

One Click™ Density of Liquids

Precise, Simple and Versatile



Simplicity

Automatically convert and display your results in several predefined industrial units such as Brix, HFCS, API degrees, API gravity, alcohol concentration or any customized table you have specified.



Confidence

LED illumination of the sample measuring environment provides enhanced transparency. Bubble Check™ automatic error detection, single-point adjustment of the entire temperature range, viscosity correction and Peltier temperature control assure confidence in your results. Built-in algorithms reduce your wait time up to 75% while ensuring reproducibility.



Ease-of-use

One Click™ shortcuts streamline workflows by allowing you to initiate your most frequent methods with a single tap of an icon on the color touchscreen. Elegant ergonomic design, customizable user settings and multilingual support make the DM family of instruments appealing and easy to use by a wide variety of operators.



LiquiPhysics™ Excellence

DM Series Benchtop Density Meters

- **Precise** – Accurate to 0.00001g/cm³
- **Succinct** – One Click™ user-defined shortcuts optimize workflows
- **Flexible** – Modular system is adaptable to changing needs
- **Secure** – Barcodes, certified standards, user management and optional biometric user recognition ensure traceability and security
- **Automatic** – Different levels of available automation enable high-throughput multiparameter analysis of even the most challenging samples
- **Seamless** – Optional LabX™ Software provides data/SOP management and facilitates integration into diverse IT environments
- **Compliant** – EQPac (IQ, OQ, PQ) qualification services help satisfy regulatory requirements

METTLER TOLEDO

Excellence Density Meters

Technical Data

Measuring cell		DM40	DM45 Delta Range	DM50
Density	Measuring range [g/cm ³]	0 – 3	0 – 3	0 – 3
	Limits of error [g/cm ³]	0.0001	0.00002 (d: 0.7 - 1) 0.00005 (d: 0 - 3)	0.00002 (d: 0 - 1) 0.00003 (d: 1 - 2) 0.00004 (d: 2 - 3)
	Repeatability (SD) [g/cm ³]	0.00005	0.000005	0.000005
	Resolution [g/cm ³]	0.0001	0.00001	0.00001
Temperature (Peltier)	Range [°C]	0 - 91	0 - 91	0 - 91
	Limits of error [°C]	0.05 (10 – 30) 0.1 (0 - 91)	0.02 (15 – 20) 0.05 (0 - 91)	0.02 (10 – 30) 0.05 (0 - 91)
Built-in Unit Conversion Tables		Specific Gravity, Brix%, HFCS, Alcohol (% w/w, % v/v, US & UK Proof), °Baume, °Plato, API degrees, API gravity		
Alcohol	Range [% v/v]	0 - 100	0 - 100	0 - 100
	Limits of error [% v/v]	0.1	0.02	0.02
	Repeatability (SD) [% v/v]	0.1	0.01	0.01
Brix	Range [% w/w]	0 - 83	0 - 83	0 - 83
	Limits of error [% w/w]	0.03	0.02	0.006
	Repeatability (SD) [% w/w]	0.03	0.015	0.003
Measuring Principle		Oscillating U-tube		
Viscosity Correction		Yes		
Display		5.7" VGA Color touchscreen		
Languages Supported		English, Spanish, Chinese, German, French, Italian, Russian and Portuguese		
User Management		Up to 30 users with individual administrative rights		
One Click™ Shortcuts		Up to 8 per user (Global maximum of 30 stored methods, 100 products and 5 series)		
Data Export		Printer, USB storage device, PDF, network/LIMS, LabX™		
Required Sample Volume		At least 1.2 mL (manual injection with syringe) At least 2 mL (complete cycle with attached automation unit)		
Typical Measuring Time		1 to 4 minutes (manual) 2 to 10 minutes (complete cycle with attached automation unit)		
Materials in Contact with Sample		Borosilicate glass, PTFE, FEP, PP (syringe adaptor)		



Multiparameter Analysis

Expand your scope of measurement by adding parameters such as pH, color, and refractive index to your density readings. Simply connect a compatible SevenCompact™ pH or conductivity meter, colorimeter, or RX refractive index cell to the DM module and define the method.

Optional LabX™ Server software captures and manages all data points of these parameters under a single platform. LabX™ Server also fully supports your 21 CFR part 11 requirements, audit trail, flexible data export options (including seamless LIMS integration) and customized reports. LabX™ Express offers data and SOP management for standalone systems in less regulated environments.

www.mt.com/density

For more information

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