

Email: sales@laboratoryinstrumentindia.com

**Product Name:**Wave Probe System

Product Code: LBNY-0005-1040002



## **Description:**

A simple and robust system for the measurement and recording of water wave profiles, which uses the principle of measuring the electrical conductivity between two parallel wires. Each probe consists of a pair of stainless steel wires which dip into the water waves. The electrical conductivity between them is measured, and is linearly related to their depth of immersion hence to wave height. The method is free of meniscus and `wetting effects. The system is available in 1, 2 or 3 channel form and can display data by high speed recorder or input to a data logger. Alternative lengths of probe are 300mm or 500mm.

The probe consists of two 1.5mm diameter stainless steel wires spaced 12.5mm apart and 300mm long or 500mm long as required. Each probe is connected to its own wave monitor module in the electronic console by a twin core flexible cable 10m long. The distance between the console and probe may be increased up to 100m using commonly available low current cables.

Energization is conducted by means of an audio frequency drive signal which avoids all polarization effects at the wire interface. The signal is balanced relative to earth, to render the system immune to common mode voltages between the water and instrument earth. The frequency can be altered to permit two or more sensors to operate in close proximity without mutual interference.

The power supply module and appropriate number of wave monitor modules are mounted in a console, finished in matte textured blue paint and fitted with four rubber feet and carrying handle.

The result is a system giving high dynamic accuracy over a wide range of wave heights and frequencies.

## **Technical Specification:**

## Features:

High dynamic accuracy
Linear calibration over a large range

Outputs for high speed recorders and data loggers

Easily set up and calibrated

Can be operated at different energization frequencies to avoid mutual interaction between two or more closely spaced probes.



## **Laboratory Instrument India**