

Density Meter DS7400 | DS7500

Digital density meter measures density, specific gravity and concentration of liquid solutions within the range of 0.70000 - 1.30000 g/cm³.

Measurement is based on a further development of the oscillating u-tube method. Due to this micromechanical setup, the temperature sensor is placed close to the sample and measures the sample temperature directly.

Micromechanical measuring cell needs only 80 µl sample quantity with integrated temperature measurement of the sample.

Validation can be provided by our technical service team.

Built-in Peltier thermostat with high accuracy for temperature control and repeatability of ±0.02 °C.

Special field of application: the GLP / GMP range.

Separate desiccation unit available.



Fields of application:

Determination of mixing ratios, quality and quantity inspection in the following industries:

- Chemical industry
- Pharmaceutical industry
- Cosmetics industry
- Beverage industry / breweries
- Food industry
- Sugar and sweetener industry
- Pulp and paper industries
- Electronic industry
- Petrochemical industry
- Wastewater management

Features at a glance

- Compact measurement cell with high resolution
- User-friendly touch-screen operation in 6 languages
- Data export (e.g. in Excel format) to a USB flash drive
- Various programmable measurement units
- Password-protected user management (optional)
- User-friendly RS-232, USB and Ethernet interfaces for direct connection to a PC
- Data display of all important settings and measurements
- 32-bit processor
- Integrated high-accuracy Peltier thermostat
- Separate desiccation unit available
- SQL database
- NIST-compliant calibration certificate
- Full GLP suitability
- Low wastage of samples

Specifications

• Measurement range	DS7500: 0.70000 - 1.30000 g/cm ³ DS7400: 0.7000 - 1.3000 g/cm ³
• Accuracy of measured value	DS7500: 0.00005 g/cm ³ DS7400: 0.0001 g/cm ³
• Repeatability of measured value	DS7500: 0.00001 g/cm ³ DS7400: 0.0001 g/cm ³
• Sample volume by manual injection	ca. 0.3 ml
• Temperature range	5 – 60 °C
• Reproducibility	±0.02 °C
• Max. dynamic viscosity of sample	5 mPa s (cps)
• Measurement time	~ 1 s
• Calibration	with air and distilled water
• Case	Cast aluminium
• Sample dish	Stainless steel
• Display	LCD TFT 5.7", 320x240 Px
• Interface	RS232, USB, Ethernet
• Working voltage	90 - 264 V, 50/60 Hz, 260 W
• Ambient temperature	10 - 40 °C
• Calibration of the measured value	4 - 10 supporting points 3rd-degree polynomial
• Number of customized methods	990
• Measurement storage / control	999
• Printer port	yes
• USB flash drive for data transfer and firmware update	yes
• User management (can be switched off)	yes
• Password protection	yes
• LIMS port	possible

