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Smarter solutions, delivered faster



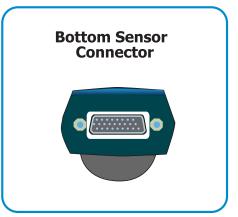
Making it easy for you to save water, time and money

# WISI MINI RTU A complete miniature Remote Terminal Unit (RTU)









The Watch Technology WiSI system (wireless sensor interface) is a complete Remote Terminal Unit (RTU) in miniature. It includes a embedded radio, antenna, energy storage capacitor, 4 relay switches, and I/O connectors for sensors, external power, and serial port interface. Attach sensors or control wiring, place the WiSI SP with its embedded solar panel anywhere there is a minimum of sunlight, and it will collect data, transmit it at least two miles by radio or directly into an accumulator, run relays to control electro/mechanical devices like actuators, pumps, and motors, repeat secure encrypted data from sister devices, accept operational changes on-the-fly from a Base Station, and do myriad functions in any weather condition without the need for a battery change, ever. The WiSI is completely encased in an IP-67 rated enclosre.

The WiSI EP is setup for continuous duty and external power. All WiSI models are completely integrated nodes for a SCADA system sealed off from weather conditions (IP-67 rated). The WiSI comes with free easily configured software, "talks" Modbus from the Coordinator (Base Station) unit to a PC or other Modbus capable device, and can be deployed as easily as placing it into the end of a 2" pipe and walking away.

### **FEATURES**

- Up to 2 Mile Range At 2.4 Ghz No License Required!
- 128-Bit AES Encryption
- Solar Power With Backup Power for Running Over Night\*\*
- No Maintenance / No Batteries to Change!\*\*
- Switched 5 Volt and 12 Volt Supply for Powering Sensors
- Modbus Interface Provides Flexibility View Collected
  Data and Dynamically Adjust System
- Low Power Indication (Available Through Modbus Interface)\*\*
- Transmit LED
- Onboard Switch to Force Transmission

- Onboard Temperature Measurement
- Serial Port for Modifying Node Settings and
- Sending Data
- Easily Integrates With Rugid RTUs Automatic Array Generation
- Easy Installation Only Need to Attach Local Signal Wires
- Easy Network Setup Through FREE Configuration Software
- Low Power, Suitable For Energy Harvesting Applications



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# **WISI MINI RTU**

# **Details Specifications**



Range: More than 2 Miles

Frequency: 2.4 Ghz

TX Power: 19 dBm

TX Current: 125 mA

RX Sensitivity: -100 dBm

RX Current: 45 mA

### I/O:

4 12-Bit Analog Inputs

2 - 0-5 Volt or 0-2.5 Volt

1 - 0-20 mA

1 – 2-Wire RTD Interface

4 Digital Inputs (Powered, 0-5V)

4 Digital Outputs (FET Sinking, 0-45V, 500 mA)

5 Volt Supply @ 50 mA

12 Volt Supply @ 50 mA

### Network Architecture:

Star - Up to 16 Nodes

Tree - Up to 500 Nodes

- 128-Bit AES Encryption
- Selectable Report Times Sensor(s) Asleep Unless Reporting
- **Modbus Interface to Coordinator**
- Power:

Local Solar Panel or External 12 Volts DC

Power Consumption:

200 uA For End Nodes (Reporting Once per Minute)

55 mA for Coordinator/Router\*

- 3 X 2 Inches (Board Only)
- Temperature: -20 to +70 Celsius