

Handheld Ultrasonic Flow Meter FM-2000H

GENERAL

FM-2000H series is a portable transit-time ultrasonic flowmeter with clamp-on transducers for non-invasive liquid measurement. Our microprocessor based, user friendly, field programmable flow measurement technique allows no interruption of the process flow and has low installation costs.

FEATURES

- ❑ 4 line LCD display with flowrate, totalizer & signal condition.
- ❑ The flowmeter is designed for high accuracy $\pm 1.0\%$.
- ❑ Small sized (210 * 90 * 30mm) and light - weight (500 g)
- ❑ Wide range ,Velocities (0.01 ~ ± 32 m/s).
- ❑ Ni-MH Battery life for up to 12 hours continuous operation.
- ❑ Transducers for pipe sizes of 15 to 6000 mm.
- ❑ High accuracy of $\pm 0.5\%$ of reading (or $\pm 0.2\%$ of reading)
- ❑ Transducers include magnet 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



SPECIFICATION

- | | | | |
|-----------------------|--|-----------------------|--|
| ● Measuring Principle | : Transit time Ultrasonics | ● Keypad | : 18 Key with tactile action |
| ● Transducers | : TS-2 : 15 mm ~ 100 mm (1/2" ~ 4")
: TM-1 : 50 mm ~ 700 mm (2" ~ 28")
: TL-1 : 300 mm ~ 6000 mm (12" ~ 240")
: TS-2-HT : 15 mm ~ 100 mm (1/2" ~ 4")
: TM-1-HT : 50 mm ~ 700 mm (2" ~ 28") | ● Response Time | : Less than 1 second |
| ● Pipe Material | : Cast Iron, Stainless Steel, Ductile Iron
Copper, PVC, Aluminum, Asbestos
Fiberglass... etc. | ● Flow velocity | : 0.01 ~ ± 32 m/s |
| ● Liner Material | : Tar Epoxy, Rubber, Mortar, Polypropylene,
Polystyrene, Polyethylene, Polyester, Ebonite,
Polyethylene, Teflon... etc. | ● Resolution | : 0.0001 m/s |
| ● Display | : 4 Line LCD with illumination.
Flowrate : 5 digit with decimal point
Totalizer : 8 digit, Forward, Reverse & Net values.
Engineer Unit : M3, Liter, US Gallon, Imperial Gallon,
Million Gallon, Cubic Feet, US Barrels,
Imperial Barrels, Oil Barrel.
Time Unit : Second, Minute, Hour, Day.
Other : Velocity, Date, Time, Signal condition. | ● Ambient Temperature | : -20 ~ +50 °C |
| ● Accuracy | : $\pm 1\% \sim \pm 2\%$ of reading (0.5 ~ 30 m/s) | ● Ambient Humidity | : 90% RH or Less |
| ● Repeatability | : $\pm 0.2\%$ of reading | ● Built-in battery | : Ni-MH Battery |
| | | ● Operation Time | : > 12 Hours |
| | | ● Charger | : 90 ~ 260Vac 50/60 Hz, 8-12 Hr charging |
| | | ● Data Storage | : Operation parameters and totalization
data are stored by EEPROM for more
than 10 years |
| | | ● Operation Time | : > 10 Hours |
| | | ● Charger | : 90 ~ 260Vac 50/60 Hz, 8-12 Hour charging |
| | | ● IP Converter | : IP65 |
| | | ● IP Sensor | : IP68 (Submersible) |
| | | ● Alarm | : High/Low with buzzer |
| | | ● Power consumption | : Less than 2W |
| | | ● Dimension | : 210 * 90 * 30 mm |
| | | ● Weight | : 0.50 Kg |

TRANSDUCER SPECIFICATION

Standard-Transducers

Fluid Temperature : -30 ~ +90 °C

Model	TS-2 (Small Size)	TM-1 (Medium Size)	TL-1 (Large Size)
Pipe Size	DN15-100mm	DN50-700mm	DN300-6000mm
A*B*C	45mm*23mm*25mm	64mm*32mm*35mm	98mm*45mm*49mm



High Temperature Transducers

Fluid Temperature : -30 ~ +160 °C

Model	TS-2-HT (Small Size)	TM-1-HT (Medium)
Pipe Size	DN15-100mm	DN50-700mm



ACCESSORY (standard package)



Aluminum Case



Silicone grease

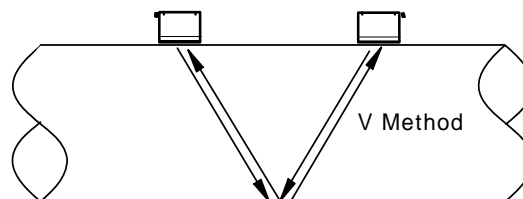
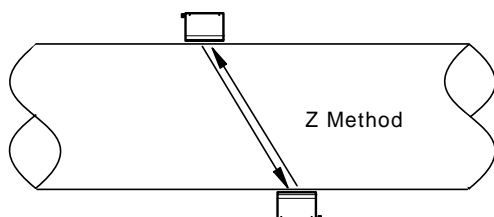


Mounting Belt



Measuring Tape

INSTALLATION



STRAIGHT RUN PIPING REQUIREMENT

