



# Model 803 - ROV Current Meter



The MODEL 803 ROV Current Meter is a unique instrument providing ROV pilots with relative through water speed data, in real time. It can be fitted directly on the ROVs to provide vehicle through water speeds or fitted to the Tether Management System to give a measurement of local flow conditions. The selection of output options make interfacing straightforward and data can be displayed using ROVLog PC software that is supplied with the system. A Model 803 is supplied with a 4000m rated titanium housing as standard.

The Model 803 is an extremely durable, reliable method of measuring current speeds in a wide variety of underwater vehicle applications.



### Description

A Model 803 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 PC using the ROVLog PC software provided.

As standard the Model 803 is supplied as a complete self-contained instrument, but can optionally be configured with separate sensor and electronics packages, or even as an OEM system. The Model 803 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.

### Physical

Sensor:	11.5cm discus EM sensor, made from polyurethane with titanium mounting
Housing:	Titanium - 4000m depth rating
Dimensions:	76mmØ x 350mm length
Weight:	3.5kg (in water)
Connector:	8 way SubConn BH8M

### Performance

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

### Power

7 – 29V DC, 2W nominal.
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### Output Formats

Default settings are applied for update rate and output format as standard. Changes can be made to these settings via a Terminal program

Digital:	RS232 or RS485 (internally set). 19200 baud (default), 8 data bits, 1 stop bit, no parity bits.										
String format:	<table border="0"> <tr> <td>kts:</td> <td>sxx.xx&lt;tab&gt;sy.yy&lt;cr&gt;&lt;lf&gt;</td> </tr> <tr> <td>m/s:</td> <td>sx.xxx&lt;tab&gt;sy.yyy&lt;cr&gt;&lt;lf&gt;</td> </tr> <tr> <td>Where:</td> <td>s= sign, + or -</td> </tr> <tr> <td></td> <td>xx.xx or x.xxx = speed on X axis</td> </tr> <tr> <td></td> <td>yy.yy or y.yyy = speed on Y axis</td> </tr> </table>	kts:	sxx.xx<tab>sy.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		yy.yy or y.yyy = speed on Y axis
kts:	sxx.xx<tab>sy.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										
	yy.yy or y.yyy = speed on Y axis										
Analogue:	-5 to +5V for each channel 0-5V or 0-10V (optional) also available										
Update rate:	1Hz default.										

### Software

System supplied with ROVLog PC software, for display of data from the instrument. ROVLog is license free.

### Shipping

Size:	52 x 46 x 23cm
Weight:	11kg

### Ordering

0803002	Model 803 ROV Current Meter in Titanium 4000m rated Supplied with: <ul style="list-style-type: none"> <li>• Pigtail / setup lead</li> <li>• USB adapter</li> <li>• Operating manual and transit case</li> </ul>
0803EA2	RS485 Communications adapter for PC
Note:	Other configurations are available to include a remote sensor / electronics pod and analogue output options. Please contact Valeport for details