HI96831 · HI96832

Digital Refractometers

for Ethylene and Propylene Glycol Analysis

- 0 to -50 °C freezing point range with ±0.5 °C accuracy
- Dual-level LCD
  - Displays measurement and temperature readings simultaneously
- Automatic Temperature Compensation (ATC)
- Easy measurement
  - Place a few drops of the sample in the well and press the READ key
- BEPS
  - Alerts the user of low battery power that could adversely affect readings
- IP65 water protection
  - Built to perform under harsh laboratory and field conditions.
- Quick, accurate results
  - Readings are displayed in approximately 1.5 seconds
- Single-point calibration
  - Calibrate with distilled or deionized water
- Small sample size
  - Sample size can be as small as 2 metric drops
- Automatic shut-off
  - After three minutes of non-use
- Stainless steel sample well
  - Resists corrosion from salt water
- ABS thermoplastic casing

The HI96831 for Ethylene Glycol and HI96832 for PropyleneGlycol Digital Refractometers are rugged, portable, water-resistant devices that utilizes the measurement of the refractive index to determine the percent volume and freezing point of ethylene and propylene glycol based solutions respectively.

These digital refractometers eliminate the uncertainty associated with mechanical refractometers. Samples are measured after a simple user calibration with distilled or deionized water. Within seconds, the refractive index and temperature are measured and converted into one of two measurement units; % volume or freezing point. Both meters use internationally recognized references for unit conversion and temperature compensation for glycol solutions (e.g. CRC Handbook of Chemistry and Physics, 87th Edition).

Specifications		HI96831 Ethylene Glycol	HI96832 Propylene Glycol
% Volume (% v/v)	Range	0 to 100%	0 to 100%
	Resolution	0.1 %	0.1 %
	Accuracy (@25°C/77°F)	±0.2 %	±0.3 %
Freezing Point (FP)	Range	0 to -50°C (32 to -58°F)	0 to -51°C (32 to -59.8°F)
	Resolution	0.1°C (0.1°F)	0.1°C (0.1 °F)
	Accuracy (@25°C/77°F)	±0.5°C (±1.0°F)	±0.5°C (±1.0°F)
Temperature	Range	0 to 80°C (32 to 176°F)	0 to 80°C (32 to 176°F)
	Resolution	0.1°C (0.1°F)	0.1°C (0.1°F)
	Accuracy (@25°C/77°F)	±0.3°C (±0.5°F)	±0.3°C (±0.5°F)
Additional Specifications	Temperature Compensation	automatic between 0 and 40°C (32 to 104°F)	
	Measurement Time	approximately 1.5 seconds	
	Minimum Sample Volume	100 µL (to cover prism totally)	
	Light Source	yellow LED	
	Sample Cell	stainless steel ring and flint glass prism	
	Auto-off	after three minutes of non-use	
	Enclosure Rating	IP65	
	Battery Type / Battery Life	9V / approximately 5000 readings	
	Dimensions / Weight	192 x 102 x 67 mm (7.6 x 4.01 x 2.6") / 420 g (14.8 oz.)	
Ordering Information		**HI96831** and **HI96832** are supplied with battery and instruction manual.	