

ZigBee Wireless Baseboard Heater Thermostat

The WZ_LVS250 Wireless Baseboard Thermostat replaces mechanical baseboard thermostats with no additional wiring required for communication or power.

The WZ_LVS250 uses the ZigBee wireless protocol to control a single zone of 120/240 VAC baseboard heaters. It wirelessly connects to a central station for remote control and monitoring as part of a larger system.

Advanced software techniques are used to estimate a room's heat loss and predict the amount of heat required to be added, resulting in extremely stable room temperatures. The WZ_LVS250 is nevertheless very responsive to sudden changes in heating demand.

Digital signal processing is also used to compensate for thermostat self heating, a common problem with thermostats affecting temperature measurement accuracy. The WZ_LVS250 achieves unparalleled 0.5°C accuracy for comfort and energy savings.



Benefits

- Reduced heating costs.
- Consistent, accurate temperature.
- Inexpensive installation.
- Remote monitoring and control.

Features

- **ZigBee Radio** - connects to a central controller through a wireless, self healing mesh network.
- **Digital Signal Processing** - uses advanced digital techniques to even out heating cycles for a consistent, accurate room temperature.
- **Multiple setpoints** - stored locally for stand alone mode in case of loss of radio reception to the controller.
- **Multiple schedules** - separate settings for day/night and 7 days of the week.
- **Min/max temperature** - prevents users from setting the temperature too high or too low.
- **Programmable** - simple yet powerful programming language for creating complex heating algorithms.
- **Motion sensor** - reduces the heat when the room is not in use.
- **Robust** - Protected by a Gas Discharge Tube for high surge voltage tolerance in noisy electrical environments.
- **Simple installation** - powers off line voltage and doesn't require additional control lines.
- **Warranty** - 3 years.

Specifications

Input Characteristics

Operating Voltage	Max Current Draw	Frequency
120~240VAC	20mA	50~60Hz

Load Characteristics

Voltage	Max Load	Frequency
120/240VAC	2500W/5000W	50/60Hz

Motion Detect

Type	Max Viewing Range	Max Viewing Angle
Infrared	5m	135°

Temperature Characteristics

Sensing Range	Setpoint Range	Accuracy
-10°C~120°C	15°C~27°C	0.5°

Communication Ports

Type	Connection	Baud Rate/Frequency	Max Distance
RS232	3 Pin	9.6Kbps	15m
ZigBee	Wireless	2.4GHz	25m

Voltage Surge Withstand

Voltage	Waveform
2KV	1.5/50 uS rise/fall