Vectrino





Sample 3D velocity at up to 200 Hz for use in hydraulic models and laboratory flumes

This instrument is no longer available.

Highlights

Applications

Technical specifications

Up or Down

Pressure:

→ Water velocity measurements	
Maximum profiling range	N/A
Distance from probe	0.05 m, 0.1 m (field probe)
Sampling volume diameter	6 mm
Sampling volume height (user- selectable)	3-15 mm
Cell size	N/A
Velocity range*	±0.03, 0.1, 0.3, 1, 2.5, 4 m/s (software-selectable)
Adaptive ping interval	N/A
Accuracy	±0.5% of measured value ±1 mm/s
Velocity precision	N/A
Sampling rate (output)	1-25 Hz (Std firmware),1-200 Hz (Plus firmware)
Internal sampling rate	N/A
 The velocity range is not the sa configuration software. 	me in the horizontal and vertical direction. Please refer to the
→ Distance measurements	
Minimum range	N/A
Maximum range	N/A
Cell size	N/A
Accuracy	N/A
Sampling rate	N/A
→ Echo intensity	
Acoustic frequency	10 MHz
Resolution	Linear scale
Dynamic range	25 dB
→ Sensors	
Temperature:	Thermistor embedded in probe
Temp. range	-4 to +32 °C
Temp. accuracy/resolution	1 °C/0.1 °C
Temp. time response	5 min
Compass:	N/A
Accuracy/resolution	N/A
Tilt:	N/A
Accuracy/resolution	N/A
Maximum tilt	N/A

N/A

N/A

→ Sensors	
Standard range	N/A
Accuracy/precision	N/A
→ Analog inputs	
No. of channels	N/A
Supply voltage to analog output devices	N/A
→ Data recording	
Capacity (standard):	N/A
Data record	N/A
→ Real-time clock	
Accuracy	N/A
Backup in absence of power	N/A
→ Data communications	
I/O	RS-232
Communication baud rate	300-115 200 Bd
Recorder download baud rate	N/A
User control	Handled via "Vectrino" software, ActiveX® function calls, or direct commands
Analog outputs	3 channels standard, one for each velocity component
Output range	0–5 V, scaling is user-selectable0
Synchronization	RS-485, start on sync, sample on sync,transmit on sync (Plus Firmware)
→ Connectors	
Bulkhead	MCBH-12-FS, bronze
Cable	PMCIL-12-MP – see also options below
→ Software	
Functions	Deployment planning, instrument configuration, data retrieval and conversion (for Windows $\ensuremath{\$}$)
→ Multi unit operation	
Software	Polysync
I/O	RS 232-USB support for devices with 1, 2, 4, and 8 serial ports
→ Power	
DC input	12-48 V DC
Maximum peak current	2.5 A at 12 V DC (user-selectable)
Max. consumption	1.5 W at 200 Hz
Typical consumption, 4 Hz	N/A
Sleep consumption	N/A
Transmit power	N/A

→ Batteries	
Battery capacity	N/A
New battery voltage	N/A
Data collection capacity	N/A
→ Environmental	
Operating temperature	-4 to +40 °C
Storage temperature	-15 to +60 °C
Vibration	IEC 60068-1/IEC60068-2-64
Depth rating	20 m
→ Materials	
Standard model	POM housing. Stainless steel (316) probe and fasteners
→ Dimensions	
Maximum diameter	66 mm
Maximum length	350 mm (housing only), 365 mm (fixed stem)
→ Weight	
Weight in air	1.2 kg (1.3 kg with field probe)
Weight in water	Neutral (0.1 kg with field probe)
→ Options	
4 hoam down looking probe or side to	poking probe. Fixed stem or 1 m flexible cable

4-beam down-looking probe or side-looking probe. Fixed stem or 1 m flexible cable

10, 20, 30 or 50 m cable with Impulse underwater connector

RS 232-USB converter (one-to-one, four-to-one or eight-to-one)

Standard or Vectrino Plus firmware

Combined transportation and storage case