

Electro-Magnetic Current Meter **INFINITY-EM**

AEM-USB

VEL

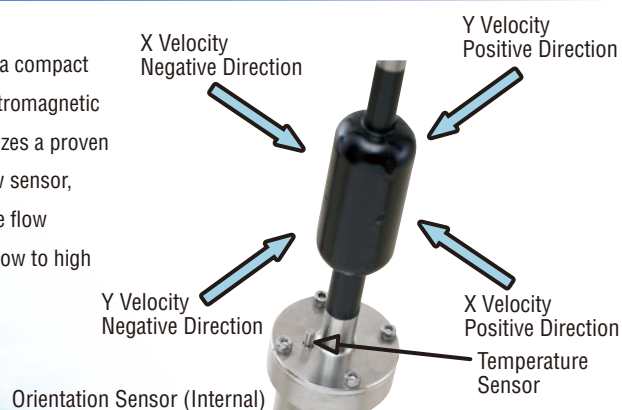
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Overview

The INFINITY-EM is a compact and lightweight electromagnetic current meter. It utilizes a proven electromagnetic flow sensor, allowing for accurate flow measurement from low to high flow velocities.



Sensor Specifications

Parameter	Velocity*	Orientation	Temperature
Sensor Type	2-axis Electromagnetic Induction	Hall Element	Thermistor
Range	0 to $\pm 500 \text{ cm s}^{-1}$	0 to 360°	-3 to 45°C
Resolution	0.02 cm s^{-1}	0.01°	0.001°C
Accuracy	$\pm 1 \text{ cm s}^{-1}$ or $\pm 2\%$ *	$\pm 2^\circ$	$\pm 0.02^\circ\text{C}$ (3 to 31°C)

*Velocity calibration range is 0 to $\pm 60 \text{ cm s}^{-1}$.

Logger Specifications

Memory Type	microSD card (waterproof high-speed spec)
Memory Capacity	1GB
Mode	Continuous Mode / Burst Mode
Interval	0.1 to 600 sec
Burst	1 to 1,440 min
Number of Samples	1 to 18,000
Battery	CR-V3 Lithium Battery / 3.3 Ah (Up to 2) AA Alkaline Battery (Up to 4) - Requires AA adapter kit AA Lithium Battery (Up to 4) - Requires AA adapter kit
Communication Method	USB Communication (Compliant with Ver. 2.0, Equivalent to Ver. 1.1)
Housing Material	Titanium Grade 2
Dimensions	$\phi 42 \text{ mm}$ (Flange part $\phi 54 \text{ mm}$) \times 455 mm
Weight	Approx. 1.0 kg in air / 0.6 kg in water
Pressure Resistance	Equivalent to 1,000 m depth
Tensile Strength	Approx. 2 kN (equivalent to 200 kg)

*Please use the flow velocity sensor in an upward-facing position.

Drawing

