



Affordable Technology to Monitor Solar Production and Performance

Gateway and devices for commercial PV monitoring support most inverters, power meters, and weather stations.



inGate commercial Ethernet gateway, when configured as a Modbus master, can read Modbus RTU data from most commercial solar inverters and electricity meters. Compact low-profile DIN-rail mountable design. A Zigbee radio connects to select Zigbee devices. Data can be pushed securely to any HTTP IP address. *Available with private labeling for OEM.*



inPower™ meter can measure single & 3 phase, in delta or wye services, from 120 to 600 VAC. Supports multiple CT options. *Revenue-grade option available.*



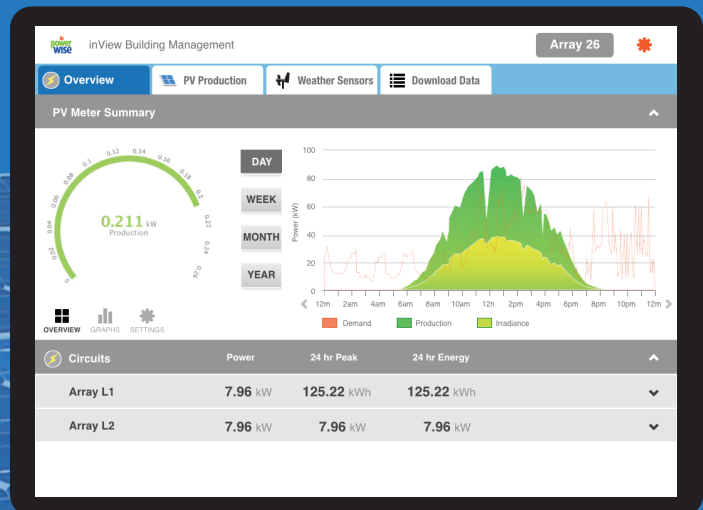
inBridge™ Wireless network bridge enables wired Modbus RTU devices to transmit wirelessly to the inGate with range up to 1200 meters. Eliminate the need for costly & difficult wiring runs.



inSense™ wireless battery-powered temperature sensor for monitoring back of PV panel. Includes 10K thermistor in a self-adhesive thermal block.

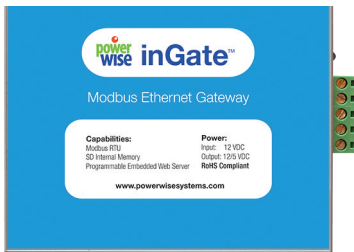
inView™ PV Basic, A cloud based data analytics dashboard. Visualize all monitored data types graphically for a clear view of solar installations.

- Easy export of data in CSV format
- API options available.
- Custom Dashboard /UI enhancements available with private labeling for OEM.





Hardware Specifications



inGate™ Modbus RTU, Zigbee, and Ethernet Gateway

The inGate is Modbus RTU master and Zigbee ethernet gateway. Embedded web-server configured to your needs. Additional Modbus RTU device support can be added on demand.

- **Power Input:** 12-24 VDC, 500ma (min.)
- **Dimensions:** 4.25" x 3.5" x 1.25" (108mm x 89mm x 31.8mm)
- **Communication:** Zigbee (2.4 GHz), Modbus RTU, RS485 connection
- **Internal SD Memory:** up to 32 GB
- **Plug & Play Supported Slave Devices (50 max)**
 - RainWise PVmet line of Weather Stations
 - PowerWise inPower & inBridge
 - PV Inverters, electricity meters, etc.



3-Channel Energy and Power Meter

The inPower™ is a Modbus RTU revenue grade electricity meter.

- **Accuracy:** ANSI C12.1 (ANSI C12.20 class 0.5 available)
- **Voltage:** 3-phase Delta/Wye services, 120 to 600 Vac.
- **Current Transducers:** 0.333 mV, (1-6,000 amps)
- **Dimensions:** 1.9" x 3.68" x 1.15" (48.3mm x 93.5mm x 29.2mm)
- **Mounting:** Compact DIN-rail mount enclosure.
- **Data points include:**
 - Power (real, apparent, & reactive)
 - Energy (real, apparent, & reactive)
 - Voltage (phase-neutral, phase-phase)
 - Power Factor, Frequency, and Current.



inBridge™ Wireless Modbus RTU-to-Zigbee Bridge

The inBridge is a wireless powered bridge for sending Modbus RTU data to the PowerWise inGate. Ultra compact DIN-Rail mountable design.

- **Power Input:** 12 - 24VDC /24VAC (Full Bridge) Communication: Zigbee (2.4 GHz), Ext. Antenna
- **Dimensions:** 3.5" x 1.4" x 1.27" (90mm x 36.1mm x 32.2mm)
- **Indoor range:** 60 meters
- **Outdoor Range:** 1200 meters (line of sight)
- **Radio:** Upgradable to high-power radio for 2x range.



inSense™ Wireless Waterproof

This is a battery-powered Zigbee HA 1.2 endpoint device and has a environmental IP67 rating. An external 10k, type 2 thermistor can be attached for remote temperature monitoring.

- **Battery Ratings:** 3.0 - 3.6 VDC (2x 1.5VDC Li Batteries), 7000 mAh (2x 3500mAh Li Batteries)
- **Communication:** Zigbee (2.4 GHz) (60 to 1200 meters)
- **Operating Range:** -40 - +125 °C, 0 - 100% RH
- **Sensor Accuracy:** ±0.4 °C, -10 to 85 °C.