

Deluxe Flow Gauging Rods with Integrated Counter

WATER FLOW | SURFACE WATER | DISCHARGE MEASUREMENT

General Description

HyQuest Solutions' Magna Rod takes all the headaches out of current meter gauging: It is the **all-in-one solution** for measurement of stream velocity and discharge by wading. It bundles a **robust, lightweight and convenient rod with a counter device** and additionally offers the possibility to attach various current meters.

The Magna Rod is available in two models:

- MAG/D: measures and displays sounding/depth of observation only
- MAG/CMC: measures and displays sounding/depth of observation AND current meter revolutions, and computed point velocity

Current meters fitted with a cat whisker ball and wire contact to perform a mechanical switch closure can be used with the rods to produce a clean, noise-free signal. The water velocity is directly computed and displayed on the LCD. The Magna Rod supports up to 6 current meters with each meter having up to 3 rating equations and 3 rotations/sec ranges. Thus 'point' velocity can be displayed from almost any mechanically rotating current meter.

Integrated Counter

The Magna Rod does not need to be connected to an external device. Its visual indicators, LCD and internal buzzer can be used to make conventional current meter measurements and compute water velocity using look-up tables if required. Magna Rods offer a bluetooth interface to communicate with mobile devices. They provide serial data that can be used by external devices to compute discharge.

Features

- Counter:
 - LCD (with back lighting)
 - Two-button keypad
 - Units: imperial or metric
 - Computes and displays depth, counts and velocity (CMC)
 - Bluetooth® interface (for compatible external devices)
 - In-built signal processing: signal conditioning and "shorts" detection
 - Test modes: spin + dwell
 - Low power operation
- Easy-to-read ruler on rod
- Adaptors available for HyQuest Solutions' current meters OSSPC1 and RB1 (see flipside)
- Support for 3rd-party items (see flipside)

Applications

- Flow Gauging in Surface Waters
- Wading



Technical Specifications

Measurement range	Velocity: <ul style="list-style-type: none"> 0.015 m/sec to 6.09 m/sec (0.05 ft/sec to 20 ft/sec) (with a Price AA meter) Low-speed mode to improve measurements with extremely slow rotating current meters (velocities less than 0.077 m/sec (0.25 ft/sec))
Materials	<ul style="list-style-type: none"> Rods: anodized aluminum Mounting adaptors: steel Fasteners: stainless steel Connectors: brass Graduated ruler: aluminum Synthetic components: impact resistant UV stabilised acetal plastic
Level	Bulls eye integrated into handle
Power Supply	3 x 1.5 V AA Alkaline batteries
Dimensions	<ul style="list-style-type: none"> 1600 x 300 x 140 mm (5.25' x 0.98' x 0.46') Valid for standard rod length of 1.2 m (4 ft); other sizes available on demand
Weight	3 kg (6.6 lbs) for 1.2 m (4 ft)
Operating Time	<ul style="list-style-type: none"> 43 hrs use (with backlight on), 233 hrs use (with backlight off) Low-power operation due to auto turn-off feature
Protection Class	IP66
Scope of Delivery	<ul style="list-style-type: none"> Rod segments, graduated Handle with bulls eye Magna Rod computing device Canvas carry bag

Accessories and Add-Ons

Support for 3rd-party supplies:

- Compatible with AquaCalc software
- Keypad mount (optional) to suit ADCP Flow-Tracker and Sontek Flow-Tracker
- Various adaptors (optional) for different current meters (Price AA Bucket Meters, SonTek Flow-Tracker) available



OSSPC1:

The OSSPC1 **miniature current meter** is a world recognised

instrument for measuring the velocity of water **in shallow open and closed channels**. Made of durable materials, the OSSPC1 is suitable for extreme environments.



Red Back:

The RB1 is a **cup-type current meter**.

Its advanced contact switching system allows the measurement of water flow in streams, open canals, pressure pipes, lakes and seas to a fine degree of accuracy and repeatability.

Please ask for details.

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