

MASS FLOWMETER

○ FOR LOW FLOW GAS RATE MEASUREMENT



- Based on a **thermal measurement**, this flow meter delivers a signal independent of the temperature and pressure.
- The electronic unit calculates the flow from the voltage measured by the sensor.
- With its **extremely low pressure drop** it is intended for the measurement of the sampling flow of micro pumps whose flow is sensitive to charge loss.
- Its supply by battery or mains, its management by microcontroller and its compact size make this instrument very adaptable to use.
- Its internal memory enables it to memorize up to 3000 measurements.
- Parameter setting and reading of the data by *DMView* software.

Features



MASS FLOWMETER

FEATURES

Range of the measurement:

0-10 l.h⁻¹ reference instrument: DM10

Pressure drop :

DM10 : 10 Pa

Accuracy:

Less than 1 % of the measurement extent over the whole temperature range.

Response time:

Of the sensor: 5 mS

Of the instrument: 500 mS

Measurement :

Each measurement results from the calculation of the average value of 10 elementary measurements.

The interval between measurements can be set between 1 second and 60 seconds.

An average function (smoothing) over a maximum of 10 values is available.

Display:

LCD 4*20 back-lit screen.

Low battery and range excess indicator.

Control:

Board equipped with a microcontroller with 8 bit architecture.

Clock frequency 10 MHz.

Control by keyboard with 2 push buttons.

Memory:

Capacity : 3000 measurements

Possibility of storing one measurement among N, with N between 1 and 1000.

Delta Logger:

The internal memory can monitor sampling flows over long periods.

Environment:

0°C to +45°C / 10-90 % relative humidity.

Protection Index : IP54.

Sound level: Not significant.

Compliant with standards CEM EN 55022 and CEI 61000-4

Casing:

Poly carbonate casing.

L*1*h : 240*145*70 mm.

Weight: 1.2 kg

Power supplies:

Mains 230V 50 Hz

Cadmium Nickel Battery 12 Volts.

Capacity: 1.3 Ah.

Independent operation:

6 hours in measurement mode with back lighting

60 hours in measurement mode without back lighting

2 to 4 months in sleep mode

Integral battery charger.

Charging time: 4 hours.

Parameter setting and data retrieval:

Return of information by series link RS232C (Rs232, 19200 Bauds, 8 bits, 1 stop).

DMView Software:

Used for the entry of operating parameters and reading memorised results.

DM10 instruments are delivered with:

- Power supply cable 230 V.,
- Series link cable,
- Flexible tubing,
- End pieces,
- **DMView** software on CD.
- Simplified instruction leaflet,
- Verification certificate.

To order:

1-Type of instrument

DM10

P-550-107

2-Accessories :

Measuring appliance for individual P-550-104 dosimeter