

ZX Series Energy Management Thermostat

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

- > **Modern, trendy thermostat**
- > **Native Integration with all LG VRF, PTAC and Mini-Split Units**
- > **Unparalleled Energy Savings**
- > **Quick and Easy Installation**
- > **Online Management Capabilities***

The ZX-RSW-LGE 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 AAA 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)	3.00" x 4.73" x 1.32"	3.88" x 2.13" x 0.75"	1.18 x 1.97 x 0.78
Case Dimensions (Metric)	76mm x 120mm x 34mm	98mm x 54mm x 19mm	30mm x 50mm x 20mm
Screen Dimensions (Imperial)	1.88" x 0.94"	N/A	N/A
Screen Dimensions (Metric)	48mm x 24mm	N/A	N/A
Operating Voltage	2 *AAA* Cell Batteries	12VDC	12VDC 5VDC
Communication Interface		12VDC	12VDC
		RX	Communication Line
		TX	GND
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	XEYZXWU	XEY-ZX-LV	N/A
IC	8410A-ZXWU	8410A-ZXLV	N/A



THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.

PURSUANT TO PART 15.21 OF THE FCC RULES, ANY CHANGES OR MODIFICATIONS TO THIS EQUIPMENT NOT EXPRESSLY APPROVED BY VERDANT ENVIRONMENTAL TECHNOLOGIES, INC. MAY VOID VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

US PATENTS: 8,369,994; 8,141,791; 7,918,406; 7,841,542; 7,838,803; RE40,437; 7,232,075; 7,185,825; 7,156,318; 7,152,806; 7,145,110; 7,058,477; 7,050,026; 7,028,912; 6,902,117; 6,789,739; 6,786,421; 6,619,555; 6,581,846; 6,578,770; CANADIAN PATENTS: CA2615065; CA2633113; CA2633121; CA2633200; OTHER PATENTS PENDING.

Verdant Environmental Technologies, Inc. reserves the right to make changes, without notice, in design or components as progress in engineering and manufacturing methods may warrant. Product appearance may vary.
© Verdant Environmental Technologies, Inc. 2022.

VERDANT™

EMERSON™

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

Wiring Diagram Verdant LG - HVAC Controller

