

Handheld 1-D electro-magnetic current meter for rivers

AEM1-D

■Description

AEM1-D is a 1-D electro-magnetic (EM) current meter for the flow measurements in rivers, streams and various waterways. The measurement range is 0 to 5m/sec. The EM sensor can accurately measure water speeds at a shallow depth of 3cm. The display unit has a 2MB flash memory so that the data are saved with calendar information (up to 255 station data). In comparison with conventional propeller-type current meter, *AEM1-D* is robust and extremely easy to be operated and maintained.



■Sensor Specifications

Principle	Electromagnetic induction
Measuring direction	1-D
Measuring range	0 to 5m/s
Resolution	0,002m/s
Accuracy	Measured value $\pm 2\%$ or $\pm 0,005\text{m/s}$
Minimum measured depth	3cm
Dimensions	$\phi 30\text{mm} \times 65\text{mm}$
Cable length	10m (Maximum 50m extension possible)
Depth rating	30m depth equivalent

■Display Area Specifications

Display	LCD, 20 characters, 2 lines
Displayed information	Velocity (m/s), time, Block No.
Average time	Selectable from 1, 5, 10, 20, 40, 60sec
Data capacity	2MB, recordable up to 255 blocks
Logged information	Block number, measured time, velocity, average time
External output	RS-232C output 1. Memory data transfer 2. Real-time data transfer
Power	Size C dry alkaline battery (Qty 4) (For approx. 20 hours of use)
Dimensions	W240mm \times D100mm \times H95mm
Weight	Approx. 1.1kg
Material	ABS resin
Waterproof level	JIS4 class equivalent

■Measurement using extension support bar



■Measurement using vane

