

**DMA 35N**  
Portable  
Density, Specific Gravity & Concentration Meter



## The DMA 35N ...

... portability and power, all in one small package! The new DMA35N handheld digital density meter defines the state of the art of portable density measurement. Designed for use in the most demanding industrial environments, the DMA35N gives you the density, specific gravity, or % concentration of your sample. Simply press the lever on the built-in pump and within seconds, the results are shown on the large, bright display.

Based on the familiar Anton Paar harmonic oscillator technology, the DMA35N is light, weighing only 275 grams (10 ounces), so your arm won't get tired, no matter how many samples you measure. Need to save the data for later analysis? Press a button and the measured results are stored in the instrument's memory – up to 1024 data points – and can easily be transferred to a computer or printed later.

The DMA35N is the result of many years of experience, brought together in the optimal portable package. Anton Paar introduced portable density meters in 1980 and has incorporated the comments and requests of tens of thousands of customers into this new design.



### Ease of use

- Small, compact, light weight design
- No arm fatigue, even when measuring hundreds of samples daily
- Easily fits into tight spaces
- Designed so that display is easily seen, regardless of sampling position
- True one-hand operation



### Pipette-style pump

- Better control of sample flow
- Less effort required
- No bellows to crack or leak
- Entire pump assembly easily replaced



### State of the art electronics

- Display is large, bright, and easy to read
- You select parameters displayed
- Up to 1024 data points can be stored in the instrument's memory
- Uses just two Micro LR03 1.5 V AAA batteries (0% Cd, 0% Hg)
- Up to 90 hours expected life per battery



### Rugged design

- Designed for use in industrial or field applications
- Grip large enough for gloved hands
- Pump spills do not enter instrument
- Infrared data port replaces RS232 – no terminal corrosion and no openings where samples could leak into the instrument

# Applications

There are 3 versions of the DMA 35N:

- The standard instrument for use in the laboratory and for applications, where no explosion protection is required. This is typically used in the food and beverage industry and for general industrial and laboratory applications.
- The explosion-proof standard instrument (classification: EEx ia IIC T6) is predominantly used for battery acid measurements and in the field of chemical applications.
- An explosion-proof version (classification: EEx ia IIC T6) with a special housing is provided for the petrochemical industry, being especially resistant to petrols and similar organic solvents.



## Battery acid concentration

- Emergency power supply plants
- Drive batteries
- Starter batteries
- Submarines



## Petrochemistry

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



## Pharmacy & chemistry

- Fermenters
- Serums
- Lab preparations
- Scouring baths
- Flux monitoring
- Insulating oils



## Food and beverage industry

- Fruit juices and cider
- Beer wort
- Monitoring the fermentation process
- Distillation & rectification
- Water and sewage plants
- Wine, must and sparkling wines



# Specifications

## Measuring range

Density: 0 to 1.999 g/cm<sup>3</sup>  
Temperature: 0 to 40 °C  
(32 to 104 °F), filling at higher  
temperatures possible

## Accuracy

Density: ±0.001 g/cm<sup>3</sup>  
Temperature: ± 0.2 °C

## Repeatability

Density: ±0.0005 g/cm<sup>3</sup>  
Temperature: ±0.1 °C

## Resolution

Density: 0.0001 g/cm<sup>3</sup>  
Temperature: 0.1 °C or 0.1 °F

## Permanently stored tables and customer functions

°Brix, % Alcohol, Proof, °Baumé,  
°Plato, API gravity, API SG, API  
density, SG at ref. temp., % H<sub>2</sub>SO<sub>4</sub>,  
programmable customer function

## Data memory

1024 measuring values

## Power supply

Two 1.5 V alkaline batteries  
(Micro LR03 AAA)

## Sample volume

Approx. 2 ml

## Dimensions

140 x 130 x 25 mm  
(5.5 x 5.1 x 1 inches)

## Weight

275 g (10 ounces)

## Interface

Optional RS 232 interface with infrared  
data port



Invented and developed by H. Stabinger and H. Leopold / Graz-Austria

Specifications subject to change without notice.

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