

## MBT-300

### Portable Density / Specific gravity / Concentration Meter



#### Overview:

The portable digital densitometer represents the highest level of field density measurement technology. The delicate design meets the application needs of most users, providing a variety of optional data (such as density, specific gravity, or sample concentration percentage, etc.). Users can obtain clear and bright real time data by pressing the sample of the built in pump gently. It is based on the well known resonant tube technology and is very elaborate in design. Users can easily measure many samples; if they need to store data, just press the storage key lightly; with built in large memory, they can store 100 data and export it to a computer or printer.

parameter	values
Patents granted	Smart connection of measuring cell: Patent AT516421 (B1), EP3015847 (B1)
Other special functions	Viscosity correction for reliable measurements, also on highly viscous samples
	Gesture control for easy one-handed measurements
	Identification of results outside your specified limits
Measuring range	Density: 0 g/cm <sup>3</sup> to 3 g/cm <sup>3</sup>
	Temperature: 0 °C to 40 °C (32 °F to 104 °F)*
Accuracy	Density: 0.001 g/cm <sup>3</sup> **
	Temperature: 0.2 °C (0.4 °F)
Repeatability, s.d.***	Density: 0.0005 g/cm <sup>3</sup>
	Temperature: 0.1 °C (0.2 °F)
Reproducibility, s.d.***	Density: 0.0007 g/cm <sup>3</sup>
Resolution	Density: 0.0001 g/cm <sup>3</sup>
	Temperature: 0.1 °C (0.1 °F)
Ambient temperature****	Standard Version: -10 °C to +50 °C (14 °F to 122 °F)
	Ex and Ex Petrol version: -10 °C to +40 °C (14 °F to 104 °F)
Supported measuring units	Specific gravity
	Alcohol tables
	Sugar/extract tables
	API functions
	H2SO4 tables
	Ten programmable custom-specific measuring units
Sample volume	2 mL
Dimensions (L x W x H)	245 mm x 103 mm x 126 mm
Data memory	1024 measured results, 30 measuring methods, 250 sample IDs
Interfaces	Bluetooth®, RFID (both included by default)
Protection class	IP54
	(first digit: 5 – protection against dust ingress; second digit: 4 – protection against splash water from any direction)
Intrinsic safety of Ex and Ex Petrol version	Ex II 2 G Ex iB IIC T4
Scope of supply	Portable density meter, filling tube, adapter for syringe filling, syringes, transportation suitcase, rubber protection for measuring cell, three batteries, Allen key, instructions
Menu language	English, German, Chinese, Japanese, French, Russian, Italian, Portuguese, Turkish
Available options	Elongated filling tube
	Portable thermal printer with Bluetooth® interface
	Bluetooth® USB adapter
	Wristband
	Carrying strap
	ISO calibration

## Food and beverage industry

- Fruit juices
- Cider
- Liqueurs
- Spirits
- Wine
- Beer wort

## Electrical engineering & electronics

- Coatings
  - Metallic coatings
  - Etching baths
- Environment
- Pesticides
  - Sewage sludge
  - Waste water

## Pharmacy and chemistry

- Fermenters
- Serums
- Lab preparations
- Battery acid

## Petrochemistry

- Tankers
- Drums
- Filling/loading stations
- Storage tanks