



ALSONIC-EG

Ultrasonic Thermal Energy Meter Model Alsonic-EG

GENERAL

Alsonic-Energy meters feature transit-time ultrasonic flow measurement with two PT 100 temperature sensors or customer-supplied RTD sensors for calculating total and instantaneous energy consumption. Flow measurement may be achieved via clamp-on, spool piece, or insertion-type sensors. Our microprocessor based, user friendly field programmable flow measurement technique creates no interruption of the process flow and has low installation costs.

FEATURES

- ❑ Measures energy consumption rate and total
- ❑ Compact or wall mount version
- ❑ Proven ultrasonic technology for flow measurement and PT 100 for temperature
- ❑ Clamp-on, spool piece or insertion mounting for flow measurement
- ❑ Wide range velocities - 0.3 ~ ±105 feet/sec (0.1 ~ ±32 m/s)
- ❑ Transducers for pipe sizes ranging from ½" ~ 240" (15 ~ 6000 mm)
- ❑ Excellent accuracy - ±0.5% of reading.
- ❑ RS485 and Modbus communication protocols available
- ❑ 4-20 mA and pulse outputs with available relays and alarms
- ❑ Data logger function - includes time & date, totalizer, diagnostics
- ❑ Response time less than 1 second
- ❑ NIST traceable calibration certificate

SPECIFICATION

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|-------------------------|--|---------------------|--|
| ● Flow measurement | : Transit time ultrasonic method | ● Display | : LCD with backlight, 2 x 20 characters |
| ● Transducer type | : clamp-on, spool piece, or insertion | ● Keypad | : 4 x 4 tactile-feedback membrane keypad
Displays energy rate, total consumption, temperature, instantaneous flow rate, accumulated flow rate, velocity, time |
| ● Temperature measure | : Platinum 100 RTDs | ● Mounting | : wall mounting or integral |
| ● Pipe Size | : ½"-240" (25-6000mm) | ● Max. Cable Length | : 500' (150 m) |
| ● Pipe Material | : Cast Iron, Stainless Steel, Ductile Iron
Copper, PVC, Aluminum, Asbestos
Fiberglass... etc. | ● Power | : ≤ 2W |
| ● Liner Material | : Tar Epoxy, Rubber, Mortar, Polypropylene,
Polystyrene, Polystyrene, Polyester, Ebonite,
Polyethylene, Teflon... etc. | ● Power Supply (AC) | : 90 ~ 260V _{AC} , 50/60 Hz |
| ● Flow Velocity | : 0.3 ~ ±105 feet/sec (0.1 ~ ±32 m/s) | ● Power Supply (DC) | : 8~36 VDC |
| ● Resolution | : 0.0003 feet/sec (0.0001 m/s) | ● Data Storage | : Totalized data up 64 days
Time and corresponding flow rates of the last 64 times power on/off events |
| ● Liquid temperature | : -40 ~ 312 °F (-40 ~ 155 °C) | ● Signal outputs | : Manual or automatic flow loss consumption |
| ● Suspended solids | : <2%; particle size smaller than 75µm | ● Signal inputs | : Two RTD channels, and additional inputs |
| ● Engineering units | : Metric or English (US) | ● Response Time | : < 1 second |
| ● Accuracy | : ± 1%-± 2% of reading from 1.5 - 100 feet/sec
± 0.5% of reading (online calibration) | ● Enclosure | : NEMA 4X (IP65) |
| ● Repeatability | : ±0.5% of reading | ● Sensor | : IP68(Submersible) |
| ● Digital communication | : Isolated RS 485, MODBUS, GPRS/GSM | ● Weight | : 4 lb (2 kg) wall mount, 2 lb (1 kg) integral |
| ● Measurement period | : 0 to 99s | | |
| ● Ambient Temperature | : -4 ~ 122 °F (-20 ~ 50 °C) | | |



