ESP AMR Water Meter

Features and Benefits

⇒ Integral radio and water meter,
NO WIRES!
⇒ True encoded communication for accurate bills,
NO MISSED PULSES!
⇒ A positive displacement Meter,
NO WORRY ABOUT VERTICAL INSTALLS!
⇒ Factory programmed,
NO EXTRA LABOR!
⇒ Fixed or walk-by reading,
NO WORRIES!
⇒ Available in 5/8" thru 2" sizes
⇒ Also available in Turbine and Compound Meters up to 4"

Simple

The ESP comes from the factory ready to install. No special FCC Licenses are required so preconstruction time planning is no longer critical. No wiring is required in the field and no configuration programming is required by the installer. By keeping it simple and allowing for a quick installation the ESP keeps installation and maintenance costs down and ensures a successful installation every time, and time is money.

Affordable

With few moving parts and no wires the ESP is innately inexpensive when compared to conventional meters with conventional registers from which it evolved. Fewer parts, thanks to advanced engineering, results in the best value in the submetering market, the ESP.

Connector

Tailpieces/meter couplings for installation of meters on various types and sizes of pipe are available as an option.

Accurate

The ESP utilizes the BluTower positive displacement meter that conforms to AWWA C700 standards. PD Meters are inherently accurate over a wide flow range and unlike jet-style meters, their accuracy is not susceptible to changes in orientation so vertical installs are not a problem. Its positive displacement design is time-proven for long-term accuracy and dependability, ensuring maximum revenue for at least 15 years. The revolutionary LCD display not only shows the meter reading but it also communicates that reading to the integral radio. With the radio and battery mounted internally there is no resident tampering and no missed pulses or questionable reads with the ESP!

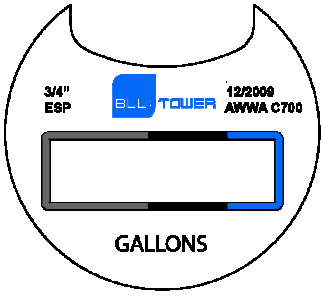
Flexible

ESP can be read as either a fixed network, drive-by or walk-by. It uses the same RF protocol as BluTower DataStream Transponders and therefore can coexist on the same network or reading route.

Specifications

Size	Operating Range 100%±1.5%	Low Flow Min. 95%	Maximum Continuous Flow	Maximum Operating Capacity	Maximum Pressure Loss	Meter Length inches
5/8" x 1/2"	¼ - 25 gpm	1/8 gpm	15 gpm	20 gpm	7.0 psi	7 ½
5/8" x 3/4"	¼ - 25 gpm	1/8 gpm	20 gpm	25 gpm	7.0 psi	7 ½
3/4"	½ - 30 gpm	¼ gpm	25 gpm	35 gpm	7.0 psi	7 ½
1"	¾ - 60 gpm	¾ gpm	40 gpm	60 gpm	9.0 psi	10 ¾
1 1/2"	5 - 100 gpm	1 ½ gpm	50 gpm	100 gpm	11 psi	13
2"	8 - 160 gpm	2 gpm	80 gpm	160 gpm	12 psi	17

Maximum Temperature for all sizes: 120°F, Maximu m Pressure for all sizes: 150 psi



Strainer

All meters have a strainer installed in the meter. Strainer screens are rigid, snug fitting, easy to remove and have an effective straining area of at least double that of the main-case inlet.

Register

Electronic register integrated with BluTower ESP radio transmitter. Easy to read LCD odometer with 100th of a gallon resolution.

Information includes:

- Company name
- Month and year of manufacture
- Leak detector
- Large, easy to read numbers
- Size of meter
- Type of reading (example U.S. Gallons, Cubic Feet, m3 or Liters)

Installation

The meter must be installed in a clean pipeline, free from any foreign materials. The meter shall be installed with the direction of flow as indicated by the arrow cast in the meter case. The meter may be installed in horizontal or vertical lines. Two versions are available, ESP and ESP-PIT (for below ground installations).

Materials

Main Case	Bronze
Measuring Chamber	Thermoplastic
O-Ring	Nitrile Rubber
Magnet	Ceramic Ferrite
Strainer	Thermoplastic
Register Lens	Polycarbonate
Register Housing	Thermoplastic
Gearing Wheels	Thermoplastic

RF Specifications

- Certified for operation in the United States under FCC Part 15 (Class B device)
- Certified to Industry Canada's RSS210 specification for category II equipment
- No license required, transmits on an industry-proven frequency of 902-928 MHz
- 15 year calculated battery life
- Transmits every 30 seconds for fixed or mobile data collection

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