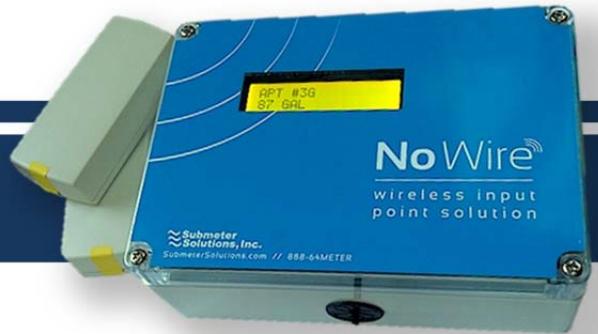


NoWire - model 1100



NOWIRE - MODEL 1100

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, with the CellConnect™ cell modem option, daily readings via the internet.

WIRELESS TRANSMITTERS

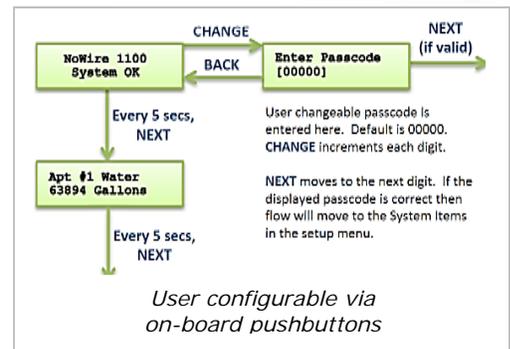
Up To 32 wireless transmitters can be read by NoWire™. To read water, electric or gas meters the meter pulse output is attached to a pulse transmitter. Temperature, humidity, and analog input transmitters are also available. No FCC license is required for these battery operated transmitters. The transmitters were designed by Inovonics specifically for multifamily properties and are currently installed in more than 1.6 million 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™ main receiver unit, walk through a series of step-by-step menus to identify meters with meaningful names and their units of measure. The information for each meter is then scrolled through on the display and available for remote access via Modbus protocol or CellConnect™ cell modem.

FEATURES

- 32 wireless input points. 4 wired pulse input points.
- Supports pulse meters, Temperature, Humidity, 0-5V, 0-10V, and 4-20mA analog signals.
- 4 isolated outputs used to re-transmit meter pulses to external digital input equipment.
- Meter readings, analog data, and status available externally via Modbus RTU RS232/485 or CellConnect™ cell modem.
- Have us configure NoWire™ for you so all you need to do is attach it to a wall and plug it in.
- 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 Issaquah, 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 on line store at

www.eSubmeter.com

425-228-6831
toll free 888-64METER

email: sales@submetersolutions.com
website: www.SubmeterSolutions.com

NoWire_091713



CellConnect™

Add the GSM cell modem option for simple remote connectivity for the following services:

- **MeterData™**
Daily meter reads available via the Internet.
- **ResidentBill™**
Monthly billing service where we prepare and mail the bills to your tenants.

NoWire™ Specifications

Processor	R8C/35C – 16bit embedded CPU, 20MHz
Console	2x16 backlit LCD, 3 push buttons for user configuration
LEDs	4 pulse output, 4 pulse input, power/status, 2 status
Power Requirements	120VAC Wall Transformer included, 12VDC, Class2
Wired Pulse Inputs	4 dry contact or electronic, <2k ohms senses closed. 50ms pulse minimum.
Pulse Outputs	4 optically isolated to 5kVrms. Optionally sources power.
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	RS232/RS485 Modbus RTU Slave
CellConnect™ Cell Modem	GSM/GPRS frequency 850/1900Mhz, carrier T-mobile

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 Meter Transmitters

Operating environment	-4 to 140°F, 90% relative humidity (non-cond.)
Pulse width	Closed 10ms or greater and open 120ms 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.
EN1501-EXT	Internal transmitter found in runtime sensors. 5 year battery life at 70 to 90°F. Higher temp reduces battery life.

Signal Transmitters

EN1721 Temperature & Humidity	<u>Temperature:</u> Fahrenheit, Range: -4° to 140°F, Typical resolution 0.018°F, Typical accuracy: ±0.5°F at 77°F. <u>Humidity:</u> 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	<u>Inputs:</u> 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