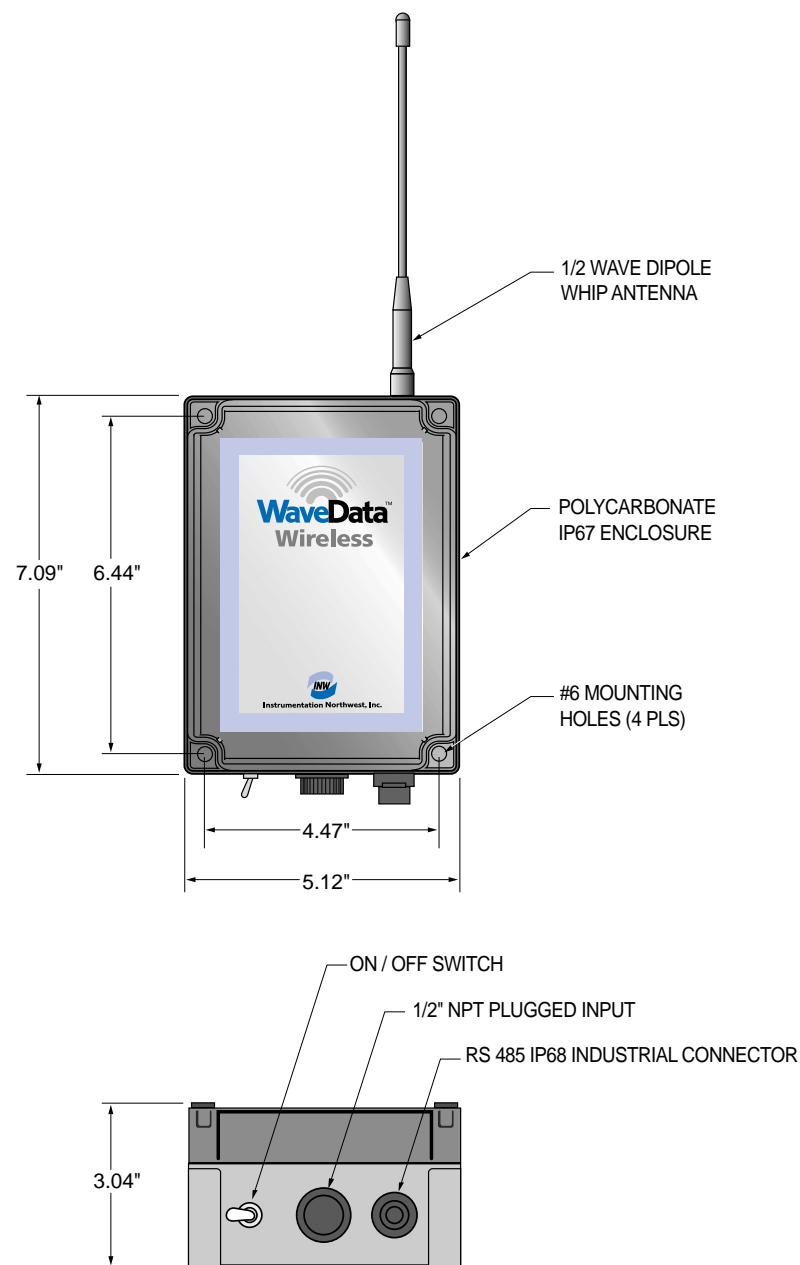




WaveData WIRELESS DATA COLLECTION SYSTEMS



WaveData™ Radio Frequency Modems

GENERAL

Enclosure Material Polycarbonate (IP67)
 Enclosure Dimensions 7.1" x 5.1" x 3.0"
 Temperature Range -40° C to 85° C
 Humidity 0 - 99% RH
 RS485 Baud Rate Selectable, 1200 to 57.6K bps
 Data Throughput 9600 or 19,200 bps

INPUTS/OUTPUTS

1-Digital Input From Aquistar® Smart Sensors
 1-Auxiliary Power Out 100 mA, max 16 VDC, for use by Aquistar® Smart Sensors
 2-Switched Power Out (Relays) 9 - 24 VDC (6 amps)

RADIO TRANSCEIVER

Frequency Ranges 902 - 928 MHz
 2.4000 - 2.4835 MHz
 Type Frequency Hopping Spread Spectrum
 Frequency Control Direct FM
 Transmit Power Output 100 mW
 Rx Sensitivity -110 / -107 dBm
 Range - Indoor 300' to 1500'
 Range - Outdoor Up to 5 miles
 Interference Rejection 70 dB at pager/cellular frequencies
 FCC Part 15.247 certification

POWER SUPPLY

Supply Voltage
 Battery 4.5 VDC
 Auxiliary 10.8 - 24 VDC

Current Consumption
 Transmit 150 mA
 Receive 50 mA
 Standby 26 microamps

Information in this document is subject to change without notice.

INSTRUMENTATION NORTHWEST, INC.



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04/01/04

1-800-PRO-WELL
www.inwusa.com



Wireless Data Collection Systems

Bringing
 Environmental
 Data to the
 Digital World



Instrumentation Northwest, Inc.

www.inwusa.com

WaveData Wireless Data Collection Systems

Bringing Environmental Data to the Digital World

WaveData™ Wireless Data Collection Systems combine INW's patented AquiStar® Smart Sensor/Dataloggers with radio frequency modems to create powerful data collection and monitoring systems.

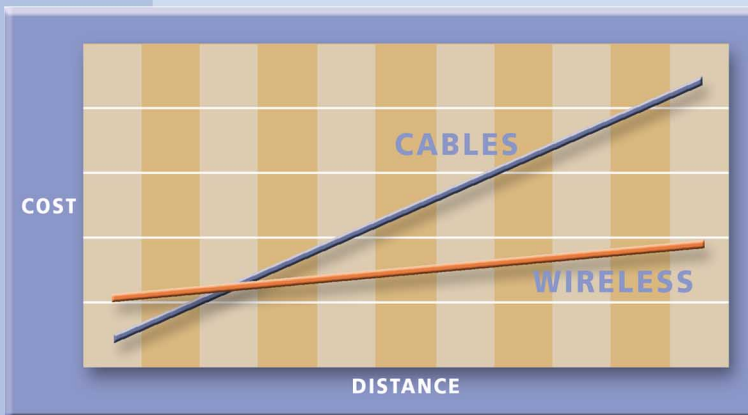
AquiStar® Smart Sensors communicate using industry standard digital RS485 interfaces and MODBUS® communication protocols. They store thousands of records, operate on low power, and feature easy to use software with powerful features, including the ability to create complex test sequences and display uploaded data in tables and graphs.

Operating on the 900 MHz or 2.4 GHz radio bands, the radio frequency modems are license free. Consuming very little power, they run for months on alkaline batteries or virtually forever on solar systems. Communication range varies from 300 feet to 5 miles, depending on line-of-sight obstructions, height and type of antennas, and additional repeaters.

Easily expand from single site monitoring to multi-site or nationwide monitoring by adding cellular or landline modems and TCP/IP Internet connectivity.

Economic Benefits:

- Less expensive than cabling
- Fewer trips to each location means better focusing of staff on areas of concern
- Early detection of problems means:
 - Less cleanup cost
 - Less environmental damage
 - Less down time
- Better information = better business decisions



Technical Benefits:

- Real time information on demand
- Accurate, coordinated data across entire sites and projects
- Reach relatively inaccessible sites
 - Across roads or rivers
 - On pilings in rivers or tide-lands
- Greater safety – less need to enter hazardous areas
 - Contaminated zones
 - Rugged terrain
 - Dangerous areas

Features:

- Low Power
- Compact – easy to install
- Weather proof (IP67)
- Easy to use software
- Battery or solar power

Applications:

- Connecting sites together
- Site monitoring with radios
- Drive-by monitoring

