

## Laser Marked Water Level Meter

Model 102

The Solinst Model 102 Water Level Meter is designed to measure groundwater levels, especially in small diameter tubes and piezometers or where a flexible cable is needed to snake past an in-well pump. The cable has a heavy-duty jacket and stainless steel coaxial conductors for strength. Permanent markings are precisely laser etched on the cable every 1/100 ft. or each millimeter.

Also available from Solinst, is the Model 101 Water Level Meter which features an easy-to-read, easily repaired flat tape. (See Model 101 Data Sheet).

## Operating Principles

The Model 102 Water Level Meter uses a choice of two small diameter probe designs, attached to a narrow coaxial cable, fitted on a sturdy ergonomically designed reel. A standard 9 volt battery, housed in an easy-access battery drawer, powers the Water Level Meter.

When the probe enters water the electrical circuit is completed, sending a signal back to the reel where a light and clearly audible buzzer are activated. The water level is then determined by taking a reading directly from the cable at the top of the well casing or borehole.

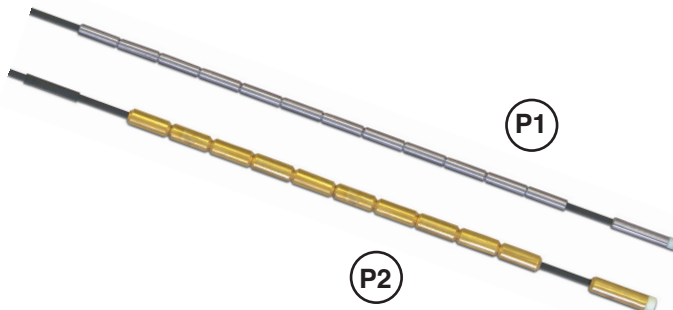
A sensitivity control allows the buzzer to be turned off while in cascading water, and ensures a clear signal in both high and low conductivity conditions.

## Probes

Model 102 Probes are designed with segmented weights for flexibility. The Teflon® tip uses a recessed design to minimize false signals in cascading water.

**P1** 1/4" dia. x 1.5" long (6.4 mm x 38 mm) stainless steel with 12 weights, weighing 2.5 oz (70 g). It is ideal for accessing narrow diameters.

**P2** 3/8" dia. x 1.5" long (10 mm x 38 mm) brass with 10 weights, weighing 4.6 oz (130 g). The heavier probe is ideal for greater depths.

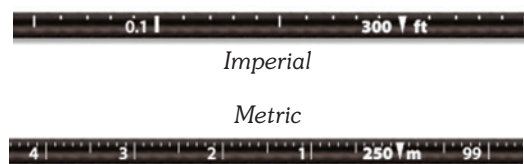


## Laser Marked Cable

The coaxial cable has laser etched markings every 1/100 ft. or each millimeter, to provide high accuracy and reliability.

The cable reels smoothly, remains flexible, and hangs straight in the well. It comes in lengths from 100 ft. - 1000 ft. (30 m - 300 m).

A tinned copper-braided shield gives flexibility and a stranded stainless steel central conductor gives strength. It is easy to repair and splice. The cable jacket is of heavy-duty polyethylene for durability.



**Laser Markings Each 1/100 ft. or Each Millimeter**

## Features

- Low Cost** • Solinst quality at a low price
- Narrow** • 1/4" (6 mm) dia. probe
- Long Life** • Rugged, corrosion proof components
  - Strong, flexible cable, is easily spliced
  - Replacement probes, cables and parts
- Accurate** • Markings precisely every 1/100 ft. or mm
  - Traceable to national standards

## Reels

The standard reel has an easy access battery drawer, an excellent brake, and convenient carrying handle. It has been ergonomically designed to be comfortable in use and stable when placed on the ground. It has an on/off sensitivity switch, light, buzzer, and battery test button.

The mini reel is sturdy, yet very compact and easy to carry. It also has an on/off sensitivity switch, light, buzzer, and battery test button.

## Length Options

Solinst Model 102 Water Level Meters are available on reels in the following standard lengths:

<b>Mini Reel</b>	80 ft.	25 m
<b>Small Reel</b>	100 ft.	30 m
	200 ft.	60 m
	300 ft.	90 m
	500 ft.	150 m
	750 ft.	230 m
	1000 ft.	300 m



*Measure Water Levels within the narrow channels of a Solinst CMT® System.*

## Other Options

**Carrying Bag:** Small and mini padded nylon carrying bags are available, as optional extras. The bag design has a convenient shoulder strap, zippered front pocket, zippered top, and a grommet in the base to prevent moisture build-up. A mini bag has no pocket.

**Replacement Parts:** Replacement probes, cables with probe and other spare parts are available. Water Level Meters can also be returned directly to Solinst, or to authorized repair facilities.

## 102M Mini Laser Marked Water Level Meter



The laser marked coaxial cable is mounted on a convenient small reel that is light-weight and fits easily into a mini carrying case or backpack. The accurate cable is marked each 1/100 ft. or each millimeter.

The 102M Mini Water Level Meter is available in 80 ft. and 25 m lengths. There is the choice of the P1 or P2 Probe with segmented weights.



## Tape Guide/Datum

The tape guide can be used to protect the cable from damage on rough edges, help the probe hang straight in the well, and ensures consistent measurements. It can also provide reel support on the casing. A tape guide is provided with each Water Level Meter.

