



Digital Portable Submersible

Density/Level/Specific Gravity/Concentration Meter

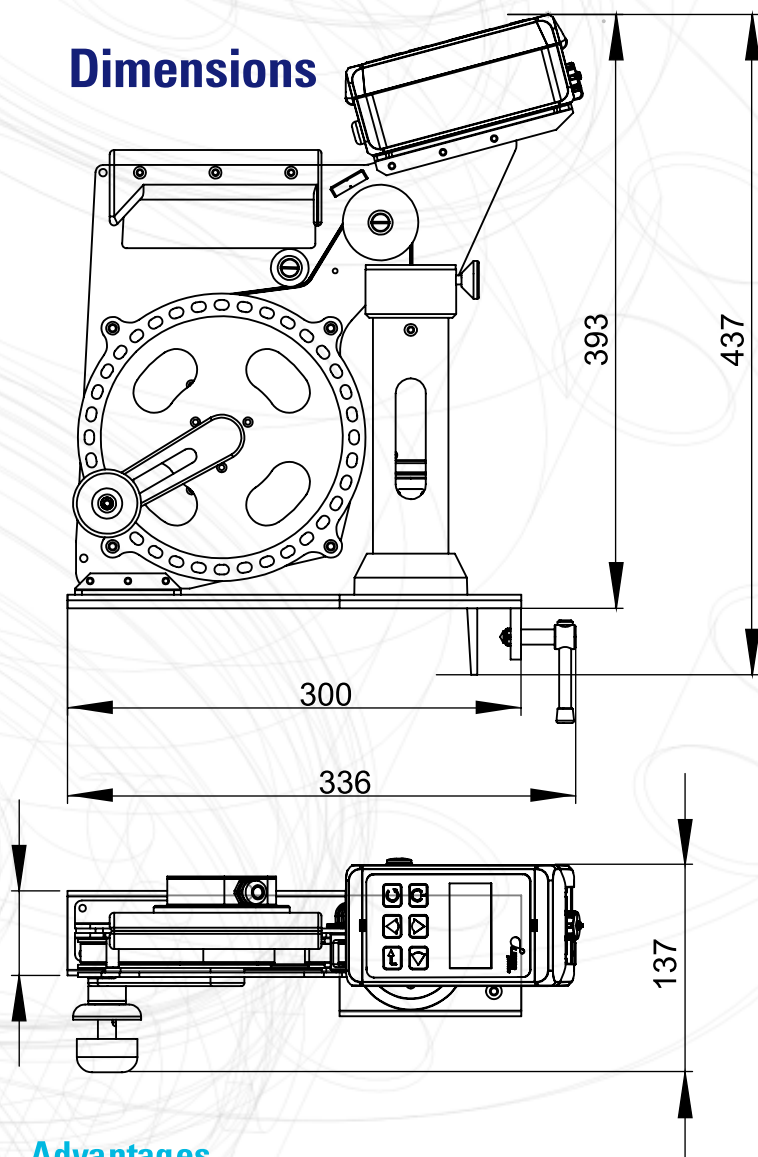
DUTI-254 (DM-250.4)

IN PROCESS TO EXCELLENCE

The portable density meter DUTI-254 is designed for density and level measurements of any pure liquids directly in tanks, without sampling, at the depth up to **30 meters**.



Dimensions



Advantages

- Direct density measurement
- Record spot density and average per tank
- Automatic temperature compensation
- No sampling required
- ATEX, IEC Hazloc certification
- Safe operation, low maintenance
- At any depths up to 30 meters
- Economical and easy to operate
- Measures highly viscous liquids up to 2000 cP
- Rigid construction for heavy duty outdoor operation
- Local results storage and Bluetooth and USB data transfer

Applications

- Petroleum industry
- Ethanol production
- Food & Beverages
- Chemical industry
- Cosmetic industries
- Pharmaceutical industry



DUTI-254 OVERVIEW

OLED Display (128x64)

Device Controller

Tape Cleaning
Device

Graduated

Meter or Feet Tape

Stopper for
Tape Fixing

Temperature Sensor

Vibrating Level and
Density Sensor

For Easy Distinguish:

Displays Density and Temperature
Displays Referred Density
Displays Level
Displays Tank Number, Date and Time



Principle:

Detection of Density and Ullage

The detection method is based upon the principle of detecting a change in resonance frequency.

Temperature Measurement

Temperature measurement is obtained by changes in electrical resistance of a platinum element.

Specifications

Measuring range:

Density	0... 3 g/cm ³ (0... 3000 kg/m ³)
Density Standard calibration	0.6... 1.2 g/cm ³ (600... 1200 kg/m ³) 0.9... 1.8 g/cm ³ (900... 1800 kg/m ³)
Temperature	-40... +85°C (-40... +185°F)
Level	up to 30 m (100ft.)

Accuracy:

Density	±0.0003 or ±0.0005 g/cm ³ (±0.3 or ±0.5 kg/m ³)
Temperature	±0.1°C (±0.2°F) or ±0.2°C (±0.4°F)
Level	±2mm (±0.008")

Repeatability:

Density	±0.00015 or ±0.00025 g/cm ³ (±0.15 or ±0.25 kg/m ³)
Temperature	±0.1°C (±0.2°F)
Level	±1mm (1/16")

Resolution:

Density	0.0001 g/cm ³ (0.1 kg/m ³)
Temperature	0.01°C (0.02°F)
Level	±1mm (1/16")

Supported measuring units

Real Density: g/cm³, kg/m³, lb/gal, lb/ft³; API; SG
 Referred Density: at 15°C, 20°C, 60°F; API60; SG60
 Tables ASTM D 1250
 Alcohol Tables
 Temperature in °C or °F

Ambient temperature

-40... +85°C (-40... +185°F)

Depth of submersion

Up to 30 meters (100 ft.)

Sensor:

Type	Vibrating element (Resonance principle)
Material	Stainless steel SS 316 L; NiSpan C; Hastelloy C22
Weather rating	IP68

Intrinsically safe:

Level block with sensor	ATEX II 1G EEx ia IIB T4
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Charging device

USB with IP68 protected connector

Power supply

NiMH 3.6V-1500mAh

Operating time without charging

Appr. 12 hours

Dimensions, weight:

Level block with sensor	437 x 336 x 137 mm (17.1 x 13.2 x 5.4 in), 3 kg (6.6 lb)
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Temperature compensation

Automatic

Viscosity compensation

Automatic

Data handling

OLED Display (128x64) with backlight
 Local memory up to 2000 results with date/time stamped
 Build in Bluetooth and USB for data transfer to printer or PC
 Optional Windows - based software

Delivery

Delivered in compact carrying case



Multifunctional software allows to proceed the measurements results in use-convenient form;
 Compatible for a Windows 7/8/10*



Immediate printout of the measurements by Bluetooth
 No need for PC*



Delivered in compact carrying case



* Option

For more information please visit www.lemis-process.com



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