# **INT-Oil/Water Interface Meters**

The INT series OIL/WATER INTERFACE METER measures the depth and thickness of floating (LNAPLs), sinking (DNAPLs) hydrocarbons and water in monitoring wells as small as 1/2" ID (12.5 MM) using an optical sensor for industry leading accuracy.

Interface meters are available with 50-2000 foot tapes with probe sizes not available from any other manufacturer. All probes are pressure proof and leak proof using a unique triple-seal design.

### **ADVANTAGES**

- the most accurate tapes available
- the best choice of probes
- purpose built rugged reel
- field proven design

## BEST PERFORMING ELECTRONICS AND CHOICE OF PROBES

**BEST SELECTION** of probes to cover every monitoring project from our 5/8" probe for standard wells to our unique 7/16" probe for 1/2" ID wells used with Direct Push drill rigs.

IMPACT RESISTANT - More impact resistant than probes using glass. Impact proof sensors resist all solvents found in environmental monitoring.

CHEMICALLY RESISTANT - Far more chemically resistant than probes using polyurethane or polysulfone optics.

**STAINLESS STEEL** - Stainless steel shrouds are more durable than plastic shrouds and stay secure.

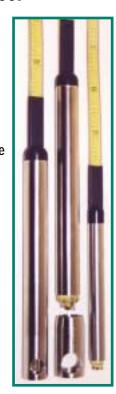
REMOVABLE SHROUD - Optional and removable 1.5" 0.D. steel shroud for extremely long cables or very viscous bunker oil.

**CONVERTIBLE** Weighted shroud available to convert 7/16" probes to 5/8" high weight version.

**DAMAGE PROOF SENSORS** - The optical sensor and electronics work together to ignore minor or severe scratches.

NEW INDUSTRY STANDARD - Setting a new industry standard our probes will detect 1/2mm of product versus 3mm. Units can be recalibrated to 1mm, 2mm or 3mm for user preference.

ADJUSTABLE SENSITIVITY The water sensitivity can be changed to ensure quick readings but reduced to avoid bridging when the water contains a lot of dissolved solids, giving the user ideal performance in all field conditions.





### **MOST ACCURATE TAPES**

Designed specifically for measuring product and organic solvents and four times more accurate than the commonly found flat white TV cable-type tapes. These tapes use twisted stainless steel wires that can untwist and lengthen from the weight (5 lbs.) of the probe and cable. The flat spring steel measuring tape of the INT units has a breaking strength of 297 pounds and will not stretch (less than .001 inches) with a 35 pound load.

The measuring tape was designed specifically for environmental use and is resistant to all solvents found in the field.

HIGHEST ACCURACY - Highest accuracy purpose designed yellow measuring tapes—.008% OR BETTER...GUARANTEED! Tapes meet or exceed federal specification US GGG-T-106E(U.S.A) or EEC CLASS II (Europe).

**FOUR TIMES MORE ACCURATE** than flat white TV cable type tapes that use twisted or spiral conductors which allow 1/2 inch of stretch/100 ft from the cables own weight.

**UNIQUE SOLID CORE** flat spring steel measuring tape with clear Kynar jacket covering the conductors and protecting the graduations and numerical markings.

KYNAR COVERING is about 4-5 times harder (Rockwell hardness) than softer polyethylene white tapes which are far more easily cut and damaged and require frequent repairs. White tapes will become softer when exposed to gasoline and other solvents.

CHEMICALLY RESISTANT Kynar resists all chemicals found in environmental monitoring and the smooth covering is easier to decontaminate than embossed tapes.

NO STRETCHING - The flat spring steel core measuring tapes guarantee the tapes will not stretch (less than .001 inches/100ft) and will hang much straighter than white tapes.

**EXACT ZERO POINT** - The tape zero point and probe zero point coincide exactly to within .01 inches versus .06 inches found on most industry standard units.

# INT-Oil/Water Interface Meters



### **HIGH QUALITY DESIGN**

Using state-of-the-art electronics, the INT interface meter delivers reliable, rock solid performance in the field. This allows more readings and more accurate measurements compared to other similar instruments.

Infra-red refraction is used to detect liquids and conductivity is used to detect the water. For heavy viscous oils, detect water sensitivity quickly by increasing the external sensitivity control. For high conductivity water (brine) decreasing the sensitivity control prevents bridging so a moist probe is not detected as being in water. While all water level meters have a water sensitivity adjustment, there isn't another interface meter on the market with this feature except the INT Interface Meter. If a water sensitivity adjustment is essential for a water meter, it is definitely needed for an interface meter.

Triple-sealed probes do not need to be accessed by the user. Using "smart electronics" the probes will ignore any damage to the optical lens and continue to perform. Similar to a water level meter, the units will produce a solid tone in water and an intermittent light and tone indicates product. This system doubles the battery life and provides better overall performance.

The INT unit is available in a reversed version.
The electronics are easily converted to provide a solid tone in oil and an intermittent tone in water. However, field testing has always indicated the majority prefer a solid tone in water so that units can be tested in water outside — a popular practice and not possible with other units.

For industrial commercial hazardous locations use an intrinsically safe, Class 1, Division 1, Group D version. (approval pending).

### **PURPOSE BUILT RUGGED REEL**

Unlike many of the low cost plastic reels on the market which use frames too small for enough ground clearance when winding and rarely use a detachable module for cleaning—The Rugged Reel is designed specifically for environmental monitoring and rugged field use.

**LIGHTWEIGHT** aluminum faceplates and solid metal and machined nylon components will not crack under tough field use. There are no thin-walled molded components to crack and break.

**EASY TO USE** ergonomic frame and hub size for winding tapes under rough field conditions (don't get stuck with a low cost cable reel).

**STAINLESS STEEL** - A threaded stainless steel axle prevents welds from cracking and resists corrosion to keep the reel running smoothly. Double sealed ball bearings are standard for longer lengths.

**REMOVABLE MODULE** - The electronics module is removable for easy decontamination.

### **FEATURES**

Highest quality steel core engineering tapes made by one of the world's largest tape manufacturers

External water sensitivity adjustment/detects water quickly through viscous oils

Automatic sleep function — unit powers down after 10 min.

Smart electronics ignore severe scratches, condensation and dripping oil

Easy access battery drawer

Flat spring steel tape with Kynar or Tefzel covering

Clear signals — no hesitation at the interface

Optional 1.5" OD shroud available

#### **SPECIFICATIONS**

5/8" OD (16mm) or 7/16" OD (11mm) probe

Tape lengths from 50 -2000 ft (15-600M)

Sensor accuracy to .010"— offset error

Detect limit is sheen (.020 inches or 1/2 mm)

Accuracy is .008% or better

Battery life is 300 hours for INT-mini and 180 hours for INT-standard with one 9-volt alkaline battery

Tape markings:1/10 ft and 1/100 ft (cm and mm)

Shipping weight: 9 pounds

Off button can be added for user preference

Optional padded carry case with shoulder strap

Available with optional 1.5" OD shroud