

## Electro-magnetic current meter

# INFINITY-EM

AEM-USB/  
CAR/CAD



On the fly current measurement



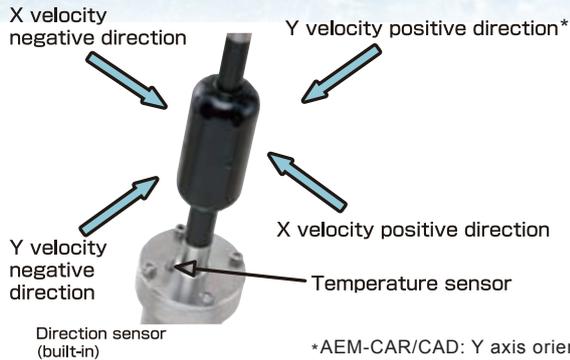
- High-speed communication
- Compact design
- Beep sound for operation verification
- Common-use software (easy device settings menu)



JFE Advantech Co., Ltd.

# INFINITY-EM

AEM-USB/CAR/CAD



## Description

The INFINITY-EM is a compact, light-weight electromagnetic current meter.

The electromagnetic velocity sensor is a time-proven velocity sensor and allows for accurate measurements in different kind of streams (from weak to strong flows).

\*AEM-CAR/CAD: Y axis orientation is the opposite of the direction shown in the picture.

## Sensor specifications

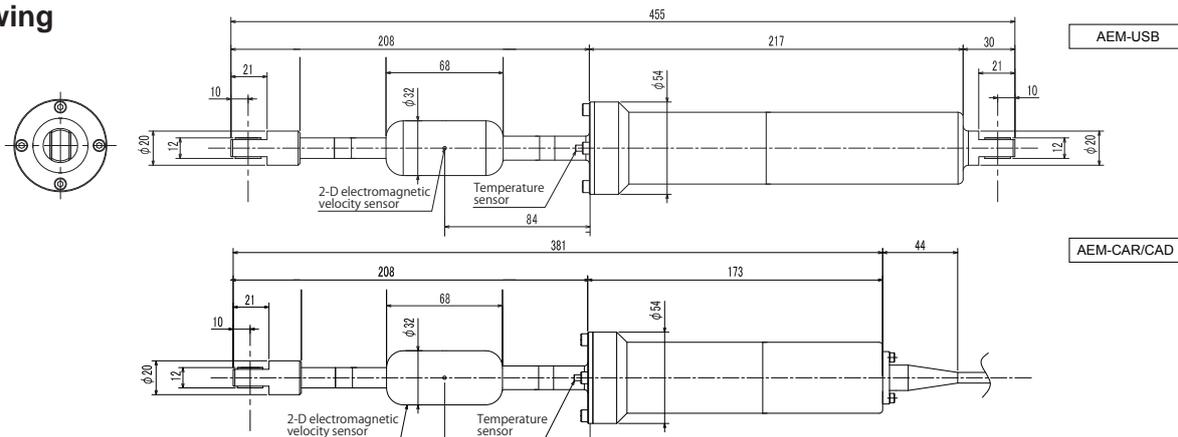
Model	AEM-USB/CAR/CAD		
Parameter	Velocity	Direction	Temperature
Principle	2-D electromagnetic velocity sensor	Hole element	Thermistor
Range	0 to $\pm 500 \text{ cm s}^{-1}$	0 to $360^\circ$	-3 to $45^\circ \text{C}$
Resolution	$0.02 \text{ cm s}^{-1}$	$0.01^\circ$	$0.001^\circ \text{C}$
Accuracy	$\pm 1 \text{ cm s}^{-1}$ or $\pm 2\%$ (0 to $\pm 60 \text{ cm s}^{-1}$ )	$\pm 2^\circ$	$\pm 0.02^\circ \text{C}$ (3 to $31^\circ \text{C}$ )

\*AEM-CAR/CAD:  $\pm 1 \text{ cm s}^{-1}$  or  $\pm 2\%$  (0 to  $\pm 100 \text{ cm s}^{-1}$ )

## Instrument specifications

Model	Data logger AEM-USB	Cable type AEM-CAR/CAD
Memory medium	1 GB miniSD card	—
Battery	CR-V3 3.3 Ah Lithium battery (maximum 2 batteries)	—
Operating voltage	—	DC 12 to 24 V
Communication	USB 2.0 (ver 1.1 compatible)	CAR: RS-232C, CAD: RS-485
A/D converter	16 bit digital conversion	
Power consumption	90 mA	50 mA
Dimensions	$\Phi 42$ (Flange area: $\Phi 54 \text{ mm}$ ) $\times 455 \text{ mm}$	$\Phi 42$ (Flange area: $\Phi 54 \text{ mm}$ ) $\times 381 \text{ mm}$ (connector & cable not included)
Weight	Approx. 1.0 kg in air, 0.6 kg in water	Approx. 1.0 kg in air, 0.8 kg in water (connector & cable not included)
Depth rating	1,000 m depth equivalent	
Materials	Titanium (grade 2)	

## Drawing



※ Dimensions are in mm. ※ All specifications on this leaflet are subject to change without notice.

**JFE Advantech Co., Ltd.**

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