WiSI™

Introducing WiSI. Wireless Sensor Interface is designed to boldly go where no wire has gone before. Cost-effective remote monitoring is now possible by simply attaching your sensor directly to WiSI. WiSI will send your data securely with 128-bit AES encryption up to a 2 mile range. Now there is no need for an expensive radio and PLC everywhere you need to monitor.

Features

- Up to 2 Mile Range At 2.4 GHz – No License Required!
- 128-Bit AES Encryption
- Solar Power With Backup Power for Running Overnight**
- No Maintenance / **No Batteries** to Change!**
- Switched 5 Volt and 18 Volt Supply for Powering Sensors
- Modbus Interface Provides Flexibility – View Collected Data and Dynamically Adjust System
- Low Power Indication (Available Through Modbus Interface)**
- Environmental Protection IP 67 Rated Enclosure
- User Definable Alarming Conditions for AI & DI channels
- Digital I/O Mapping – 2 Nodes
- 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
- Viewable Signal Strength for Installation and Debugging
- Fits Inside Standard 2" ID Pipe

Specifications

- IEEE 802.15.4 Radio:
    - Range: Up to 2 Miles
    - Frequency: 2.4 Ghz
    - TX Power: 19 dBm, (79mW)
    - TX Current: 125 mA
    - RX Sensitivity: -100 dBm
    - RX Current: 45 mA
- I/O:
    - 4 12-Bit Analog Inputs, Hardware Pre-Configured With a Combination of The Following Types (Contact For Offerings):
        - 0-5 Volts or 0-2.5 Volts
        - 0-20 mA
        - ± 1.8 Volts
        - 0-2.2 Volts
    - 4 Digital Inputs (Powered, 0-24V input)
        - Pulse input up to 140Hz/50µs wide****
    - 4 Digital Outputs (FET Sinking, 0-42V, 2A)
    - 5 Volt Supply
    - 18 Volt Supply
        - (25mA total external load)
    - 250 uA Current Supply for Powering RTDs
- Network Architecture:
    - Star – Up to 16 Nodes
    - Tree – Up to 200 Nodes
- 128-Bit AES Encryption
- Selectable Report Times – End Node Asleep Unless Reporting
- Modbus Interface to Coordinator
- Power:
    - Local Solar Panel or External 6-12 Volts DC**
    - 6-24 Volts DC***
- Power Consumption:
    - 400 uA For End Nodes (Reporting Once per Minute, with no external loads)
    - 20 mA for Coordinator/Router*
- Temperature: -20 to +70 Celsius

*Dependent upon size of system and report times
**SP Package
***EP Package
****Higher frequencies upon request

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