

### Mini Interface Meter

Model 122M - Laser Marked Cable

Solinst Mini Oil/Water Interface Meters give clear and accurate measurements of product level and thickness in wells and tanks. Determination of both light (floating) non-aqueous phase liquids (LNAPL) and dense (sinking) non-aqueous phase liquids (DNAPL) is quick and easy.

The Model 122M Mini Interface Meter with laser marked cable is a convenient small version, which can easily fit in a backpack or an optional custom mini carry case. It uses narrow laser marked cable in 25 m or 80 ft lengths.

The Mini Interface Meter enhanced electronics include automatic circuitry testing; 300 hours of on-time battery life; clear signals; and high accuracy. The circuits are powered by one standard 9V battery housed in easy-access drawer in the faceplate.

Also available is the standard Solinst Model 122 Interface Meter with laser marked flat tape in lengths up to 300 m (1000 ft).

### Probe

The 122M uses the P8 Probe, which is 16 mm (5/8") in diameter and stainless steel. It is pressure proof the full length of the submerged cable. The beam is emitted from within a Hydex cone-shaped tip. The tip is protected by an integral stainless steel shield, and is excellent for the vast majority of product monitoring situations. A cleaning brush is included with each Meter.



Zero point at tip of stainless steel conductivity pin

### Laser Marked Cable

The cable is traceable to NIST and EU measurement standards.

The 3 mm (0.12") coaxial cable has a durable jacket with permanent laser markings each millimeter and every 1/100 ft. The cable has a braided copper outer conductor, a stranded stainless steel central conductor, and a smooth chemical-resistant surface that is easy to decontaminate.

**LN2:** Feet and tenths: with markings every 1/100 ft.

**LN3:** Meters and centimeters: with markings every mm.



*Model 122 is approved for use in hazardous locations Class I, Div 1, Groups C&D based on CSA Standards and is ATEX certified under directive 94/9/EC as II 3 G Ex ic IIB T4 Gc*



### Features

- Sensor accuracy to 1.0 mm or 1/200 ft
- Certified intrinsically safe
- 16 mm (5/8") diameter probe
- Easy access battery: minimum 300 hours of life
- Stable electronics with automatic circuitry testing
- Compact and easy to transport in a backpack
- Designed for rugged field use

### Operating Principles

**Product** (Non-conductive liquid) = Steady light and tone

**Water** (Conductive liquid) = Intermittent light and tone

To detect liquids, the Model 122M Mini Interface Meters use an infra-red beam and detector. When the probe enters a liquid the beam is refracted away from the detector which activates an audible tone and light. If the liquid is a non-conductive oil/product the signals are steady. If the liquid is conductive (water), the conductivity of the water completes a conductivity circuit. This overrides the infra-red circuit, and the tone and light are intermittent.

Both sensors use exactly the same zero point, giving accuracy as good as 1.0 mm or 1/200 ft. The high accuracy enables the sensors to detect the slightest sheen of oil on the surface of the water.

### Hazardous Locations Use

The Model 122M Mini Interface Meter with cable has been approved by QPS for use in hazardous locations, Class I, Div 1, Groups C&D based on CSA Standards. It is also ATEX certified under directive 94/9/EC, as II 3 G Ex ic IIB T4 Gc.

The ground cable is a safety essential when the meter is used in potentially explosive environments. It also ensures that the electronics are properly protected.