

# 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.

## **DATA SHEET**

**Product Details** 



CURRENT



SOFTWARE



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#### 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.

#### **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	kts	sxx.xx <tab>syy.yy<cr>&lt; f&gt;</cr></tab>	
	m/s	sx.xxx <tab>sy.yyy<cr><lf></lf></cr></tab>	
	Where	s= sign, + or -	
		xx.xx or x.xxx = speed on X axis	
		yy.yy or y.yyy = speed on Y axis	
Analogue	-5 - +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 licence free.

Shipping			
Size	52 x 46 x 23cm		
Weight	11kg		
Ordering			
0803002	Model 803 ROV Current Meter in Titanium 4000m rated Supplied with: Pigtail/setup lead USB adapter Operating manual and transit case		
0803002-A	Model 803 ROV Current Meter in Titanium  • 4000m rated  • Supplied as above with Analogue output		
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.		

