

# PDFM 6.1

## Technical Specifications:

The PDFM 6.1 is a clamp-on portable Doppler flow meter for mediums with the presence of suspended solids or undissolved gasses. It can be used for immediate performance evaluation, or deployed for longer term flow studies. Measurement can be taken in minutes from the outside of the pipe. No shutdown or flow stoppage required



### GENERAL SPECIFICATIONS

|                                |                                                                                                                                                                                                                                                   |        |        |         |         |         |         |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|---------|---------|---------|---------|
| Operating Parameters:          | Liquids containing suspended solids or bubbles minimum size of 100 microns, minimum concentration 75 ppm                                                                                                                                          |        |        |         |         |         |         |
| Flow Rate Range:               | ±0.03 m/s to 12.2 m/s (±0.1 ft/s to 40 ft/s) in most applications                                                                                                                                                                                 |        |        |         |         |         |         |
| Pipe Size:                     | Ultrasonic sensor mounts on any pipe from 12.7 mm to 4.6 m ID (0.5 in to 15 ft)                                                                                                                                                                   |        |        |         |         |         |         |
| Display:                       | Color TFT LCD display, IPS type, 2.8" screen size, 320 x 240 resolution, 500 NITS brightness, super wide view                                                                                                                                     |        |        |         |         |         |         |
| Power Input:                   | <ul style="list-style-type: none"><li>Built-in rechargeable lithium polymer battery for up to 15 hours continuous operation</li><li>External mains to USB-C charger with 100-240V AC, 50-60Hz, 0.6A input; and 5.0V DC, 3A, 15W output</li></ul>  |        |        |         |         |         |         |
| 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 |        |        |         |         |         |         |
| Extended Logging:              | Can be deployed in sleep-logging mode for extended battery duration.                                                                                                                                                                              |        |        |         |         |         |         |
|                                | Logging Interval                                                                                                                                                                                                                                  | 30 sec | 1 min  | 2 min   | 5 min   | 10 min  | 15 min  |
|                                | Est. Battery Duration                                                                                                                                                                                                                             | 5 days | 8 days | 15 days | 30 days | 45 days | 60 days |
| PC Software:                   | Free Greyline Logger Software for Windows. For display, manipulation, analysis, and exporting of data.                                                                                                                                            |        |        |         |         |         |         |
| Operating Temp. (Electronics): | -20 °C to +60 °C (-5 °F to +140 °F)                                                                                                                                                                                                               |        |        |         |         |         |         |
| Electronics Enclosure:         | IP67 when transducer cables connected. IP65 when transducers cables not connected. Aluminum enclosure with silicone protective end covers.                                                                                                        |        |        |         |         |         |         |
| Carry Case:                    | IP67, with protective molded foam with room for transducer and installation hardware                                                                                                                                                              |        |        |         |         |         |         |
| Accuracy:                      | ±2% of reading or 0.03 m/s (0.1 ft/s), whichever is greater. Requires solids or bubbles minimum size of 100 microns, minimum concentration 75 ppm. Repeatability: ±0.1%, Linearity ±0.5%                                                          |        |        |         |         |         |         |
| Configuration:                 | Built-in 5-button keypad interface with English, French, and Spanish menu language selection. Optional user-configured password protection.                                                                                                       |        |        |         |         |         |         |
| Approvals:                     | CE                                                                                                                                                                                                                                                |        |        |         |         |         |         |

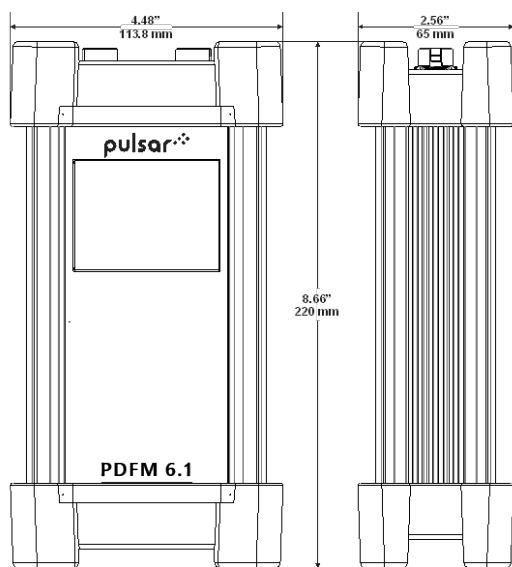
### TRANSDUCER SPECIFICATIONS

|                                |                                                                                                                                                                                                                                                                                    |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Standard Model PSE4-A2:</b> | Clamp-on, single-head ultrasonic for pipes from 12.7 mm to 4.6 m ID (0.5 in to 15 ft) with 3.4 m (12 ft) shielded dual-coaxial cable and latching connector                                                                                                                        |
| <b>Sensor Mounting Kit:</b>    | Stainless steel pipe clamp and 3.0 fl oz coupling compound                                                                                                                                                                                                                         |
| <b>Pipe Materials:</b>         | Steel, stainless steel, cast iron, ductile iron, concrete-lined ductile iron, PVC, HDPE, or any contiguous pipe material that conducts sound, including lined pipes with a liner bonded to the pipe wall. Avoid pipes with loose insertion liners and pipe walls that contain air. |
| <b>Operating Temperature:</b>  | -40 °C to +150 °C (-40 °F to +300 °F)                                                                                                                                                                                                                                              |
| <b>Ingress Protection</b>      | IP68, can withstand 10psi (approx. 23 ft or 7 m of H2O) for 24 hours                                                                                                                                                                                                               |

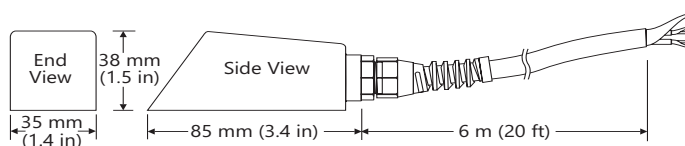
## POPULAR OPTIONS

**Sensor Cable:** 15.2 m (50 ft) sensor cable extension, shielded, with connectors

**Sensor Mounting:** Extra silicone coupling compound. Additional stainless steel pipe clamps



Enclosure



SE4 Ultrasonic Doppler Sensor

## Delivering the Measure of Possibility

Pulsar Measurement offers worldwide professional support for all of our products, and our network of global partners all offer full support and training. Our facilities in Malvern, UK and Largo, USA are home to technical support teams who are always available to answer your call or attend your site when required. Our global presence, with direct offices in the UK, USA, Canada, and Malaysia, allows us to create close relationships with our customers and provide service, support, training, and information throughout the lifetime of your product.

By taking a step forward in echo processing technology, Pulsar Measurement addresses applications previously thought to be beyond the scope of ultrasonic measurement. This technology improves signal processing at the transducer head which has made it possible to increase resistance to electrical noise, enabling the transducer to 'zone in' on the true echo.

For more information, please visit our website:

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