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DENSITY METER AZA0969

The AZA0969 Density Meter is a high-precision analytical instrument designed for the accurate determination of density, relative density (specific gravity), and API gravity of liquids, petroleum products, and crude oils.

Utilizing advanced oscillating U-tube technology, the instrument delivers fast, highly accurate, and repeatable results, making it ideal for petroleum laboratories, refineries, inspection agencies, chemical plants, and quality control environments.

Key Functional Features

High-Precision Measurement System

- Resolution up to 0.00001 g/cm^3
- Accuracy up to $\pm 0.00005 \text{ g/cm}^3$

Advanced Temperature Control

- Integrated Peltier temperature system
- Stability: $\pm 0.02^\circ\text{C}$
- External heating support for viscous samples

Fully Automated Operation

- One-button measurement cycle
- Automatic sample handling





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HD Video Monitoring

- Real-time visualization of sample inside U-tube
- Minimizes measurement errors

Large Touchscreen Interface

- 10.4-inch TFT color display
- Intuitive operation and data visualization

Integrated Data Management System

- 64 GB internal storage
- Audit trail and electronic signature
- Multi-user access with security levels

Multiple Connectivity Options

- USB, RS232, RJ45, SD card
- Wi-Fi / serial printing

Standards Compliance

The AZA0969 conforms to:

- ASTM D4052 – Density, Relative Density, and API Gravity by Digital Density Meter
- ASTM D5002 – Density of Crude Oils

Ensuring global acceptance for commercial, regulatory, and research applications.



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TECHNICAL SPECIFICATION

Parameter	Specification
Model	AZA0969
Measurement Type	Density / Relative Density / API Gravity
Measuring Range	0 – 3 g/cm ³
Resolution	0.00001 g/cm ³
Accuracy	±0.00005 g/cm ³
Repeatability	±0.00008 g/cm ³
Temperature Range	5°C – 85°C
Temperature Stability	±0.02°C
Temperature Control	Peltier system + external heater
Display	10.4" TFT Touchscreen
Data Storage	64 GB
Interfaces	USB, RS232, RJ45, SD card



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TECHNICAL SPECIFICATION

Parameter	Specification
Output	PDF, Excel, Printer
User Management	4-level access control
Audit Trail	Yes
Electronic Signature	Yes
Power Supply	110–230V AC, 50/60 Hz
Dimensions	480 × 320 × 200 mm
Weight	Approx. 8 kg

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