

DIGITAL WATER CURRENT METER (CUP TYPE)



VSLIC- ME-02

Ref. Standard - IS :3910

This Water Current Meter is used to measure Velocity of water flow directly in m/s. The stainless-steel spindle carrying the cup wheel freely rotates in the bearing assembly. The magnet and reed switch assembly produces one pulse per rotation. The rotation of the Water Current Meter is sensed by sensor & gives pulsed output signal.

Water Current Meter is a world recognized designed instrument for measuring the velocity of water in rivers, streams, open canals, and sea. Made of non-corrosive material stainless steel, brass, Gunmetal casting with duly nickel-chromium plating.

The Water current Meter consists of streamlined body which houses the sensing mechanism, an encapsulated reed switch, and the propeller / cup shaft, which has a permanent magnet, mounted such that each rotation of the shaft produces a pulse from the reed switch. The pulses are conducted through a lead to the surface where they are counted by a current meter Counter. The velocity of the stream is proportional to the rotations of the propeller /cup. The following equation is used to calculate the velocity.

$$V = K \times N + Y$$

Where: $V = \text{Velocity}$, $K = \text{constant of the water current meter}$ $N = \text{Revolutions per second}$
 $Y = \text{A constant determined by ration tests}$

This instrument is suitable for most general measurements in analysis of water dispatch quantity in Canals & Rivers, Agricultural Investigations & many more applications.

It is tested & calibrated from range 0.05 m/s. to 3.5 m/s velocity by CW&PRS, Govt. of India).

