

Bluetooth Current Meter Counter

WATER FLOW | METEOROLOGY

General Description

HyQuest Solutions' current meter counter CMCbt is a small electronic device for **collecting the count (and time) from almost any mechanically rotating current meter**. It provides a Bluetooth interface between the current meter and a user interface such as the HydroTab Application (see flipside).

The CMCbt counts the rotations and transmits the data to an external tablet where the velocity and discharge can be calculated. It is also used to totalize the number of tips in a tipping bucket rain gauge (TBRG).

The CMCbt has three LEDs and an audible sounder to indicate its status and the counts.

The CMCbt offers connectivity between the current meter and a tablet via Bluetooth. It can be mounted directly onto a top-setting wading rod. Faulty connections are detected. All settings and operations are performed via the Bluetooth interface.

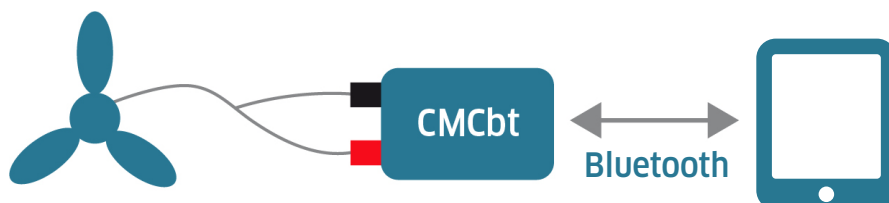
Applications

The CMCbt is especially suitable for

- Hydrology
- Flow Velocity Measurement
- Discharge Calculation (e.g. with HydroTab, see flipside)
- Small and big water courses
- Open channels

Features

- Small and compact
- Self-calibrating, no adjustment or calibration is required
- 100 % waterproof
- Used in conjunction with HydroTab application on Samsung Active Tab for current meters
- Used in conjunction with the FCD App on Samsung Active Tab or Android Smart Phone for performing field calibration checks of tipping bucket rain gauges.



Technical Specifications

Power Source	<ul style="list-style-type: none"> ■ 2 x Alkaline 1.5 V AA batteries ■ Estimated operating battery life 40 hours
Power Consumption	<ul style="list-style-type: none"> ■ Off: 16 uA ■ Bluetooth connected: 62 mA
On/Off	<ul style="list-style-type: none"> ■ Push button ■ Auto-off: 10 minutes (no Bluetooth or count)
Bluetooth®	<ul style="list-style-type: none"> ■ Class 2 / Output power 2.5mW (4dBm) ■ Compliant Bluetooth® Spec V1.2 Nominal 30 m (100 ft) range (tested with Samsung Tablet to 80 m)
Indicators	<ul style="list-style-type: none"> ■ Blue LED: Bluetooth status; Red LED: battery low; Yellow LED: count ■ Audible sounder
Connectors	Red and black gold plated banana sockets
Case Dimensions and Weight	<ul style="list-style-type: none"> ■ 50 mm (W) x 65 mm (H) x 45 mm (D) ■ 0.15 kg (with batteries)
Maximum Pulse rates	<ul style="list-style-type: none"> ■ Mag Head mode: up to 50 pulses/sec ■ CatW mode Fast: up to 25 pulses/sec ■ CatW mode Slow: up to 5 pulses/sec
Environmental Conditions	<ul style="list-style-type: none"> ■ Temperature: -20 °C to 60 °C ■ Humidity: 0-100 % waterproof ■ Max. salt water conductivity: 50,000 uSiemens/cm
Enclosure Rating	IP66

Accessories



OSSB1: This **universal current meter** is a world recognised instrument for measuring the velocity of water **in open**

and closed channels. Made of high grade 316 stainless steel, it is suitable for the most extreme environments.



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.



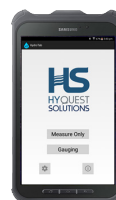
Wading Rods: HyQuest Solutions' range of top setting wading rods were developed to simplify the task of carrying out

gauging in small streams. We are happy to provide help in choosing the proper rod depending on your application and equipment.



Under Ice Rod:

The HyQuest Solutions Under Ice Rod has been designed specifically for deployment of various brands of ADCP and mechanical current meters for 'under ice' discharge measurements.



HydroTab Stream Gauging

Tablet: Assembly of HydroTab software and a tablet suitable for harsh and wet environments. Used for direct water velocity measurements, or collecting, calculating, displaying and emailing full river gauging data.

Please ask for details.