

# DENSITY METER

**DC-50**

**IN PROCESS TO EXCELLENCE**

# Specifications

## Measuring range:

Density	0... 2 g/cm <sup>3</sup> (0... 2000 kg/m <sup>3</sup> )
Density NG, PG, LNG	0... 0.4 g/cm <sup>3</sup> (0... 400 kg/m <sup>3</sup> )
Density LPG	0.4... 0.65 g/cm <sup>3</sup> (400... 650 kg/m <sup>3</sup> )
Density Standard	0.65... 1.6 g/cm <sup>3</sup> (650... 1600 kg/m <sup>3</sup> )
Temperature	-40... +85°C (-40... +185°F)

## Accuracy:

Density	Up to ±0.00025 g/cm <sup>3</sup> (up to ±0.25 kg/m <sup>3</sup> )
Temperature	±0.2°C (±0.4°F)

## Repeatability:

Density	Up to ±0.000125 g/cm <sup>3</sup> (up to ±0.125 kg/m <sup>3</sup> )
Temperature	±0.1°C (±0.2°F)

## Resolution:

Density	0.0001 g/cm <sup>3</sup> (0.1 kg/m <sup>3</sup> )
Temperature	0.01°C (0.02°F)

## Process connection

NPT 1/2", 3/4", 1"  
ANSI 1/2", 1", 2", 3", 4"  
DN 10, 15, 25, 50, 80, 100

## Operating pressure

Up to 100 Bar (up to 1450 psi)

## Supported measuring units

Real density: g/cm<sup>3</sup>, kg/m<sup>3</sup>, lb/gal, lb/ft<sup>3</sup>; API; SG  
Referred density: at 15°C, 20°C, 60°F; API60; SG60  
Tables ASTM D1250  
Alcohol tables  
Temperature in °C or °F

## Ambient temperature

-40... +50°C (-40... +122°F)

## Weather rating

IP68 for sensor and IP65 for other parts

## Power voltage:

Device	110-230V AC (50-60 Hz) or 24V DC (16-28V DC)
Sensor	6-14V DC (30 mA)

## Implosion protection marking

**ATEX** II 1/2G Ex ia IIB T4; **IECEx** Ex ia IIB T4 Ga /Gb; CCE

## Digital output

Standard: RS485, Modbus; user choice of signals and protocols

## Analog output

4-20 mA, up to 3 channels

## Temperature compensation

Automatic

## Viscosity compensation

Automatic

## Factory calibration

Calibration certificates supplied as standard

## Advantages

- Continuous measurements
- High accuracy
- Simple installation
- Suitable for very viscous liquids
- Wide range of applications
- Safe operation, low maintenance
- Easy cleaning
- Rigorous factory testing
- Compact design
- Automatic viscosity/temperature compensation

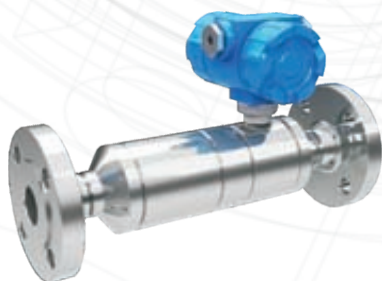
## Applications

- Petroleum industry
- Ethanol production
- Food & Beverages
- Chemical industry
- Cosmetic industries
- Process monitoring and control

## Software

- Receiving of density and temperature values from Terminal Box via cable
- Calculating of relative/referred density of product on the base of built-in tables
- Various formats for data reading
- Storage of the measured and calculated values in the database tables
- Conversion of the database tables to EXCEL format and printing the results
- Up to 16 sensors monitoring (another sensors quantity is optional)

DC-50 S-type



DC-50 G-type



DC-50 T-type



For more information please visit [www.lemis-process.com](http://www.lemis-process.com)



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