

## Acoustic Current Meter for Moored Profilers

*Compact, cost-effective, high-accuracy meter*

### *Enhanced Design, Specifications, Performance*

The Falmouth Scientific **ACM-PLUS-MP** Moored Profiler Acoustic Current Meter delivers extremely precise three dimensional velocity measurements. This specialized version of the **ACM-PLUS** Current Meter incorporates a specifically designed velocity head which is mounted separate from the electronics to make readings less sensitive to currents caused by profiler equipment movement.

The instrument uses the most accurate and stable current measurement techniques available today and is configured with standard features that are options on competitive instruments such as **extended on-board data memory, fast download capability, high accuracy real-time clock, and high speed data sampling.**



FSI ACM-PLUS-MP

### FEATURES

- True cosine response velocity measurement
- Accurate velocity measurement with excellent low-velocity resolution
- Electronic magneto-resistive compass with 2-axis tilt sensor
- **Fast Data Sampling up to 10 Hz**
- Water Temperature measurement
- Simultaneous Real-time output and logging capability; **Fast Data Download**
- Long-term data logging to **2 Gigabyte internal flash memory**
- ASCII serial data output via RS-232 (Optional RS-485)
- Built-in **High Accuracy** real-time clock with on/off power control
- 7000 Meter Standard Operating Depth

# SPECIFICATIONS

## Sensors

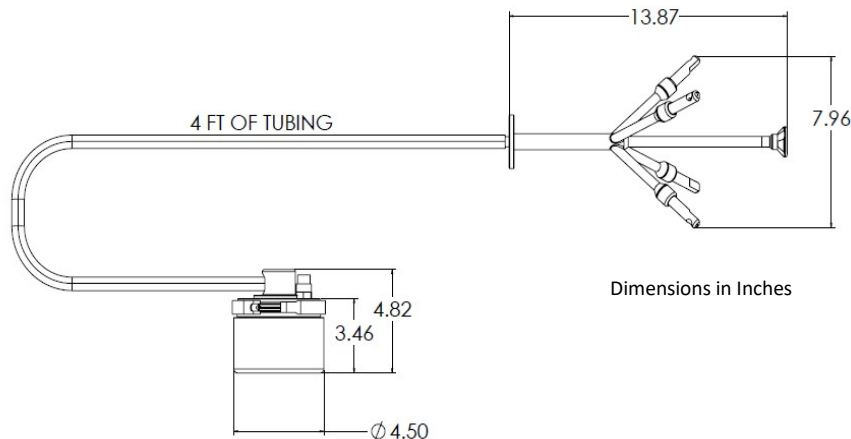
Parameter	Type	Range	Accuracy	Resolution
Path Velocity	Acoustic	0 to 600 cm/s	$\leq 1\% \pm 0.5 \text{ cm/s}$	0.01 cm/s
Compass	3 Axis Magnetometer	0 to 360°	$\pm 2^\circ$	0.01°
Tilt	2 Axis Accelerometer	0 to 30°	0.5°	0.01°
Temperature	Semiconductor	-2 to 35°C	0.5°C	0.01°C

## Instrument

<b>External Power:</b>	8 to 32 VDC
<b>Current Draw:</b>	15 mA at 1 Hz sample rate; 80 mA at 10 Hz sample rate; 150 uAmp sleep
<b>Internal Memory:</b>	<b>2.0GB Standard</b>
<b>Sample Rate:</b>	<b>10 Hz Maximum</b>
<b>Averaging Period:</b>	<b>User Selectable up to 59 Min: 59 Sec</b>
<b>Real Time Clock:</b>	Programmable <b>High Accuracy</b> Sampling/Low-power Mode
<b>Sampling Modes:</b>	Continuous, Interval, and Delayed Start (continuous or interval)
<b>Clock Stability:</b>	+/- 2ppm (0-40 degrees C); +/-4ppm (-40 degrees C to +85 degrees C)
<b>Depth Rating/Physical Material:</b>	7000 Meter Titanium Housing

**PLEASE CONTACT FSI FOR APPLICATION INFORMATION**

*Specifications Subject to Change without Notice*



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**Falmouth Scientific, Inc.**

33 Jonathan Bourne Dr, PO Box 326, Pocasset, MA 02559

[sales@falmouth.com](mailto:sales@falmouth.com) • Tel: 508-564-7640 • Fax: 508-564-7643 • [www.falmouth.com](http://www.falmouth.com)