

Exactus BAM

The Exactus BAM is a complete measurement system and comes with the following standard components:

- Internal Datalogger
- External AC Vacuum Pump Standard
- Real-Time Concentration
- PM10 Inlet
- Aluminum Tripod
- Temp./RH/Pressure Sensor
- Volumetric Flow Control
- Weatherproof Enclosure
- Filter Temperature Sensor
- Filter RH Sensor
- Filter Pressure Sensor
- Calibration Membrane

Specifications

Range	0 - 65 mg per cubic meter
Accuracy	Exceeds US-EPA PM ₁₀ FEM Requirements
Measurement Cycle	Hourly measurements, time resolution to 1-minute
Beta Source	C14, (Carbon 14), Half-life of 5730 years
Detector:	Photomultiplier tube with organic plastic scintillator
Analog Output	2 Channels: optically isolated; Voltage range 0-1V, 0-2.5v, 0-5V,
Filter Tape	Continuous glass fiber filter
Inlet	EPA PM10 inlet
Flow Rate:	16.7 liters per minute, adjustable
Flow accuracy	+/- 2% of reading, volumetric flow controlled
Sample Pump	Dual diaphragm type, DC powered, 4000 hr rating
Alarm Signals	Filter, flow, power and operation failure
Input Power	12 Volts DC @ 48 Watts max
US-EPA Designation:	EQPM-1215-226 (PM ₁₀)
Operating Temperature	-25 Deg C to 40 Deg C
Enclosure	46 cm x 41 cm x 31 cm, 16kg

Options and Accessories

- Zero Calibration Kit
- PM₁₀ Inlet head EPA spec.
- Flow Calibrator
- PM_{2.5} Sharp-Cut Cyclone
- TSP Inlet
- Wind speed and direction sensor
- Sonic wind speed and direction sensor
- Ambient RH Pressure Sensor
- Filter tape, roll
- Volumetric flow calibration kit
- External Pump or VAC Option



The Exactus BAM is a portable, real-time beta gauge which is comparable to U.S. EPA methods for PM₁₀ particulate measurements.

The Exactus BAM has been built to satisfy users, regulators and those from the health community by providing truly accurate, precise, real time measurement of fine particulate matter automatically. In addition, it is rugged, portable, and deployable in 15 minutes.

The Exactus BAM offers the following advanced features:

1. Accuracy and precision approval with U.S. EPA requirements for PM₁₀ measurement.
2. Real-time, accurate results without correction factors, regardless of season or geographic location.
3. True ambient sampling provides accurate measurement of semi-volatile nitrates and organic compounds.
4. Lightweight, rugged construction is easily mounted on a tripod in minutes.
5. All-weather construction allows for true ambient sampling.
6. Operates on AC power.