

## AGAR ID-310 PORTABLE EMULSION PROFILER

### SYSTEMS

ID-310 50 foot tape

21" X 16" X 6"; 13 pounds (6 kg)

ID-310 100 foot tape

21" X 16" X 6"; 15 pounds (7 kg)



### FUNCTION

The *ID-310* is an industrial instrument used for measuring the emulsion profile and temperature of a storage vessel. This compact and portable unit measures not only level/ullage and organics/water interface levels, but also the percent water concentration in the hydrocarbon emulsion or organics layer.

The *ID-310* is very user-friendly. It contains a full alpha-numeric LCD display and menu-driven 10-key user input interface. Data from 10 tanks can be stored in the microprocessor memory, which can be downloaded later to a computer via a RS-232 cable, or retrieved on the LCD display of the *ID-310* tank profiler.

### APPLICATIONS

- Inspection of tanks and vessels for both free water and water entrained in the product, prior to shipping, unloading, etc.
- Resolve separation problems with real-time diagnostics of emulsion layers.
- Analyze groundwater for organic contamination.

### OPERATING RANGE

Process Temperature:	32° to 180°F (0° to 82°C)
Ambient Temperature (operating):	0° to 120°F (-18° to 49°C)
Instrument Storage Temperature:	-13° to 158°F (-25° to 70°C)
Low Viscosity Model:	maximum 50 cP
High Viscosity Model:	maximum 1,000 cP

### MEASUREMENT RANGE

Depth:	0 - 50 feet (0 - 15m) or 0 - 100 feet (0 - 30m)
% Water (by volume):	0-100%

## ACCURACY

Level/Ullage:  $\pm 0.125"$  ( $\pm 3$  mm)  
 Low Viscosity Model:  
 Resolution: 0.1% Water;  
 Repeatability 0.5% watercut  
 High Viscosity Model:  
 Resolution: 0.1% Water;  
 Repeatability  $\pm 1\%$  watercut  
 Temperature:  $\pm 1.4^{\circ}\text{F}$  ( $\pm 0.8^{\circ}\text{C}$ )

## MATERIALS OF CONSTRUCTION

316SS  
 Tefzel® Zoo  
 Teflon® DuPont  
 Aluminum  
 Peek  
 Aflas

## ELECTRICAL RATING

Four 9V Alkaline Transistor Batteries (NEDA 1604A)  
 Intrinsically Safe Class I, Group C and D, T4

## DATA OUTPUTS

Two-line LCD Display  
 RS-232C  
 Instantaneous % water and temperature;  
 Recorded depth of interface(s), % water concentration  
 and temperature (10 tank data storage capacity)  
 Calibration and Configuration information

Piezoelectric Buzzer and LED to alert user as follows:

Sensor Position	Buzzer / LED
Air	Off
Oil / Emulsion	Intermittent
Water	Continuous

## SAFETY CERTIFICATIONS

UL Underwriters Laboratory - File E158662  
 C-UL Underwriters Laboratory (to CSA Standards)  
 USCG U. S. Coast Guard Certified - 162.055/4/0  
 Gosstandard (as ID-210M)

