ENCARDIO RITE
METASENSING FOR MEGA STRUCTURES

WATER LEVEL SOUNDER (DIPMETER)

DATASHEET

MODEL EPP-10/6



OVERVIEW

The Encardio Rite model EPP-10/6 Water Level Sounder is a reliable and robust instrument designed to measure water levels in boreholes, wells, casagrande piezometers, and open standpipes. It is widely used for monitoring groundwater tables in various environments, including near dams, rivers, high-rise buildings, farmhouses, factories, and residential areas.

The water level sounder (dipmeter) comprises of a probe, graduated flat cable and a cable reel with electronics. The sounder provides both audio and visual signals to indicate water contact, making it an essential tool for simple and accurate groundwater level monitoring. It is accurate, robust, light weight and convenient to use.

To monitor the water table, either an existing well or a newly drilled borehole is used, reaching the aquifer most affecting the water table. A casing pipe is generally installed in the borehole to prevent the borehole wall from collapsing. At the level of the aquifer, the casing pipe is replaced with a porous filter or slotted pipe covered with geo-textile to prevent soil intrusion. The level of water in such a borehole corresponds to the water table at that location. The water level is generally referenced to mean sea level and is known as the elevation of the water table.

FEATURES

- **Audio and visual indicators:** Equipped with a high volume buzzer and a green LED light to signal water contact.
- **Portable and lightweight:** Light weight with seamless finish, shock proof and easy to carry.
- **High-tensile, waterproof cable:** Features a flat cable with a high tensile strength, virtually non-expandable, PE-insulated durable, water resistant corrosion-resistant steel tape.
- **Tape graduations:** The permanent markings on tape are available in both metric units (m, cm, mm) and in imperial units (ft, in) for precise measurements.
- **Slim probe:** The stainless steel probe having 12.7 mm diameter, which makes it ideal for narrow boreholes.
- **Locking mechanism:** The winding reel includes a locking arrangement to prevent the cable from unwinding accidently.
- **Removable hub:** The hub can be easily removed from reel to replace the battery or check electronics without disassembling the entire cable reel.
- **Ease of maintenance:** The probe has threaded cap for easy access to clean the insulation between electrodes.

DESCRIPTION

The stainless probe of the dipmeter consists of two electrodes with an insulating gap between them. It is connected to the cable comprising of high tensile virtually non-expandable, PE insulated, graduated flat steel tape.

The cable is mounted on a robust winding reel, equipped with stand, handle to rotate the tape reel, easy to grip carrying handle, locking mechanism, and a hub. The battery-operated hub includes moisture resistant electronics, an on-off switch, LED indicator, and high-volume buzzer for efficient power and signal management. The tape has integral twin conductors for current transmission from probe to the hub.

When the probe is lowered in borehole and comes in contact with water, it completes an electrical circuit, activating both the audio alarm and the visual green LED signal. The water elevation is then determined by noting the tape reading that coincides with the top of the standpipe, borehole or well.

Ordering code

EPP-10/6-L-X [L= length of tape, X = unit (m or ft)]

SPECIFICATIONS

Cable length 'L' (m)	50, 100, 150, 200, 300
Resolution (for cable length in m)	1 mm standard
Imperial unit (optional) cable length 'L' (ft)	50, 100, 150, 300, 500
Resolution (for cable length in ft)	0.1" standard
Cable/tape	High tensile virtually non-expandable, non-stretch, PE insulated flat steel tape with permament markings
Tape/cable Size	10 mm wide x 2 mm thick
Tape marking	m (ft) in red, cm & mm (in) in back color
Probe	Stainless steel with 12.7 mm diameter , IP68 protection, probe connector connection has IP 65 protection.
Power Supply	9 V PP-3 size battery
Audio Signal	Sound buzzer
Visual Signal	Green LED light signal

**All specifications are subject to change without prior notice*

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