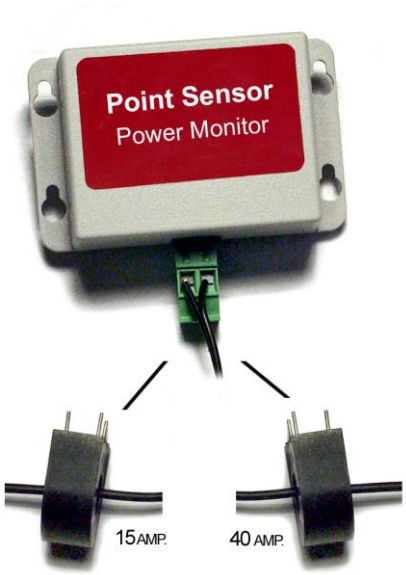
*Point Six Wireless*
*Unique, High Value Wireless Solutions*

# Point Sensor
Power Monitor

## FEATURES

- **Measures current draw**
- **64-Bit unique ID**
- **12-bit analog to digital conversion**
- **Transmits unique ID and analog value**
- **Up to 600 foot transmission range**
- **Transmission intervals from 10 to 17 seconds random**
- **Patent pending modulator**
- **Battery life up to 5 years**
- **Very small (1.3" X 2.1" X .6") ABS enclosure**
- **Water resistant coating on PCB**
- **Internal loop antenna**
- **Low cost**




## DESCRIPTION

The Point Sensor Power Monitor wireless transmitter is a battery operated 12 bit analog-to-digital converter with a microprocessor controlled 418 MHz. FCC certified radio transmitter. The Sensor has an on board time of day clock that allows it to spend most of the time in a low power quiescent state. At predetermined time intervals the clock will wake up the onboard microprocessor. Unique serial number information is read from a Dallas Semiconductor 1-wire digital device and analog data is read from a 12-bit analog to digital converter. This information is combined with a CRC-16 error check and transmitted in a very short data packet that results in a transmitter on time of only 15 milliseconds. This architecture allows the Sensor to consume very low energy resulting in a battery life of up to 5 years.

The electronics are coated with a conformal material that provides a moisture barrier against condensation. Submersion in water is not recommended. An integral pushbutton is used to activate the service switch. The Sensor is shipped with the transmitter turned off (anytime the Sensor is to be shipped the transmitter should be turned off or must be placed in a shielded container to prevent interference that might cause shipping problems). Start the Sensor by momentarily pushing the service switch (you will feel the button click). When the service switch is pushed a data transmission occurs immediately and a special mark is introduced in the ID field of the transmitted data packet to indicate which sensor is in service or installation. The service switch is also used to put the Sensor in a quiescent mode (no transmissions and very low power consumption). This is the state the Sensor is in when you receive it from the manufacturer. Push and hold the service switch for 5 seconds or more to enter this powered down state.

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|---|---|
| Transmission rate | 10-17 seconds random |
| Shelf life with battery installed | 5 Years in quiescent mode (10 years with optional battery) |
| Dimensions (enclosure) | 1.5 W X 2.1 H X .6 D (inches) |
| Weight | 1.5 oz. |
| Operating Temperature | -40° to 85° C |
| Input (0-20mA) – Model Analog20mA | 120 Ohms, 0-20.83 milliamp. 12-bit resolution, 20 mA=3932 |
| Input (0-5v) – Model Analog5v | 100k ohms, 0-5 volt, 12-bit resolution, 4.99v=4095 |
| Input (0-10v) – Model Analog10v | 62k ohms, 0-10volt, 12-bit resolution, 9.99v=4095 |
| Humidity | 0% to 90% non-condensing |
| Battery life with transmissions | 2-5 years with tx period of 10-17 seconds |
| Battery | 3.6 volt Lithium |
| FCC Certified | FCC ID: M5ZWOWANA |