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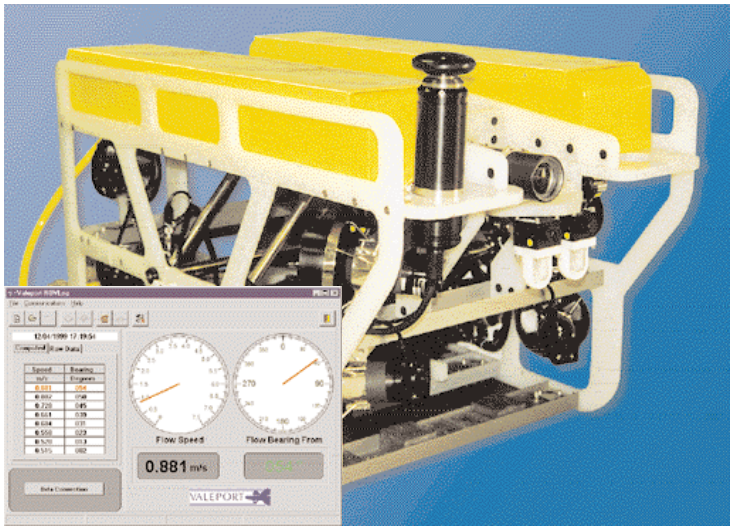
ROV Current Meter

Model 803



The Model 803 ROV Current Meter is a unique instrument, providing remotely operated vehicle (ROV) pilots with relative water velocity data in real time. It may be fitted to ROVs to provide actual through-the-water speeds, or fitted to a tether management system (TMS) to give a measurement of local flow conditions.

This instrument is the result of combining Valeport's proven current sensing technology with the knowledge and experience of some of the UK's leading ROV manufacturers and operators. The concept is simple—the Model 803 consists of a Valeport 2 axis electromagnetic flow sensor, with processing electronics capable of giving a variety of output formats for easy interface to almost any system.

The sensor should be mounted in clear flow on the ROV or TMS. When power is applied to the sensor, it measures the water velocity in 2 axes across the sensor surface. This data is updated at 1-second intervals to provide X and Y axis flow information: the X axis is flow across the vehicle, and the Y axis is flow into the vehicle. This data can either be taken into a separate logging package, or displayed and logged to a PC, using the ROVLog™ Windows™ software provided.

Available as a complete self-contained instrument, or with a separate sensor and electronics package, or even as an original manufacturer equipment (OEM) system, the Model 803 ROV Current Meter will appeal both to operators who wish to improve their existing vehicles, and to manufacturers who want to offer it as an additional parameter in the sensor package.

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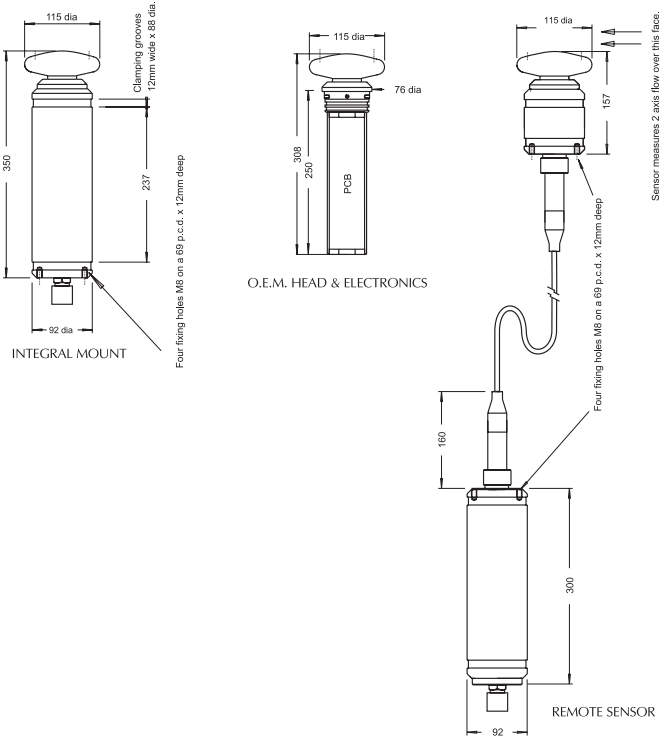
Features

- Real-time through-the-water velocity for: ROVs, autonomous underwater vehicles (AUVs), and TMSs
- Choice of output formats for easy integration
- Range of packaging options to suit all needs
- Latest electromagnetic sensor technology gives stable, accurate measurements
- Titanium and polymer construction: Lightweight design has minimal effect on vehicle balance
- Up to 10,000 ft (3000 m) depth rating



Specifications

Construction	
Sensor	Polyurethane with titanium mounting.
Electronics housing	Acetal for 3,281 ft / 1000 m depth rating, titanium for 10,000 ft / 3000 m depth rating.
Weight in water	1.1 lb / 0.5 kg (acetal), 7.7 lb / 3.5 kg (titanium); figures are for integral unit
Connector	8-way Subc™ onn.

Performance	
Units	Knots standard, option: m/s
Range	± 10 kts / ± 5 m/s
Accuracy	± 0.02 kts / 0.01 m/s + 1% reading
Resolution	0.01 kts / 0.001 m/s

Output Formats	
Analogue	-5v to +5v for each channel (0–5v or 0–10v optional)
Digital	RS232 or RS485 (internally set); 19200 baud (default), 8 data bits, 1 stop bit, no parity bits
String format	Kts: sxx.xx<tab>syy.yy<cr><lf> M/s: sx.xxx<tab>sy.yyy<cr><lf> Where: s = sign, + or - xx.xx or x.xxx = speed on X axis (including leading zero). yy.yy or y.yyy = speed on Y axis (including leading zero).
Update rate:	1Hz default
Power	7–29vDC, 2W nominal