Portable Ultrasonic Flow Meter for Liquids

The 900 series replaces the older generation 878 crystal screen pushbutton rubber encapsulated "brick" model that served the industry well for over a decade. BHGE validated the customer experiences, modified the design, upgraded the technology now offering a unit that is easier to install, more versatile, intuitive to use and gives more accurate reliable measurements even in the most difficult applications.

Size range has increased from 15mm-300mm to 15m-600mm pipes with options to go as large as 7500mm and the unit is now operated via Bluetooth to the touch screen tablet. Flow transmitter battery life has increased is now 18 to 20 hours continuous operation or up to 4 days on power saving mode.

This unit is ideal for temporary installations instead of having to install a fixed meter into pipework. It can validate existing metering like paddle or turbine meters where parts may have worn giving inconsistent readings. Even water is becoming expensive to use in processes, losses can be measured across various parts of a process plant by the use of this one portable meter. Is the fixed meter supplying water (which you are billed for) accurate? In process plants like abattoirs, food and beverage manufacturers, chemical plants, Petroleum Refineries, Water treatment facilities or local Municipal Authorities the ability to spot check equipment, validate usages or even ensure EPA compliance records are met the use of this extremely accurate PT900 meter can be priceless.

Operation and Performance

Fluid Types

Liquids: acoustically conductive fluids, including most clean liquids and many liquids with small amounts of entrained solids or gas bubbles

Flow Measurement

Patented Correlation Transit-Time TM mode

Pipe Sizes

Standard: 0.5 to 24 in. (15 to 600 mm)

Optional: up to 300 in. (7500 mm) available upon request

Pipe Wall Thickness

Up to 3 in. (76.2 mm)

Pipe Material

All metals and most plastics

Flow Transmitter

Enclosure

IP65 rating

Specifications

- Weight: 3 lb (1.4 kg)
- Size (h x w x md): 7.9 x 4.3 x 1.5 in. (200 x 109 x 38 mm)
- Mounting: Soft strap around pipe or magnetic clamp

Analog Inputs

4-20 mA (qty 2)

Analog Output

4-20 mA (qty 1)

Digital Output

Pulse (Totalizer), Frequency, Alarm (qty 1)

Digital Communication

- Modbus via RS485 Port
- Bluetooth Wireless
- Micro-USB Port

Accuracy

- ±1% of reading (2in/50mm or greater pipe sizes)
- ±2% of reading (0.5in/15mm to <2in/50mm pipe sizes)

Installation assumes a fully developed, symmetrical flow profile (typically 10 pipe diameters upstream and 5 pipe diameters downstream of straight pipe run). Final installation accuracy is a function of multiple factors including fluid, temperature range, pipe centricity among other factors.

Repeatability

±0.2% of reading

Range (Bidirectional)

0.1 to 40 ft/s (0.03 to 12.19 m/s)

Response Time

Up to 2 Hz

Measurement Parameters

Velocity, Volume, Mass, Energy, Total Flow

Channels

1 or 2 channels

Battery

- Type: Lithium Ion (high-energy, rechargeable)
- Life (continuous operation): 18-20 hours
- Life (power saver mode): >4 days
- Charger: 100 to 240 VAC (50/60/Hz)
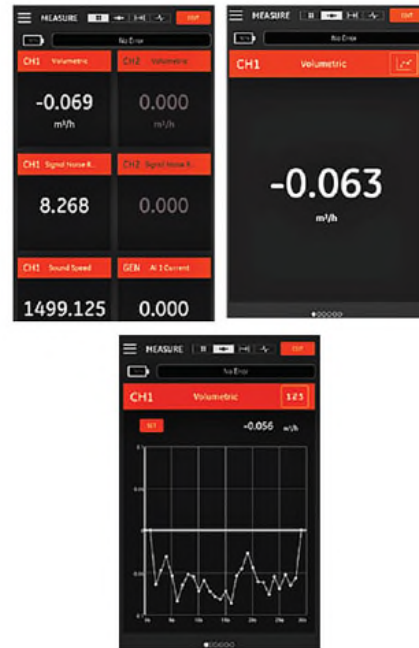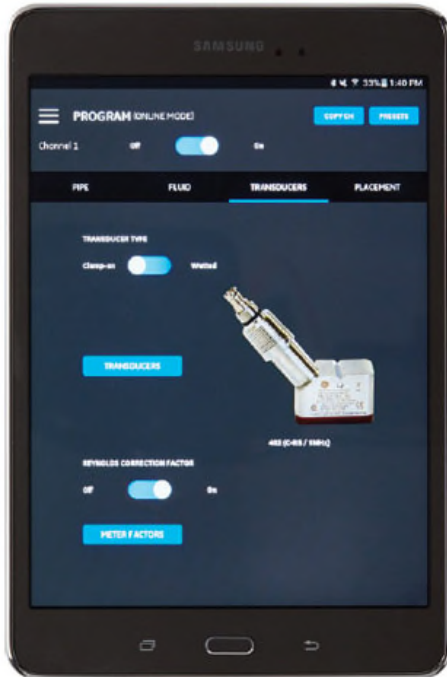- Charging Time: Up to 3 hours (from 0% to 100%)

Operating Temperature

-20 to 55°C (-4 to 131°F)

Electronics Classifications

- CE (EMC Directive) IEC 61326-1:2013, IEC 61326-2-3:2013, LVD 2006/95/EC, EN 61010-1 2010
- ANSI/UL STD. 61010-1, CAN/CSA STD. C22.2 NO. 61010-1
- WEEE Compliant (Directive 2012/19/EU)
- RoHS Compliant (Directive 2002/95/EC)

User Interface

Display

Tablet with Android operating system (version 4.4 or greater), LCD capacitive touchscreen, 800 x 1280 resolution

Dimensions

- 7 in. Tablet: 7.75 x 4.75 x 0.75 in. (196 x 120 x 19 mm) typical
- 8 in. Tablet: 8.75 x 6.00 x 0.75 in. (222 x 152 x 19 mm) typical

Battery Life

>12 hours of continuous use

Software Application (PT900 APP)

Intuitive, Swipe Screen Interface

- Colorful, icon-driven design
- Tutorial-style programming
- Site parameter presets
- Multiple display options
- Extensive online help

Battery Charger

100 to 250 VAC (50/60 Hz)

Operating Temperature

0 to 50°C (32 to 122°F)

Communication with Flow Transmitter

Bluetooth

Languages

English, Arabic, Chinese (Simplified), Dutch, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish, Swedish, Turkish

Installing the PT900 APP

Obtain the PT900 APP from:

- File provided on SD card
- Free download from Google Play

Standard Soft Shell Carrying Case