

Electronic Hydrometer / Liquid Density Monitor



Has an in-tank, drop-hang submersible probe that measures, monitors, records, and controls specific gravity/liquid density during a mixing, blending, fermentation, distillation, or plating operation. This offers many user-customized options that allow the instrument to fit your exact measuring needs. The measurement probe can be purchased independently for integration into an existing PLC (Programmable Logic Controller). Optional 4-20mA analog output board or dual 5 amp relays for process control are also available. Simply submerge the measuring probe up to 500 feet and connect to an electronics module to provide digital readouts of user defined values such as Density, Specific Gravity, Baume, Brix and Alcohol %.

Advantages

- 99.995% Accurate, measures in liquids or slurries
 - Pressure irrelevant - can monitor density at any depth
 - Remote readout at desired distance from probe
 - Readout can be chosen in preferred engineering units
 - Battery or In-tank operation depending on application
 - Determines concentration mix (by volume or mass) of the sample
 - Large sample temperature ranges (up to 106°C / 220°F)
- Customization available based on user needs



Technical Specifications

Measurement Range:	Density: 0.550 – 2.000 g/cm ³ * Sample Temperature: 20 – 106 °C (40 – 220 °F)
Pressure Range:	– 5 atm (operable in vacuum)
Accuracy:	±0.005 g/cm ³
Resolution:	±0.001 g/cm ³
Repeatability:	±0.004 g/cm ³
Minimum Sample Volume:	mL
Data Transfer:	Analog Voltage Data Logger (optional) 4 – 20 mA, dual 5 A Relay
Operating Environment:	-20 – 106 °C (-40 – 220 °F)
Power Requirements:	Control Module: 120/240 VAC** Probe: 0 – 5 VDC
Dimensions¹:	Probe Length x Diameter: 280 x 51 mm (11 x 2 in)
Weight:	Probe: 2.3 kg (5 lbs)
Cable Length:	Standard: PVC: 1.2 – 452.4 m (4 – 500 ft) Optional: Teflon: 1.2 – 30.4 m (5 – 200 ft)

Applications

- Chemical
- Petroleum
- Food & Beverage
- Passivation
- Electroplating
- Flux Density Control
- Paper Production
- Coatings

(1) Probe must be mounted vertically and be completely submerged in the test solution.