

# Portable Transit Time Flow Meter

# Pulsar PTFM 6.1

Whether you need new flow measurement or to prove that existing systems are performing properly, the PTFM 6.1 provides accurate, non-invasive flow measurement in the most challenging industrial environments and applications. With new and more powerful signal processing hardware, rugged IP67 design, and three interchangeable transducer sizes, the PTFM 6.1 is the right choice for on-the-go or long-term flow measurement applications.

#### **FEATURES**

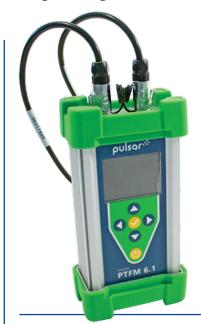
- Ultrasonic transducers operate on the exterior of metal or plastic pipes
- · Non-intrusive installation
- Simple 5-button keypad to configure and start up in minutes
- Built-in data logger with Greyline Logger Software for Windows included
- · Rugged IP67 field design
- Integrated USB-C port (USB-C flash drive included)
- Rechargeable lithium battery up to 15 hours of continuous operation
- · Color LCD 2.8 inch display

#### **EASY START-UP & VALIDATION**

Use the 5-button keypad to enter the transducer type, pipe material and OD, wall thickness, and fluid type. The PTFM 6.1 will display the correct transducer separation distance to secure pipe clamps and align the mounting brackets. The PTFM 6.1 will immediately begin to display totalized flow while on-screen diagnostics and signal waveforms provide instant validation that the meter is performing accurately.

## **COMMON APPLICATIONS**

- Treated Water
- · Raw Water
- · Cooling Water
- Chemicals
- Hvdraulic Oil
- · Demineralized Water
- Diesel & Fuel Oils



## **STANDARD KIT INCLUDES:**

- · PTFM Portable Ultrasonic Transit Time Flow Meter
- Pair of SE16B Transducers

• Pair of Transducer Cables – 12'

Pair of Mounting Brackets

Sensor alignment guide

 Installation hardware – Super Lube®, sanding block, mylar sleeve, Sharpie®

 Carry Case with protective molded foam

Wall Charger

· Calibration certificate

· Technical support

2-Year warranty



### **CALL GEOTECH TODAY (800) 833-7958**

Geotech Environmental Equipment, Inc.

2650 East 40th Avenue • Denver, Colorado 80205 (303) 320-4764 • FAX (303) 322-7242 email: sales@geotechenv.com • website: www.geotechenv.com



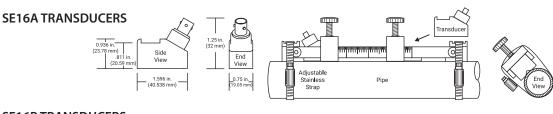
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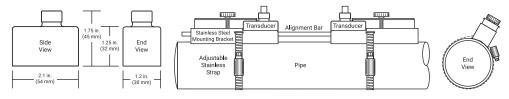
### ADDITIONAL SENSOR CONFIGURATIONS

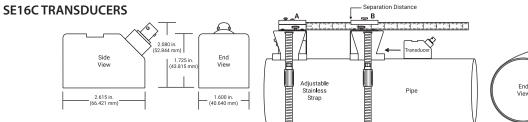
Sensor Configuration	Code:
SE16A — 1 pair, recommended for 0.5 to 2 inch (15 to 50 mm) nominal pipes, suitable for 2 to 6 inch (50 to 150 mm) nominal pipes. Includes TMK-A1 mounting hardware.	А
<b>SE16B</b> (Standard) — 1 pair, recommended for 2 to 10 inch (50 to 250 mm) nominal pipes, suitable for 10 to 48 inch (250 to 1,200 mm) nominal pipes. Includes TMK-B1 mounting hardware.	В
SE16C — 1 pair, recommended for 12 to 48 inch (300 to 1,200 mm) nominal pipes, suitable for 4 to 12 inch (100 to 300 mm) nominal pipes. Includes TMK-C2 mounting hardware.	С
SE16A & SE16B	D
SE16B & SE16C	Е
SE16A & SE16C	F
SE16A, SE16B & SE16C	G
Model PTFM 6.1 –	

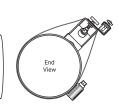
SE16A, SE16B, & SE16C TRANSDUCERS & MOUNTING



#### **SE16B TRANSDUCERS**







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## Portable Transit Time Flow Meter

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#### **SPECIFICATIONS**

**General Specifications** 

**Operating Parameters:** For clean fluids in full pipes, with typically less than 2% by-volume concentration of solids or bubbles. Also suitable for wastewater or sludge flows with

low solids concentration.

Configuration: Built-in 5-button keypad interface with English, French, and Spanish menu language selection

IP67 when transducer cables connected, aluminum enclosure with silicone end covers **Electronics Enclosure:** 

Flow Velocity Range: 0.03 m/s to 12.2 m/s ( $\pm 0.1$  to 40 ft/s)

•  $\pm 1\%$  of reading or  $\pm 0.0046$  m/s ( $\pm 0.015$  ft/s), whichever is greater Accuracy:

• Repeatability & Linearity: ±0.25%

**Power Input:** • Built-in rechargeable lithium polymer battery for up to 15 hours continuous operation

• External mains to USB-C charger with 100-240V AC, 50-60Hz, 0.6A input; and 5.0V DC, 3A, 15W output

Display: Color TFT LCD display, IPS type, 2.8" screen size, 320 x 240 resolution, 500 NITS brightness, super wide view

Outputs: Log files, daily log files, parameter settings files, and waveform capture files via USB-C flash drive (included)

Data Logger: 12 million point capacity, configurable for velocity or flow rate, date and time stamped, configurable format for Greyline Logger Software (LG2) or CSV,

available intervals of 10 s, 30 s, 1 min., 2 min., 5 min., 10 min., 15 min., 30 min., and 1 hr.

PC Software: Free Greyline Logger Software for Windows. For display, manipulation, analysis, and exporting of data.

Operating Temp. (Electronics):  $-20^{\circ}$ C to  $+60^{\circ}$ C ( $-5^{\circ}$ F to  $+140^{\circ}$ F)

IP67, with protective molded foam, with room for all transducer sizes and installation hardware Carry Case:

Language Selection: English, French, Spanish

Approvals:

Approximate Shipping Weight: 5.5 kg (12 lb.)

**Transducer Specifications** 

Pipe Diameter, Nominal: SE16A: Recommended for 15 mm to 50 mm (0.5 in. to 2 in.); Suitable for 50 mm to 150 mm (2 in. to 6 in.)

SE16B: Recommended for 50 mm to 250 mm (2 in. to 10 in.), Suitable for 250 mm to 1,200 mm (10 in. to 48 in.)

SE16C: Recommended for 300 mm to 1,200 mm (12 in. to 48 in.), Suitable for 100 mm to 300 mm (4 in. to 12 in.)

Pipe Materials: Any metal or plastic sonic conducting material including carbon steel, stainless steel, ductile iron, concrete-lined ductile iron, cast iron, PVC, HDPE, PVDF,

fiberglass, copper, brass, aluminum, and pipes with bonded liners including epoxy, rubber, and Teflon

Flow Velocity:  $\pm 0.03$  m/s to 12.2 m/s ( $\pm 0.1$  ft/s to 40 ft/s) typical

**Operating Frequency:** SE16A: 2.56 MHz

SE16B: 1.28 MHz SE16C: 640 kHz

**Operating Temperature:**  $-40^{\circ}$ C to  $+150^{\circ}$ C ( $-40^{\circ}$ F to  $+300^{\circ}$ F)

**Transducer Mounting Kit:** SE16A: Includes stainless steel track with pipe clamps, built-in ruler, and coupling tape.

SE16B: Includes set of stainless steel transducer brackets, clamps, alignment bar, and coupling tape.

SE16C: Includes set of stainless steel transducer brackets, clamps, alignment bar with built-in ruler, and coupling tape.

Transducer Cable: 1 pair, triaxial, 3.4 m (12 ft.) with waterproof plug & socket connector for electronics, and BNC connector with seal jacket for transducers

**Ingress Protection:** IP65 with seal jackets installed. IP67 when installed with Super Lube synthetic grease inside BNC connectors and seal jackets.

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