

High Volume Air Sampler, Model MFC-PM10

Mass Flow Controlled System for **PM-10** measurement



Key Features

- US EPA FRM Designated for determination of suspended PM-10 particulate concentrations (RFPS-1287-063)
- High speed motor for continuous sampling
- All-weather, outdoor shelter constructed of anodized aluminum
- Filter materials are available in binderless or high-purity glass fiber, pure quartz or cellulose

The Thermo Scientific High Volume Air Sampler, Model MFC-PM10, utilizes a mass flow controlled system for the sampling of airborne particulate matter less than 10 nanometers in ambient air. Designated as a Federal Reference Method (FRM) performance specifications for the determination of suspended PM-10 particulate concentrations.

Capable of 24-hour, continuous indoor or outdoor sampling, the MFC-PM10 features a high speed motor, durable all-weather shelter, and ruggedized electronic components for accurate sampling.

The air flow through the MFC-PM10 system is maintained at a constant rate by an electronic probe, which automatically adjusts the speed of the vacuum motor to correct for variations in line voltage temperature, pressure and filter loading.

System air flow ranges are adjustable from over 20 SCFM to 60 SCFM, and are controlled at constant standard conditions of 25°C and 760mm Hg pressure within plus or minus one SCFM. By maintaining an exact air flow rate through the sampler, the average concentration measured is extremely accurate and reliable.

The High Volume Air Sampler, Model MFC-PM10, is supplied complete with the motor, filter holder and anodized aluminum shelter. Optional accessories include a PM-2.5 inlet, brushless blower motor, digital or mechanical timer, flow recorder, and elapsed time indicator.

Applications include state and city networks, industry consulting, painting of bridges and filter based sample collection for lead analysis. The filter is also available in variety of materials including: binderless or high-purity glass fiber, pure quartz and cellulose.

High Volume Air Sampler, Model MFC-PM10

To maintain optimal product performance, you need immediate access to experts worldwide, as well as priority status when your air quality equipment needs repair or replacement. We offer comprehensive, flexible support solutions for all phases of the product life cycle. Through predictable, fixed-cost pricing, our services help protect the return on investment and total cost of ownership of your Thermo Scientific air quality products.

Product Specifications

| | |
|-----------------------------------|---|
| Motor | HP 0.6 |
| Amperage | 6.25 |
| Wattage | 750 |
| Flow Set Point | 20 - 60 ACFM |
| Mass Flow Control Accuracy | +/- 2.5% deviation (24 Hours) |
| Power Source | 110v, 1-phase, 60Hz (Other options available) |
| Weight | 112lbs (81kg) |
| Physical Dimensions | |
| <i>Shelter</i> | 46" (117cm) H x 20" (51cm) W x 23" (58cm) D, 70lbs (32kg) |
| <i>Inlet</i> | 32" (81cm) H x 32" (81cm) W x 26" (66cm) D, 58lbs (26kg) |

Ordering Information

| Model Number | Description |
|--------------|---|
| IP1070 | PM10, Hi-Vol, MFC, 7 Day Mechanical Timer, 110V 60Hz |
| IP10-1 | PM10, Hi-Vol, MFC, Digital Timer, Elapsed Time Indicator, 220V 50Hz |

Options and Accessories

- Mechanical timer
- Digital timer
- Brushless motor
- Filter media
- Flow recorder
- Elapsed time indicator
- Calibration kits

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**Environmental
Instruments Division**
Air Quality Instruments

27 Forge Parkway
Franklin, MA 02038 USA

(866) 282-0430
(508) 520-0430
(508) 520-1460 fax

www.thermo.com/air

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