



DATA SHEET

Product Details



CURRENT



CDU EXPRESS
SOFTWARE

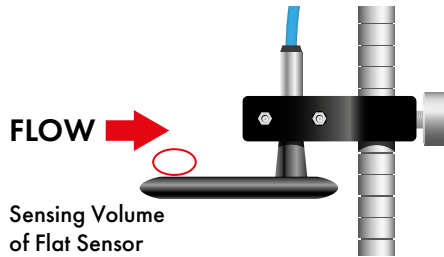
Model 801 EM Handheld Current Meter

The Model 801 EM Electromagnetic Current Meter measures the speed of water in open channel environments with exceptional accuracy. The smaller sampling volume of the flat sensor makes it suitable for shallow flows, or measurements in confined spaces.

Specifications

Model 801 EM - Flat Type

Range	-5 m/s – +5 m/s (-16.4 f/s – +16.4 f/s)
Accuracy	±0.5% of reading plus 5 mm/s (0.0164 f/s)
Zero Drift	<5 mm/s (0.02 f/s)
Sensing Volume	Approx. Ø20 mm x 10 mm high (0.8 x 0.4 in)
Minimum Depth	5 cm (2 in)



Data Acquisition

The Model 801 EM Handheld Current Meter is supplied with a dedicated Control Display Unit that both drives the sensor and provides data display of the measured water velocity.

Data is updated at 1 Hz, and may be averaged over any number of seconds from 1 to 600. The display will show real time speed data at a resolution of 1 mm/s (0.04 in/s), as well as the result of the data average, and a Standard Deviation figure to give added data confidence. A solid state memory records all results (up to 999 averaged readings), and the data may be downloaded to PC using the RS232 interface lead supplied.

Calibration

The Model 801 EM is calibrated at Valeport's own premises up to speeds of 1 m/s (3.3 f/s). Higher speed measurements are based on linear extrapolation. Specific high speed calibrations can be arranged at a third party facility on request.

Control Display Unit

Size	244 x 163 x 94 mm, 2 kg 9.6 x 6.4 x 3.7 in, 4.4 lb
Environmental	Sealed to IP67
Power	8x alkaline C cells, up to 37 hrs operation
Operating Temp	Display unit -5 °C – +50 °C (display unit) 23 °F – 122 °F Sensor -5 °C – +40 °C 23 °F – 104 °F

Application

The Model 801 EM is available for use as hand held "Wading Sets" only, with the operator standing in the channel, holding the instrument in position. The system is supplied with 1.5 m (5 ft) wading rod (3 x 0.5 m (1.64 ft) sections), graduated in cm, and a 2 or 6 m (6.6 or 19.7 ft) cable from instrument to display unit.

Alternatively, a "top-setting" wading rod system is available, which allows the vertical position of the instrument to be set without removing the wading rods from the water.

Software

System is supplied with CDUEXpress Windows based PC software, for data extraction from display unit. CDU Express is licence free.

Ordering

Single Axis—Flat Sensor with Control Display Unit, interface cable and operating manual in an ABS transit case. System supplied with the following:

- Wading rod set
- 3 x 0.5 m (1.64 ft) graduated rods, base and direction knob, in a canvas carrying bag

604480210	• 2 m cable (6 ft)
604480211	• 6 m cable (20 ft)

Parts

604480215	Wading Rod Set supplied with: <ul style="list-style-type: none">• 3 x 0.5 m (1.64 ft) graduated rods, base and direction knob, in a canvas carrying bag
604480210	• Flat transducer (single access) CDU (logging)

For sales and service contact:

Teledyne ISCO, 4700 Superior Street, Lincoln, NE 68504 USA
Tel: (402) 464-0231 • USA & Canada: (800) 228-4373

teledyneisco.com

L2314 Rev 3.0 01/25