

Logger version 2-D electro-magnetic current meter

INFINITY-EM

AEM-USB

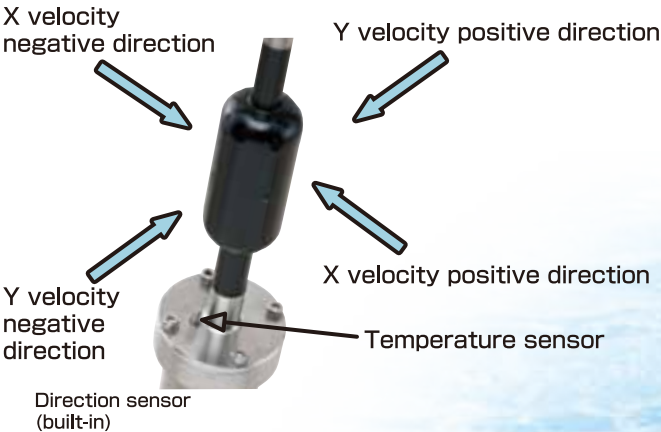
Velo
city

Direc
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Description

Infinity EM is an autonomously deployable EM (electro-magnetic) current meter with a data logger. Due to the principle, the instrument provides high accurate 2-D current measurements in even low scatter fields, where ADVs (Acoustic Doppler Velocimeter) has a difficulty. The measurement range is wide from 0 to ± 500 cm. The instrument design is compact (1.0kg in air). *Infinity EM* allows you to measure current speeds virtually anywhere.



Sensor Specifications

Parameter	Velocity	Direction	Temperature
Principle	2-D electromagnetic velocity sensor	Hole element	Thermistor
Range	0 to ± 500 cm/s	0 to 360°	-3 to 45°C
Resolution	0.02cm/s	0.01°	0.001°C
Accuracy	± 1 cm/s or $\pm 2\%$	$\pm 2^\circ$	$\pm 0.02^\circ\text{C}$ (3 to 31°C)

Logger Specifications

Memory medium	miniSD card *waterproof & high speed type
Data capacity	1GB provided as standard
A/D convertor	16-bit digital conversion
Measuring mode	Continuous mode, Burst mode
Measuring interval	0.1 to 600 seconds
Burst sampling interval	1 to 1,440 minutes
No. of samples	1 to 18,000
Battery	CR-V3 lithium / 3.3Ah (two maximum)
Communication	USB 2.0 (Ver. 1.1 compatible)
Current consumption	90mA
Housing material	Titanium (grade 2)
Dimensions	$\phi 42$ mm(Flange area: $\phi 54$ mm) $\times 455$ mm
Weight	Approx. 1.0kg in air, 0.6kg in water
Depth rating	1,000m depth equivalent
Tensile strength	Approx. 2kN (200kg equivalent)

*Use the sensor upward. When it is deployed.

Drawing

