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Laboratory Accuracy Everywhere You Need to Measure

DDM29 HANDHELD DENSITY METER

Rudolph DDM 29 – Density Meter

Untethered Portability | Temperature Controlled | Laboratory Accuracy

ACCREDITED
CERT #7528.01

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Unmatched Capabilities in a Fully Portable Density Meter

Temperature Controlled Measurements at 20°C and 25°C

The problem with most handheld Density Meters is they drift because they do not control temperature. Density measurements are highly sensitive to temperature and mathematically correcting for temperature may not be good enough for some applications. Only temperature control will result in the accuracy many users require.

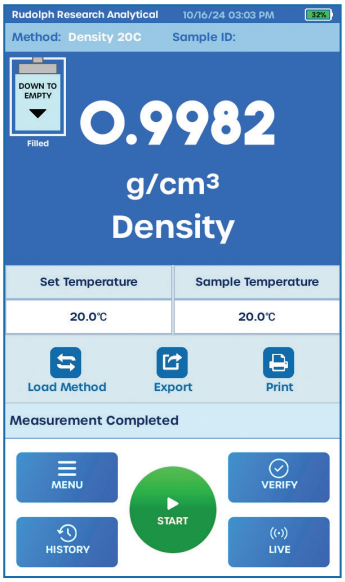
The Rudolph DDM 29 utilizes powerful and compact Peltier technology. Control of the sample temperature for precise heating and cooling to ensure stable and accurate measurements at 20°C and 25°C.

Rugged Stainless Steel Double U-Tube for unmatched accuracy and durability

The Rudolph DDM29 uses a 316 Stainless Steel, Double U-Tube instead of a simple expensive glass U-Tube. This new design is durable and corrosion resistant. Stainless Steel is preferable for customers who are tired of replacing glass U-Tubes in other handheld brands. The Double U-Tube design allows for accuracy, demonstrating readings of 4 decimal places.

User friendly GUI and Bright, Back Lit,Touch Screen Display

The DDM 29 features an intuitive graphical user interface (GUI) on a brightly lit 7-inch (128mm) touchscreen. This user-friendly design ensures easy navigation and readability in any environment, making it the most convenient handheld density meter on the market today.



Portability and Flexibility

TheDDM29 is powered by a Lithium-Ion battery that is easily recharged. Your DDM29 is ready to go everywhere you need to measure. This might be at the receiving dock, terminals, pipelines, and cargo ships or out on the distillery an production floor. The Lithium Ion battery can be charged in approximately 2 hours providing up to 4 hours of constant measurements under heavy usage or 8 hours of normal usage. Included is a Charging Station for convenient stationary charging.

Laboratory Accuracy - Everywhere You Need to Measure

Most Handheld Density Meters use temperature correction and display 2 or 3 digit accuracy which is very prone to drift. The DDM29 uses Peltier Temperature Control, which eliminates drift and provides accuracy to the 4th decimal place. Laboratory accuracy in the DDM29 could reduce testing of materials in the main Lab. Testing can now be done accurately in the receiving dock, formulations area, terminals, pipelines, cargo ships or everywhere measurements are needed.

Industry Applications

Alcoholic Beverages, Spirits,Wines

Petroleum, Chemical

Pharmaceutical

Flavor and Fragrance

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Flexible Method Management

Factory installed measurement methods cover a wide group of industries and applications. The DDM29 is factory configured with over 50 density and concentration tables, such as Brix, %Alcohol, API, and most common chemicals. Typical applications include.

Other Applications

- Essential Oils
- Most chemicals
- Beer, wort, and fermentation monitoring
- Raw material soft drink monitoring
- Monomers, Polymers and Elastometers
- Pharmaceutical raw materials and finished products
- Wort, juice, fermentation, spirits safe monitoring
- Blending, bottling, spirits and liquors packaging
- Agriculture, chemicals and fertilizers
- Colloids, nanotechnology
- Surfactants, detergents
- Emulsions
- Paints, Inks, Toners
- Most Organic, inorganic chemicals
- Fuel cells, power generation, sustainable fuels
- Soft drinks, juices, tea, coffee
- Petroleum samples according to ASTM D7777, ISO15212, IP559

A measurement method is created exactly for unique measurement applications. You may use basic Concentration Tables, Formulas and Polynomials to match the measurement methods used in your laboratory or field application.

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Technical Specifications

Rudolph Handheld Density Meter DDM 29	
Accuracy	Density: 0.0005 g/cm³ | Temperature: ±0.1°C
Alcohol Accuracy (%ABV)	0.1%
Repeatability*	Density: 0.0001 g/cm³
API Gravity Accuracy	0.1° API
API Repeatability as SD	0.02° API
Temperature Control (Controlled via Peltier)	20 and 25 °C
% Concentration Scales	Over 30 Concentration Scales
Ambient Temperature	0 to 40°C
Measurement Modes	Single, Continuous (Live)
Measurement Technique	Mechanical Oscillating Principle
Measurement Range	Density: 0-3 g /cm³
Minimum Sample Volume	Approx 1mL
Wetted Materials	316 Stainless steel, Teflon PTFE, ECTFE, PVDF, Borosilicate glass
Supported scales	Density, Specific Gravity, Alcohol Tables, Sugar/Extract, API functions, concentration tables, acids, bases, organic and inorganic chemicals
Operating System	Android OS
Measurement Time	Typically 30 seconds after thermal equilibration
Display	BrightLit - 7" touch screen.
Communication Interfaces	USB-C, WiFi®, Bluetooth® –Manual Entry, RFID, and Barcode for entering sample IDs
Printing	WiFi, Bluetooth Wireless Printing
Internal Memory	Up to 6,000 Measurements
Operating Dimensions	7.25" (L) x 4.75" (W) x 13.50" (H) 18.50 cm (L) x 12.25 cm (W) x 34.50 cm (H)
Shipping Dimensions	18" (L) x 18" (W) x 12" (H)
Operating Weight	3.5 lbs
Charging	6 – 8 hours battery life on a full charge

* Reproducibility determined by API Standard Deviation