

GENERAL

Calsonic-PU series is a Handheld transit-time ultrasonic flowmeter with clamp-on transducers for non-invasive liquid measurement. Our microprocessor based, user friendly field programmable flow measurement technique creates no interruption of the process flow and has low installation costs.

FEATURES

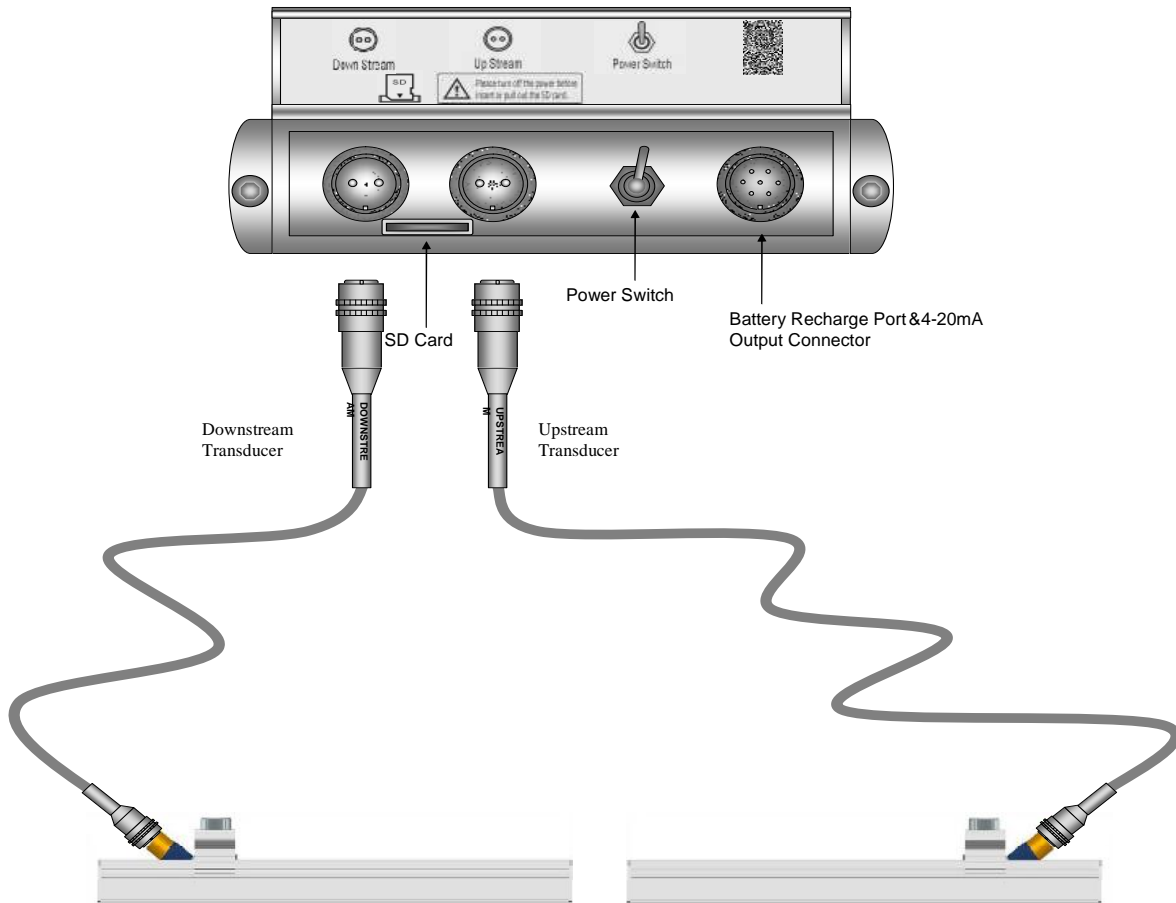
- ❑ 4 line LCD display with flow rate, totalizer & diagnostics.
- ❑ The flowmeter is designed for high accuracy $\pm 1.0\%$.
- ❑ Small sized (8.07" x 4.33" x 1.53") and lightweight (≈ 2.2 lb.)
- ❑ Wide range of fluid velocities 0 ~ ± 39 feet/sec. (0 ~ ± 12 m/s)
- ❑ Long-life Ni-MH battery for up to 16 hours of continuous operation.
- ❑ Transducer for pipe sizes ranging from 1" ~ 48" (25 to 1200 mm)
- ❑ Repeatability 0.2%
- ❑ Mounting include magnetic device, which can install on metal pipe without mounting belt.
- ❑ Data logger which records flowrate, date, total flow, signal condition, etc.
- ❑ Response time less than 1 second



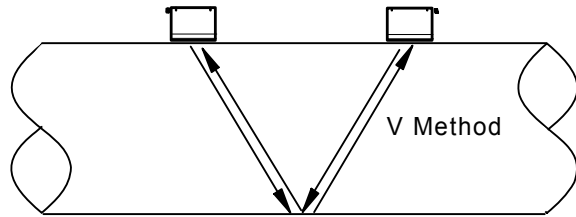
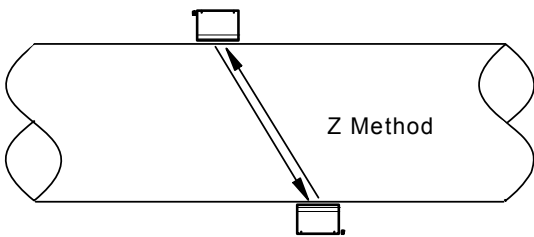
SPECIFICATIONS

- | | | | |
|-----------------------|---|-----------------------|---|
| ● Measuring Principle | : Transit time ultrasonic | ● Keypad | : 23 Key with tactile action |
| ● Transducer | : 1" ~ 48" (25 mm ~ 1200 mm) | ● Response Time | : Less than 1 second |
| ● STD Cable Length | : 16ft (5m) | ● Flow velocity | : 0 ~ 39 feet/sec. (0 ~ ± 12 m/s) |
| ● Pipe Material | : Carbon Steel, Stainless Steel, Ductile Iron
Copper, PVC, Aluminum, Asbestos
Fiberglass... etc. | ● Resolution | : 0.0003 feet/sec. (0.0001 m/s) |
| ● Liner Material | : Tar Epoxy, Rubber, Mortar, Polypropylene,
Ploystryene, Polyester, Ebonite,
Polyethylene, Teflon... etc. | ● Ambient Temperature | : -14 ~ 140 °F (-10 ~ 60 °C) |
| ● Display | : 4 Line LCD with backlight | ● Ambient Humidity | : 99% RH or Less |
| Flowrate | : 5 digit with decimal point | ● Built-in battery | : Ni-MH Battery |
| Totalizer | : 8 digit, Forward, Reverse & Net values. | ● Operation Time | : > 16 Hours |
| Engineering Units | : M ³ , Liter, US Gallon, Imperial Gallon,
Million Gallon, Cubic Feet, US Barrels,
Imperial Barrels, Oil Barrel. | ● Charger | : 90 ~ 260V _{AC} 50/60 Hz, 8-12 Hr charging |
| Time Units | : Second, Minute, Hour, Day. | ● Data Storage | : SD Card (2GB), Max 512 files Polystryal,
5~60 seconds Interval
Including Software to download logged data
from SD card to PC |
| Other Parameter | : Velocity, Date, Time, Signal condition. | ● Output | : Analogue output: 4-20mA, Max 750 Ohm |
| ● Accuracy | : $\pm 1\%$ of reading | ● Medium Temp. | : -10 ~ 80°C (Standard) |
| ● Repeatability | : $\pm 0.2\%$ of reading | ● Dimension | : 8.07" x 4.33" x 1.53" (20.5 x 11 x 3.9 cm) |
| | | ● Weight | : 2.2lb (1.0 kg) |
| | | ● Enclosure | : Converter : IP65
Sensor : IP68 (Submersible) |

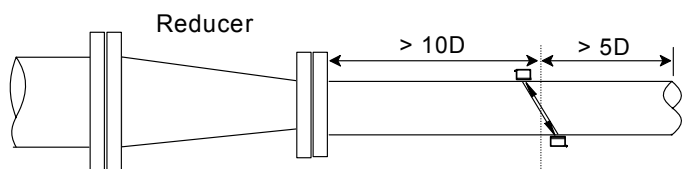
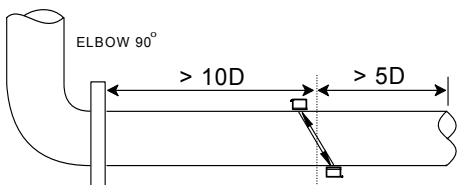
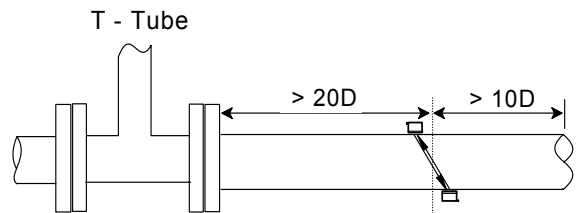
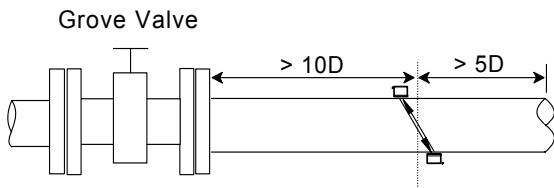
WIRING FOR ULTRASONIC FLOWMETER



INSTALLATION



STRAIGHT RUN PIPING REQUIREMENT








**** Please contact your local Calstrument application engineer**

You also need to provide the following information:

Type of Fluid	Please provide the name of your fluid, including operating density and viscosity
Line Size	Nominal pipe size and sensor connection type (insertion, clamp, etc..)
Process Pressure and Temperature	We will calibrate your flowmeter as close to your operating conditions as possible
Type of Electronics	Output and installation type (compact, wall mount, panel mount, etc..)
Pipe Material	Please provide the name of your pipe material (Copper, PVC, black iron, etc.)

➤ SCOPE OF DELIVERY

Transmitter	Transducers
	
Accessories	Documents
 <p>Carrying Case</p>  <p>Cables</p>  <p>Signal Cable</p>  <p>Software</p>  <p>Pipe Straps</p>  <p>Coupling compound</p>  <p>Charger</p>	 <ol style="list-style-type: none"> 1. Instruction Manual 2. Packing List 3. Factory Calibration Factor