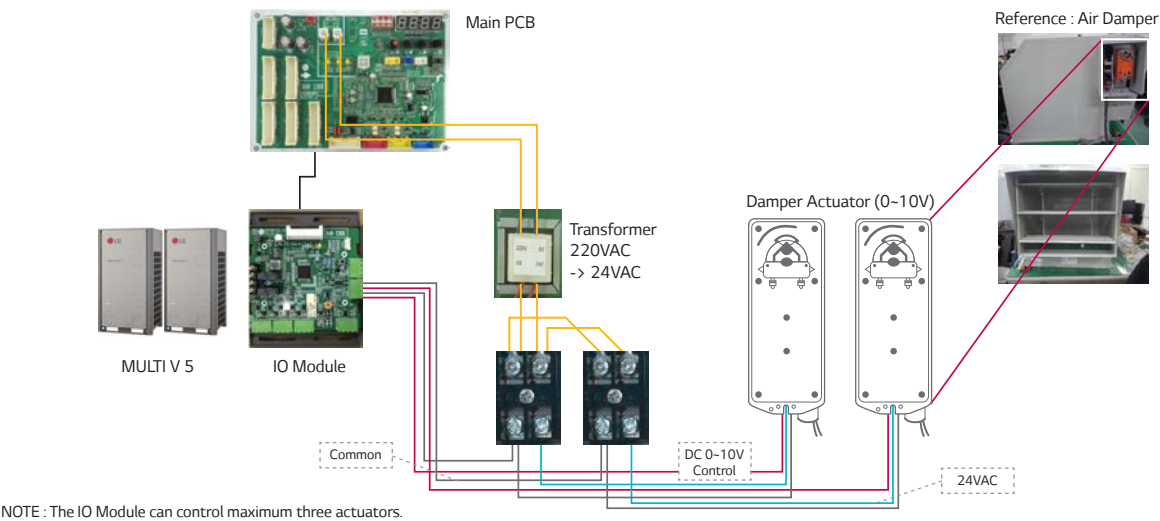


- FUNCTION**
 - 9 °F Low ambient cooling operation using Low ambient kit and hood with damper (Analog output 0~10V)
 - Demand control
- DESCRIPTION**
 - Low ambient kit supports -9 °F cooling operation by making stable condensing pressure with reducing air flow rate from hood and damper control given 0~10V proportional to condensing pressure.
 - Low ambient kit provides IO Module function.
 - The appropriate Low Ambient Baffle Kit is a required accessory.
 - Transformer and terminal block are included.

Models Applied

- MULTI V 5

System Communication Architecture



VARIABLE WATER FLOW CONTROL KIT

Required accessory for controlling water flow when the entering water temperature is lower than 59°F.

PWFCKN000
PRVC1



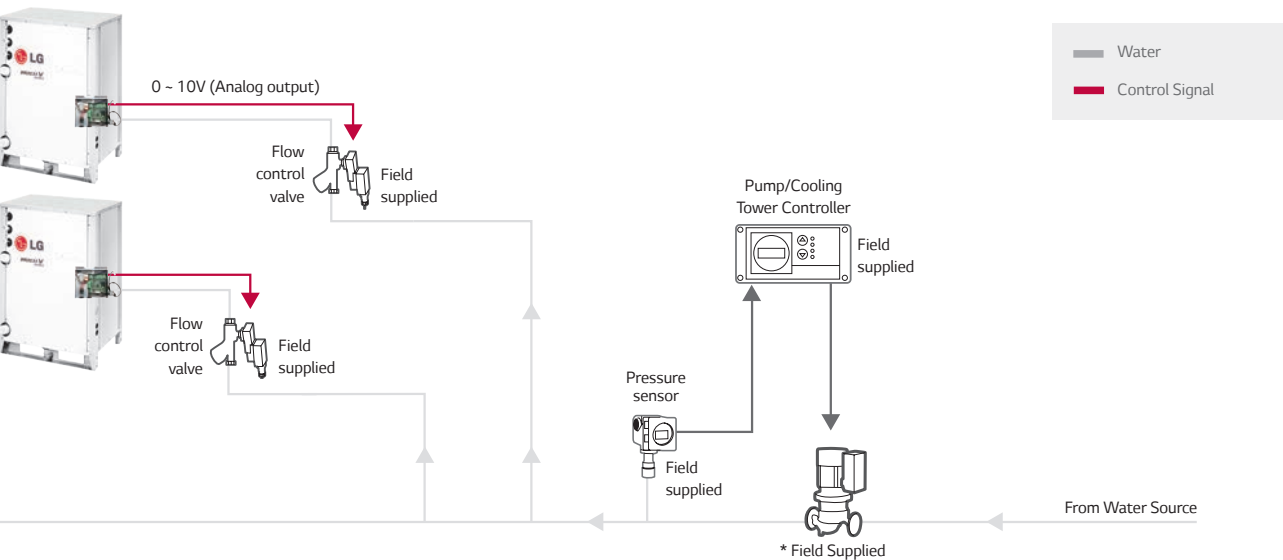
Features

- FUNCTION**
 - Water valve control (0~10V)
 - Minimum output voltage setting available
 - Operation, error output (250VAC, Max 1A)
 - Dry contact input and analog output for demand control
 - Digital output for operation, error status (250VAC, Max 1A)
- ADVANTAGE**
 - Water flow consumption reduction
 - Pump electricity consumption reduction
 - Including IO Module (Dry contact input, Analog input/output, Digital output)
: Using Dry contact and variable water flow control function simultaneously

Models Applied

- PWFCKN000 - Multi V Water IV
- PRVC1 - Multi V Water Mini

Wiring Diagram



AIR HANDLING UNIT (AHU) MODULES

Solution to extend the benefits of LG VRF technology to third party Air Handling Units.



Specifications

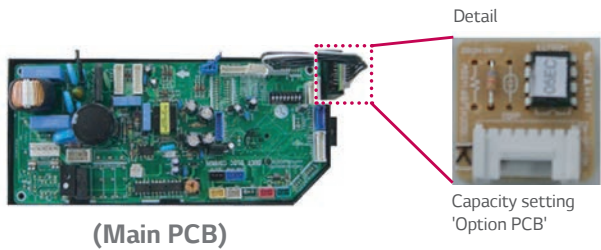
Type	Model Name	Combination				Description	Dimensions (in)			
		Outdoor unit	EEV Kit	Expansion Kit	Central controller		W	H	D	Weight
Communica-tion Kit	PRCKAM	MULTI V	●	●	●	Return/room air by remote controller or dry contact control	11-13/16	11-13/16	6-1/8	
	PRDCAM	MULTI V	●	●	-	Return/room air or supply air (capacity) control by DDC. This unit is connected with outdoor unit 1:1	15-3/4	19-11/16	8-3/8	

NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

Capacity Selection

For MULTI V

- When selecting evaporator, change 'Option PCB' in Communication kit according to below table (Basic 'Option PCB' is for 36k Btu/h)
- After verifying the required capacity, remove the 36k Option PCB equipped in the main PCB, and replace with the corresponding Option PCB in the table to the right.



Option PCB P/No	Capacity Index (Btu/h)
EBR52358907	28k
EBR52358908	36k
EBR52358909	42k
EBR52358910	48k
EBR52358911	76k
EBR52358912	96k
EBR52358914	115k
EBR52358915	134k
EBR52358916	153k
EBR52358917	172k
EBR52358913	192k

Function list for Communication Kit

	List	Description	Specification			
			PRCKAM	PRDCAM		
			Min	Type	Min	Max
Controlling	Outdoor Unit Operation	On/Off	By wired controller*	Digital input** (Non-voltage)	-	-
	Mode	Fan only/heating/cooling		Digital input (Non-voltage)	-	-
	Fan Step	High/mid/low (three steps)		Digital input (Non-voltage)	-	-
	Room Temperature Control	Cooling 64 ~ 86°F; Heating 60 ~ 86°F	By wired controller*	Analog input	0 V	10 V
	Supply Air Temperature (by outdoor capacity control)	Compressor Off, Compressor Off & Fan Off, 40 ~ 100% capacity control	-	Analog input	0 V	10 V
Monitoring	Outdoor Unit Operation	On/Off	-	Digital input** (Non-voltage)	Max : AC 250 V, DC 30 V, 1A	
	AHU Communication Kit Operation	On/Off	-	Digital input (Non-voltage)	Max : AC 250 V, DC 30 V, 1A	
	Outdoor Mode	Fan/defrost/cooling/heating	-	Digital input (Non-voltage)	Max : AC 250 V, DC 30 V, 1A	
	Fan Mode	High/mid/low (three steps)		Digital input (Non-voltage)	Max : AC 250 V, DC 30 V, 1A	
	Error Status	No error/error occurred		Digital input (Non-voltage)	Max : AC 250 V, DC 30 V, 1A	

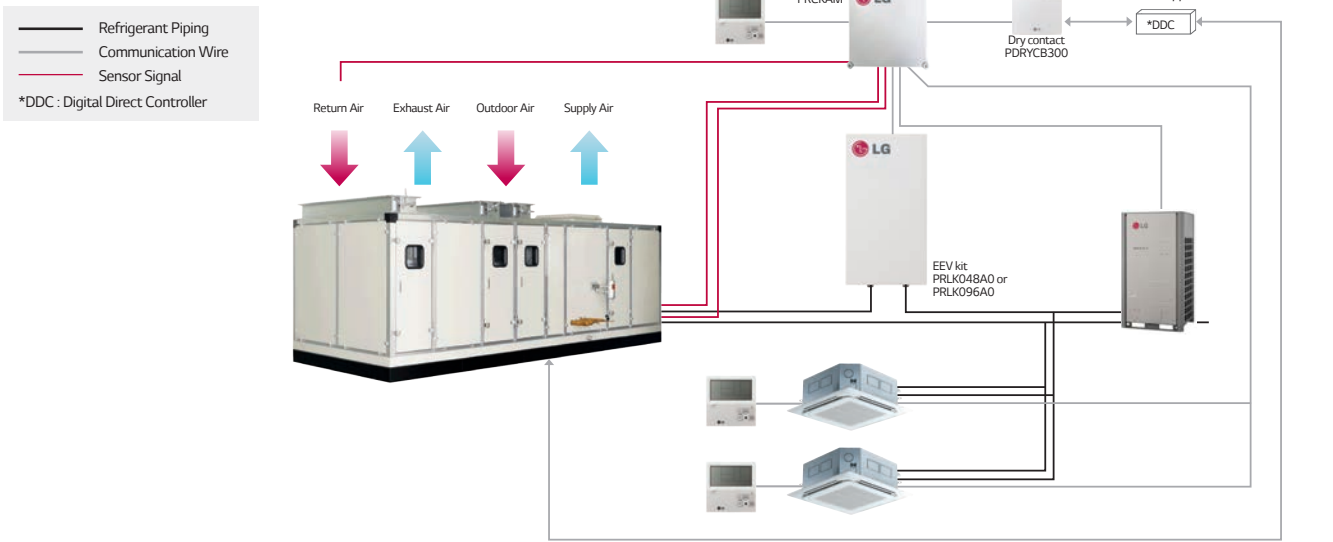
* Optional accessory, recommended model : PREMTB10U
** Binary input and output (Open and short), DO is normal open

Specifications

Type	Model Name	Description	Capacity Range	Dimensions (in)		
				W	H	D
EEV Kit	PRLK048A0	For MULTI V - In combination with or without indoor units. Several EEV kits can be connected to a single outdoor unit.	8 tons maximum	8-5/8	15-15/16	3-5/16
	PRLK096A0		16 tons maximum	8-5/8	15-15/16	3-5/16

System Architecture

• MULTI V Application (in Combination with third-party AHU)



COOL/HEAT SELECTOR

PRDSBM



Features

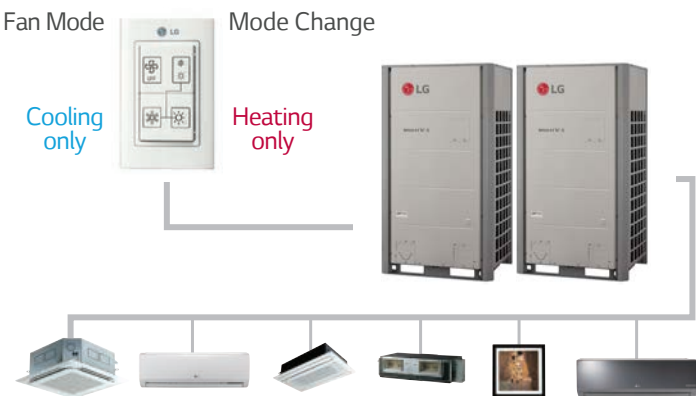
- Provides a single location for choosing cooling, heating, or fan mode for the entire system.
- Mode lock for cooling & heating

Models Applied

- MULTI V 5
- MULTI V S
- MULTI V WATER IV
- MULTI V SPACE II
- MULTI V WATER MINI

NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

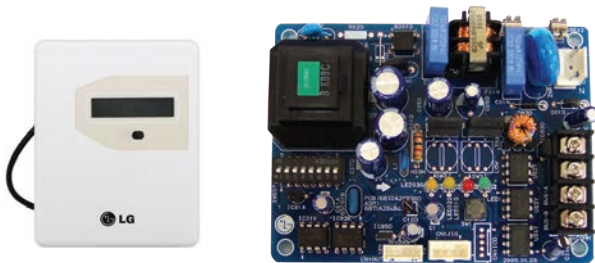
System Communication Architecture



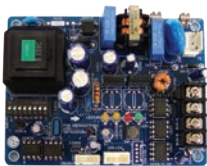
ACCESSORIES FOR ERV

These accessories allow for additional functionality when using LG ERV systems.

PSNFP14A0 PES-CORVO



Features for PI-485



- Model Number: PSNFP14A0
- Power: Connected with the Indoor Units
- 1 for Each Indoor Unit
- Dimensions W x H x D (in.): 3-1/4 x 4-1/16 x 1-1/4

* Provided with a case to be installed on the exterior.
* A PI-485 is not required when used with Multi V systems.

Features for CO₂ Sensor



PES-CORVO
The PES-CORVO is especially designed to work in conjunction with LG Energy Recovery Ventilators (ERVs). Real-time CO₂ levels are detected and displayed on the sensor's LCD. The PES-CORVO then sends the data to the LG ERV via the hard-wired connection cable coupled with the supplied 33-foot extension cable. LG ERVs, using stand-alone embedded logic, will respond to CO₂ changes in the surrounding ambient air by applying demand control ventilation when its fan is set to Auto mode. Energy efficiency is increased, and indoor air quality can be improved when ventilation air is introduced to the monitored space only as necessary.

- STANDARD FEATURES:**
- Constant monitoring of CO₂ levels
 - LCD display readout
 - LED sensor light indications for troubleshooting
 - Direct attachment through a 33-foot cable
 - Connects to CN_CC02 socket on ERV control board

NOTE: Available functions/features may differ based on the connected system. Due to our commitment to continued innovation, some specifications may be changed without notification.

Compatibility



ARVU053ZEA2 / ARVU063ZEA2














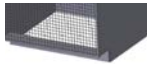
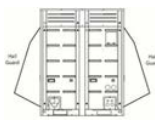


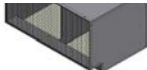



ARVU093ZFA2 / ARVU123ZFA2

- Compatible with ERV (Energy Recovery Ventilator):
ARVU053ZEA2
ARVU063ZEA2
ARVU093ZFA2
ARVU123ZFA2

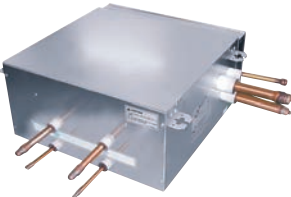
MECHANICAL ACCESSORIES

Lineup

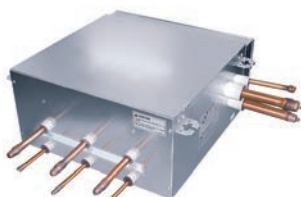
INDOOR			AIR TECHNOLOGIES
Ceiling Mounted Cassette		Ceiling Concealed Duct	
Auto Elevation Grille	Cassette Cover	Suction Grille	Air Cleaner
			
PTEGM0	PTDCM PTDCQ	PBSGB30 / PBSGB40	ZFBXD201A ZFBXD402A
Cassette Panel	Plasma Kit	Canvas	Air Cleaner Media
		PBSC30 / PBSC40	
4-Way Cassette PT-UQC / PT-UMC1		Other	
	PTPKM0 PTPKQ0	Aux Heater Relay Kit	ZFLT1301A ZFLT1302A
4-Way True 2x2 Cassette PT-QCHW0	Ventilation Kit		
		PRARH* PRARS*	Return Air Grill ZGRLA01A ZGRLA02A
4-Way Black Cassette PT-UMC1B	PTVK410	HSD Filter Box	
2-Way Cassette PT-HLC1			
1-Way Cassette PT-UUC1 PT-UTC	PTVK420 PTVK430	ZFBXB*01A	Return Air Plenum ZPLMV201A ZPLMV402A
OUTDOOR			MULTI V
Air Guide	Hail Guard	Low Ambient Baffle Kit	Heat Recovery Unit
			
ZAGDKA51A	ZHGDKA51A ZHGDKA52A	ZLABKA51A ZLABKA52A	PRHR022A PRHR032A PRHR042A
Air Guide		Wind Baffle	
			
ZAGDKA52A		ZLABGP04A	

HEAT RECOVERY UNIT

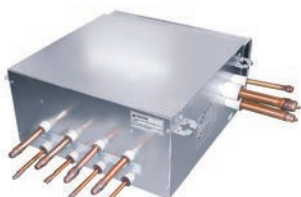
PRHR022A
PRHR032A
PRHR042A



PRHR022A
(2-branch Unit)



PRHR032A
(3-branch Unit)



PRHR042A
(4-branch Unit)

Features

- Max. 32 indoor units can be connected (Max eight indoor units per branch)
- Easy installation with auto pipe detect
- Delivers maximum efficiency using the subcooling cycle within the HR Unit

Models Applied

- MULTI V 5 Heat Recovery
- MULTI V WATER IV Heat Recovery
- Multi V S Heat Recovery

Specifications

Specification		Unit	PRHR022A	PRHR032A	PRHR042A
Number of Indoor Unit Ports ²			2	3	4
Power Input		Watts	26	40	40
Max Port Capacity	Each Port	Btu/h	54,000	54,000	54,000
	Sum of Ports	Btu/h	192,000	192,000	192,000
Electrical	Power Supply	(V/Hz/Ø)	208-230/60/1	208-230/60/1	208-230/60/1
	Rated Amps	A	0.08	0.12	0.16
Piping	Port Liquid Line	in	3/8	3/8	3/8
	Port Vapor Line	in	5/8	5/8	5/8
	System Liquid Line	in	3/8	1/2	5/8
	System Vapor Line High	in	3/4	7/8	7/8
	System Vapor Line Low	in	7/8	1-1/8	1-1/8
Sound Pressure Data	Cooling Mode	dB(A)	35.2	35.2	35.2
	Heating Mode	dB(A)	35.1	35.1	35.1
	Simultaneous	dB(A)	43.3	43.3	43.3
Weight	Net Unit Weight	lbs	40	45	49
	Shipping Weight	lbs	48	54	57
Dimensions	W x D x H	in	17-7/8 x 18-15/16 x 8-5/8	17-7/8 x 18-15/16 x 8-5/8	17-7/8 x 18-15/16 x 8-5/8

1. All refrigerant pipes require insulation.
2. Each port can allow up to eight indoor units with a maximum capacity of 48k Btu/h per port.
3. All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with applicable local and national code.
4. Kit components must be kept dry and free of debris before installation.
5. Must follow installation instructions in the applicable LG installation manual.
6. Power wiring cable size must comply with the applicable local and national code.
7. This unit comes with a dry nitrogen charge.
8. Due to our commitment to continued innovation, some specifications may be changed without notification.

ACCESSORIES

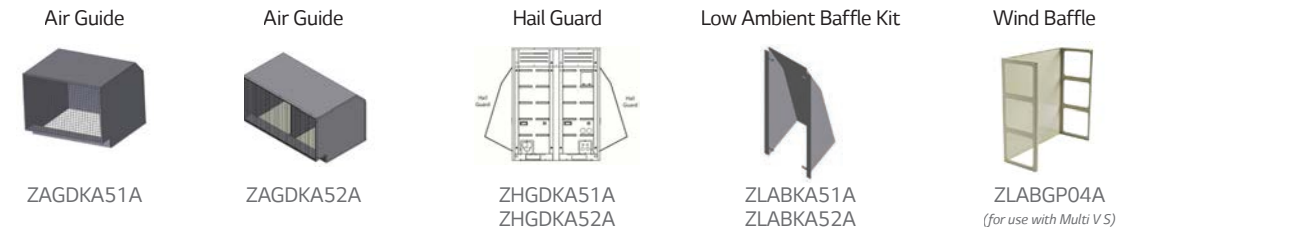
Indoor Accessories



Unit Type	Category	Model	Description	Used with
Ceiling Cassettes	Cassette Auto Elevation Kit	PTEGM0	Auto Elevation Grill Kit	TP, TN, TM
	Cassette Cover	PTDCM	Decorative Cover for 4-Way Ceiling Cassette	TP, TN, TM
		PTDCQ		TQ, TR
	Cassette Panel	PT-UTC	1-Way Ceiling Cassette Panel	TT
		PT-UUC1	1-Way Ceiling Cassette Panel	TU
		PT-HLC1	2-Way Ceiling Cassette Panel	TL
		PT-UQC	4-Way Ceiling Cassette Panel	TQ, TR
		PT-QCHW0	4-Way Ceiling Cassette Panel, True 2x2	TQ, TR
		PT-UMC1	4-Way Ceiling Cassette Panel	TP, TN, TM
		PT-UMC1B	4-Way Ceiling Cassette Panel, Black	TP, TN, TM
	Cassette Ventilation	PTVK410	Ventilation Air Intake Spacer for 4-Way Ceiling Cassette (Requires PTVK420)	TP, TN, TM
		PTVK420	6" Ø Ventilation Air Connection Flange for 4-Way Ceiling Cassette	TP, TN, TM
		PTVK430	3" Ø Ventilation Air Connection Flange for 4-Way Ceiling Cassette	TQ, TR, TP, TN, TM
	Plasma Kit	PTPKM0	4-Way Ceiling Cassette Plasma Kit (3x3)	TP, TN, TM
		PTPKQ0	4-Way Ceiling Cassette Plasma Kit (2x2)	TQ, TR
High Static Ducted & Outside Air Unit	HSD Filter Box	ZFBXB801A	High-Capacity Filter Box	B8
		ZFBXBG01A	High-Capacity Filter Box	BG
		ZFBXBH01A	High-Capacity Filter Box	BH
		ZFBXBR01A	High-Capacity Filter Box	BR
	Air Cleaner	ZFBXD201A	DYNAMIC V8-2VL Low-Profile Air Cleaner	BG, BH, BR, B8
		ZFBXD402A	DYNAMIC V8-4VL Low-Profile Air Cleaner	BG, BH, BR, B8
	Air Cleaner Media	ZFLT1301A	Air Cleaner Media 4-Pack	BG, BH, BR, B8
		ZFLT1302A	Air Cleaner Media 24-Pack	BG, BH, BR, B8
	Return Air Plenum	ZPLMV201A	2VL Return Air Plenum	BG, BH, BR, B8
		ZPLMV401A	4VL Return Air Plenum	BG, BH, BR, B8
LSD Bottom Return	LSD Bottom Return Canvas	PBSC30	Return Air Canvas (Requires PBSGB30 Grille)	B3
		PBSC40	Return Air Canvas (Requires PBSGB40 Grille)	B4
	LSD Bottom Return Grille	PBSGC30	Return Air Grille (Requires PBSC30 Canvas)	B3
		PBSGC40	Return Air Grille (Requires PBSC40 Canvas)	B4
Vertical AHU	Heat Kit	ANEH053B1	5kw Electric Heat Kit	NJ, NK
		ANEH103B2	10kw Electric Heat Kit	NJ (243, 303, 363), NK
		ANEH153B2	15kw Electric Heat Kit	NK
		ANEH203B2	20kw Electric Heat Kit	NK
Auxiliary Heat Kit	PRARH0	Auxiliary Heat Kit for Gen 2 Cassettes, Ducted, and Convertible units		VJ, VE
	PRARH1	Auxiliary Heat Kit for Gen 4 Cassettes, Ducted, and Convertible units		B3, B4, B8, BG, BH, BR, L1, L2, L3, TL, TM, TN, TP, TQ, TR, TT, TU
	PRARS1	Auxiliary Heat Kit for Wall Mounted Units		SB, SC

ACCESSORIES

Outdoor Accessories



Type	Model	Description	Used with
Air Guide	ZAGDKA51A	Air Guide	Multi V 5 (6 Ton Chassis)
	ZAGDKA52A	Air Guide	Multi V 5 (8 to 20 Ton Chassis)
Hail Guard	ZHGDKA51A	Hail Guards Kit	Multi V 5 (6 Ton Chassis)
	ZHGDKA52A	Hail Guards Kit	Multi V 5 (8 to 20 Ton Chassis)
Low Ambient Baffle Kit	ZLABKA51A	Low Ambient Baffle Kit (requires PRVC2)	Multi V 5 (6 Ton Chassis)
	ZLABKA52A	Low Ambient Baffle Kit (requires PRVC2)	Multi V 5 (8 to 20 Ton Chassis)
Wind Baffle	ZLABGP04A	Low Ambient Baffle Kit (two required per unit)	Multi V S



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Air Conditioning Technologies

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