VX Series Energy Management Thermostat

Model: VX3-RSW-LGE-W
Wireless Energy Management Thermostat for LG VRF, Inverter PTAC and Mini-Split Systems

> **Easy-to-use Thermostat**

> **Native Integration with all LG VRF, PTAC and Mini-Split Units**

> **Unparalleled Energy Savings**

> **Quick and Easy Installation**

> **Online Management Capabilities** *

The VX3-RSW-LG thermostat communicates natively with all LG indoor VRF units, Inverter PTAC and mini-splits thereby enabling the many well-known features of the Verdant system.

The thermostat connects directly to the CN_REMOTE port of the indoor unit. By using the native LG protocol, Verdant's thermostat is capable of sending vital information to the indoor unit such as guestroom set point and guestroom temperature, allowing the unit to smoothly control the flow of refrigerant, reaching the desired set point with precision.

The thermostat communication with the indoor unit does not interfere with the existing communication bus between outdoor and indoor units. The thermostat communication wiring can be installed once the indoor unit has power without waiting for the completion of the main communication bus.

The CN_REMOTE port on the LG indoor unit is capable of providing the power requirements to the Wireless Receiver. For convenience, the thermostat can be powered using 2 AA batteries or at 12VDC with a 2-conductor wire from port J11.
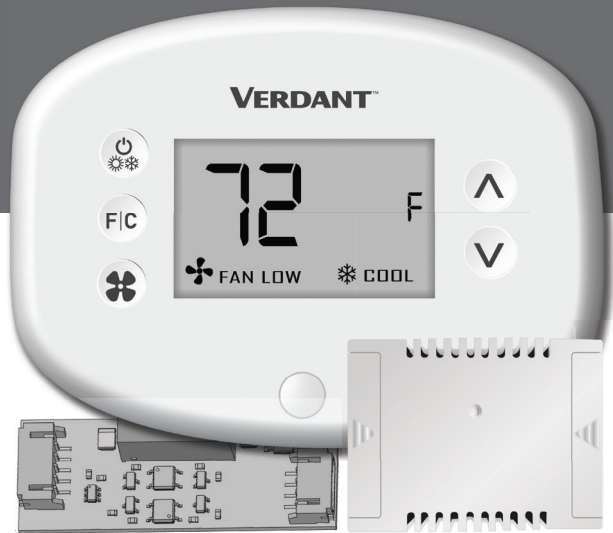
An integrated occupancy sensor on the Verdant thermostat allows for energy saving when rooms are unoccupied. Energy saving presets eliminate guesswork and make it easy to adjust the energy saving settings.

A patented "Night Occupancy" feature ensures comfort while occupants are sleeping.

Built-in wireless mesh-networking enables optional online management features.

Fully configurable settings allow for customization of energy savings to fit any situation.

▫ Temperature Setback automatically adjusts the temperature when rooms are unoccupied to save energy.

▫ Temperature Recovery allows for setting a maximum time permitted for establishing a comfortable room temperature.

▫ Setback Optimization monitors the temperature recovery rate and optimizes setback temperatures.

▫ Setback Limits control the maximum and minimum room temperature when a room is in setback mode.

▫ Set Point Limits prevent guests from setting the room temperature to extreme, energy-wasting levels.

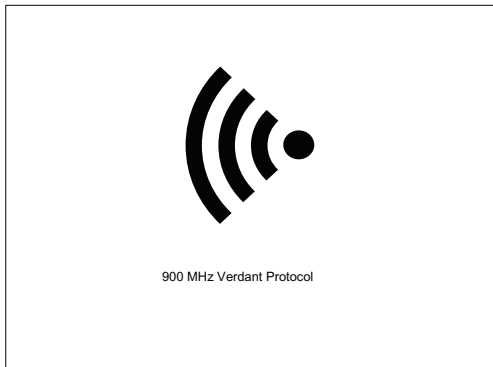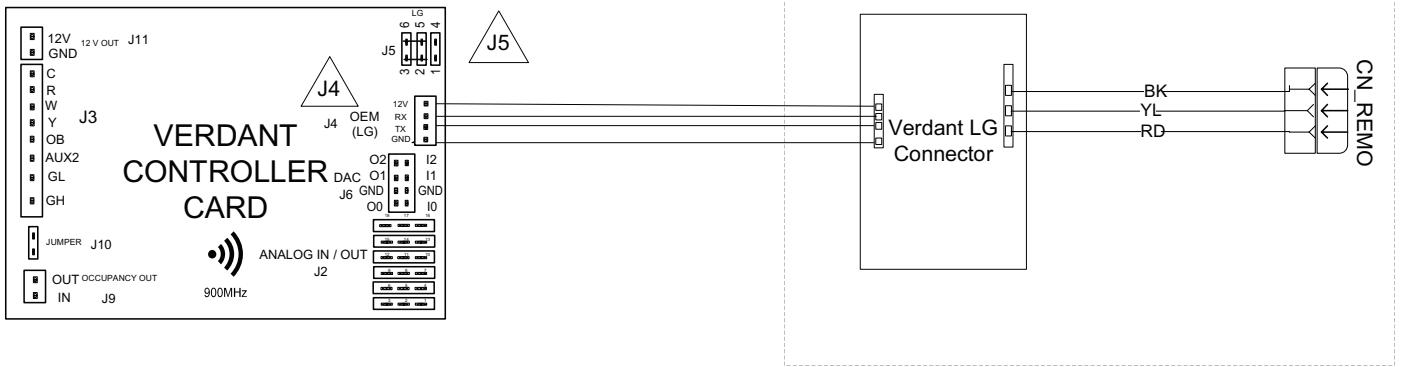|	Thermostat	HVAC Controller	Verdant Connector
Case Dimensions (Imperial)	4.02 x 5.51" x 0.93"	3.88" x 2.13" x 0.75"	1.18 x 1.97 x 0.78
Case Dimensions (Metric)	102mm x 140mm x 23.5mm	98mm x 54mm x 19mm	30mm x 50mm x 20mm
Screen Dimensions (Imperial)	3.63" x 2.13"	N/A	N/A
Screen Dimensions (Metric)	92mm x 54mm	N/A	N/A
Operating Voltage	2x AA Batteries/12VDC/24VAC	12VDC/24VAC	12VDC
Control Outputs		12VDC	12VDC
		GND	GND
		B	B
		A	A
Occupancy Sensor Beam Width (Angular degrees)	±47° (94°)	N/A	N/A
Wireless Frequency	902-928MHz	902-928MHz	N/A
Temperature Accuracy (Fahrenheit)	±1°F	N/A	N/A
FCC ID	XEYWX-DB	XEY-ZX-LV	N/A
IC	8410A-WXDB	8410A-ZXLV	N/A

¹ Requires a network access license for each thermostat (Part Number: XMF) and one "Online Connection Kit" (Part Number: OL-KT). Additional fees apply.

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Wiring Diagram Verdant LG - HVAC Controller

LG VRF IDU

VERDANT CONTROLLER CARD

12V 12 V OUT J11
GND
C
R
W
Y J3
OB
AUX2
GL
GH

JUMPER J10

OUT OCCUPANCY OUT
IN J9

900MHz

LG
J5
J4

OEM (LG)
J4
12V
RX
TX
GND

O2 I2
O1 I1
DAC O0 GND GND
J6 I0

ANALOG IN / OUT
J2

Verdant LG Connector

BK
YL
RD

CN_REMO

J5

J5: Jumpers:
LG : 2-3 and 5-6

J4: LG Verdant Unit
Connector

900 MHz Verdant Protocol

Verdant Thermostat

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