**NOWIRE - MODEL 2100**

Wirelessly records and displays meter readings for small to medium sized properties. Industry proven wireless technology by Inovonics eliminates the need for long and costly wiring installation to the meters. NoWire™ provides onsite meter reading via the front panel LCD display and on the cloud via the MeterData™ portal.

**WIRELESS TRANSMITTERS**

Up To 32 wireless transmitters can be read by NoWire™. To read water, electric or gas meters the meter pulse output is attached to a pulse transmitter. Temperature, humidity, and analog input transmitters are also available. No FCC license is required for these battery operated transmitters. The transmitters were designed by Inovonics specifically for multifamily properties and are currently installed in literally millions of apartment units.

**EASY INSTALLATION**

To install a NoWire™ system, simply connect the meter pulse wires to the Inovonics transmitters. After connecting power to the NoWire™ wireless gateway, the information for each meter is then scrolled through on the display and is available for remote access online via MeterData™.

**FEATURES**

- 32 wireless input points. 4 wired pulse input points.
- Supports pulse and encoded meters, Temperature, Humidity, 0-5V, 0-10V, and 4-20mA analog signals.
- Individual meter status and alerts including: Leak, Non-advancing, Transmitter not seen, Low battery, Transmitter tamper, etc.
- Built in Ethernet and Wifi for remote internet access to readings and consumption via MeterData™. Optional cell connection available.
- Meter readings, analog data, and status also available via Modus RTU RS485 for connection to data loggers or building management systems.
- Have us configure NoWire™ for you so all you need to do is attach it to the wall and plug it in for a “plug and play” experience.
- No software required. User configurable via on-board pushbuttons.

**ABOUT SUBMETER SOLUTIONS**

Submeter Solutions was established in 1999 in Washington State. Our business focus is manufacturing, selling, servicing, and installing meters and submetering equipment for water, natural gas, and electricity. Our offices are located in Renton, WA and support submetering projects and monthly meter reading and billing clients across the US.

We are a distributor for a full range of metering products that are sold via our online store at SubmeterSolutions.com.
### NoWire™ Specifications

- **Main Processor**: R8C/35C – 16bit embedded CPU, 20MHz
- **Console**: 2x16 backlit LCD, 4 push buttons for user configuration
- **LEDs**: 11 LEDs for status and troubleshooting
- **Power Requirements**: 120VAC Wall Transformer included, 12VDC, 1A, UL Listed
- **Wired Pulse Inputs**: 4 dry contact or electronic, <2k ohms senses closed. 20ms pulse minimum.
- **Wireless Inputs**: Mix of 32 pulse meters, temperature, humidity, analog inputs.
- **Housing**: NEMA4X outdoor rated polycarbonate enclosure
- **Dimensions**: 6.73” x 4.76” x 2.17”
- **Protocols**: RS485 Modbus RTU Slave

### Wireless Specifications

- **Brand**: EchoStream™ is a registered trademark of Inovonics Wireless Corporation
- **Operating Frequency**: 902-928 MHz, unaffected by WiFi or 900MHz cordless phones
- **Modulation**: Frequency hopping, spread spectrum
- **Transmitter Range**: Open field up to 5000 ft. Typical 3 or 4 story building up to 15 to 20 units doesn’t require a repeater.
- **Repeater**: EN5040-T, -20F to 145F, 90% relative humidity
- **Repeater Range**: Open Field up to 4 miles
- **Transmitter dimensions**: 3.57” x 1.7” x 0.85” indoor rated. Outdoor enclosure available.

### Pulse & Encoded Meter Transmitters

- **Operating environment**: -4 to 140°F, 90% relative humidity (non-cond.)
- **Pulse width**: Closed 20ms or greater and open 50ms or greater.
- **Transmission interval**: Once per hour, every 10 pulses, every minute when in diagnostic “Fast” mode.
- **EN1501**: 5 year battery life at 70 to 90°F. Higher temp reduces battery life.
- **EN1501 -XL**: Calculated battery life of 10-20 years at 70 to 90°F. Higher temp reduces battery life.
- **EN1550 - EP**: Encoder Pulse Transmitter for Neptune meters.

### Signal Transmitters

- **EN1721 Temperature & Humidity**: Temperature: Fahrenheit, Range: -4° to 140°F, Typical resolution 0.018°F, Typical accuracy: ±0.5°F at 77°F. Humidity: Range: 0 to 90%RH, Resolution 0.03%RH, Typical accuracy ±2.0%RH from 10% to 90%RH. Measures every 30 sec. If value changes 5°F or 5%RH then transmits otherwise transmits every 5 minutes. Takes up two meter points in NoWire™.
- **EN1702 Dual Analog**: Inputs: 4-20mA, 0-5V, 0-10V. 16-bit measurement resolution, 1.0% measurement accuracy. Measures every 30 sec. If value changes 0.05mA or 0.05V then transmits otherwise transmits every 5 minutes. Takes up two meter points in NoWire™.

### Other Transmitters

- **These transmitters are supported such that when the transmitter event occurs it increments the meter counts for that input. It can be useful when assigned to NoWire™ pulse outputs to signal remote equipment that an event has occurred.**
- **Universal**: EN1210, EN1215
- **Single Button Pendants**: EN1223, EN1233, EN1235
- **Motion Detectors**: EN1260, EN1261, EN1262, EN1265