

# REAL-TIME DUST MONITOR

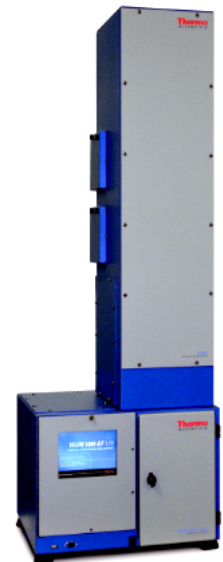
## TEOM 1405-DF

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The TEOM 1405 Real-time Dust Monitor measures airborne dust, volatile and semi-volatile compounds in real time. It is the immediate replacement of the FDMS module equipped TEOM 1400 analyser, a device chosen by many countries for the quality of its measures.

The weighing of the dust collected on a filter after filtration of a known volume of air is the standard method for measuring the mass concentration of dust in the environment.

Two models are available: the 1405-F and the 1405-DF. Depending on the model, several concentrations are programmable (see technical data).



### APPLICATIONS

- Environment
- Industrial Production Plant



### BENEFITS

- ⊕ Real-time measurement of the mass of the dust deposited on the collection filter
- ⊕ TÜV tested and certified
- ⊕ Takes into account the volatile and semi-volatile fraction of the particles by technical FDMS
- ⊕ Analog Outputs, RS232/485, USB, Ethernet
- ⊕ Colour touch screen with internal library for maintenance and use
- ⊕ Rapid response time
- ⊕ Easy installation and transportation

# REAL-TIME DUST MONITOR

## TEOM 1405-DF



### SPECIFICATIONS

<b>DISPLAYED CONCENTRATIONS</b>	1405-F: available in PM-2,5, PM-10, PM-1, and total dust versions 1405-DF: measures simultaneously 3 granulometric fractions: PM-2,5, PM-10 et PM Coarse
<b>SAMPLE CONDITIONING</b>	Nafion membrane dehydration, 4°C filtration purge
<b>MEASUREMENT UPDATES</b>	Every 6 minutes
<b>REAL-TIME VALUE AVERAGE</b>	60 minutes
<b>LONG TERM AVERAGING</b>	1, 8 and 24 hours
<b>RANGE</b>	0 to 1 000 000 µg/m <sup>3</sup> (0-1 g/m <sup>3</sup> )
<b>RESOLUTION</b>	0,1 µg/m <sup>3</sup>
<b>PRECISION</b>	+/- 2 µg/m <sup>3</sup> (one hour average) +/- 1 µg/m <sup>3</sup> (24 hour average)
<b>STANDARD CONFIGURATION</b>	TEOM microbalance with colour touch screen, FDMS stage, input selector (PM-10, PM-2,5, PM-1, TSP), flow separator, vacuum pump, temperature probe, annual consumables
<b>OUTPUTS</b>	- Ethernet, USB, RS232, RS485 - 8 Analog outputs (0-1 or 0-5 VDC) - 2 programmable alarm relays - 4 Analog outputs (0-5 VDC)
<b>FLOW RATES</b>	- Main Circuit: 3 lpm - Bypass Circuit: 13,67 lpm
<b>INTERNAL DATA ACQUISITION</b>	Up to 500 000 recordings
<b>DIMENSIONS</b>	- Height: 127 cm - Width: 43.2 cm - Depth: 48.3 cm - Weight: 34 kg
<b>TERMS OF USE</b>	- Suctioned Air Temperature: -40°C to 60°C - Shelter Temperature: 8 to 25°C - Power Consumption : 240 VAC, 4 A max
<b>APPROVALS AND CERTIFICATIONS</b>	EN 12341: 1998 (PM-10), EN 14907: 2005 (PM-2,5)

