EPAM-7500

Wireless, Portable PM Monitor with Touch Screen Operation

➡ **Simultaneous real-time measurement and gravimetric sampling for ambient and indoor particulate matter**
- Sensitive IR optical light scattering for real-time measurement and graphical representation of PM profile
- 47-mm FRM-style filter holder for concurrent gravimetric sampling for cross-calibration and further PM speciation

➡ **Measures temperature and relative humidity**

➡ **Configure with accessories for your application**
- Wireless modem
- Solar panel
- External audible alarm
- Remote sampling probe
- Heating element for high-humidity areas
- Ultrasonic wind speed and direction measurement to exclude near-field resources
  - Wind speed, wind direction, barometric pressure, heat index, and GPS in one lightweight sensor; no moving parts

➡ **Interchangeable single-jet impactors for PM10, PM2.5, PM1.0, or respirable**
- Sampling inlets for PM10, PM2.5, and TSP included with instrument

➡ **Programmable**

➡ **Measurements displayed simultaneously on graphical color touch screen**

➡ **Internal 90-dB pulse alarm — user-selectable threshold**

➡ **Rechargeable Li-Ion battery provides ≥ 24-hour operation**

➡ **Multiple interface for data transfer**
- Removable CF card
- USB Types A and B
- Ethernet port

➡ **Datalogging**
- Digital outputs include serial (RS-232), removable CF card, USB Types A and B, and Ethernet port
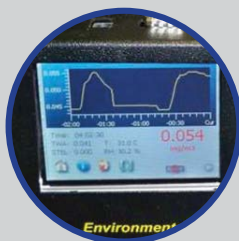- DustComm Pro PC analysis/reporting software included

Only 7 pounds!

The HAZ-DUST EPAM-7500 wireless portable PM monitor features touch screen operation and provides simultaneous real-time measurements of particulate matter, temperature, and relative humidity in ambient and indoor air. Interchangeable size-selective sampling heads allow PM10, PM2.5, PM1.0, respirable, or TSP monitoring. Optional accessory for measuring ultrasonic wind speed and direction is available. A filter holder positioned directly behind the optical sensor provides concurrent gravimetric sampling for cross-calibration of optical sensor, further particulate speciation, and determination of metal and carbon content.

Interchangeable impactor

Color touch screen

Optional ultrasonic wind speed and direction measurement

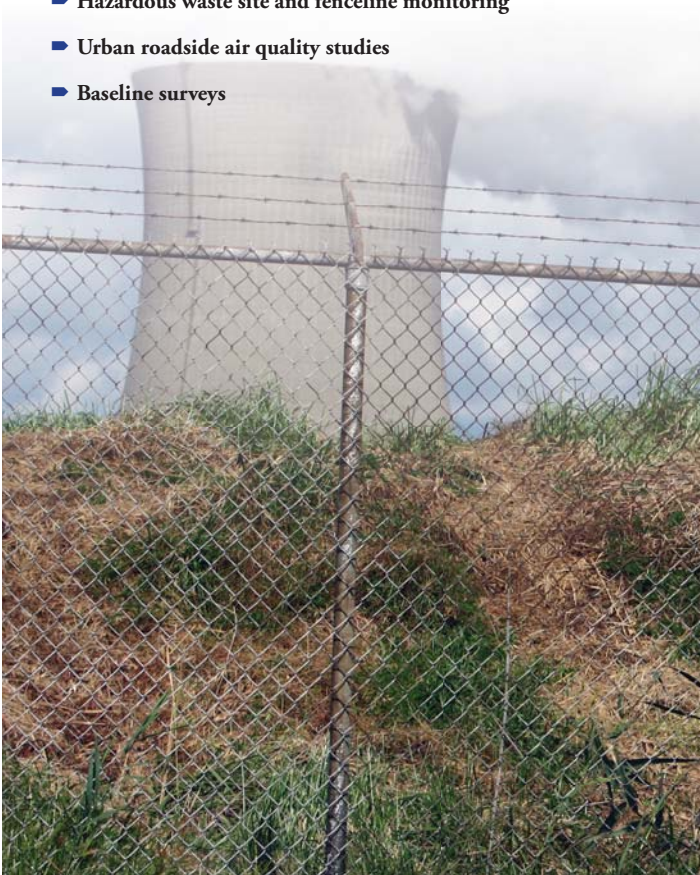*EPAM-7500 on optional tripod with solar panel*

EPAM-7500

Wireless, Portable PM Monitor with Touch Screen Operation

EPAM-7500 Applications

The EPAM-7500 is compact and weighs only seven pounds for easy transport from site to site.

- Particulate indoor air quality investigations
- Evaluation of dust suppression/engineering controls
- Walk-through IAQ surveys
- Dust generation monitoring
- Quantification of particle migration
- Hot spot location and identification
- Hazardous waste site and fenceline monitoring
- Urban roadside air quality studies
- Baseline surveys

EPAM-7500 is ideal for fenceline monitoring.

Performance Profile

Sensor:	IR optical light scattering
Sensing Range:	0.001 to 400 mg/m^3
Particle Size Range:	0.1 to 100 μm
Precision:	± 0.003 mg/m^3 (3 μg/m^3)
Sampling Flow Rate:	2 L/min (adjustable)
Accuracy:	± 10% to filter using SAE fine test dust
Calibration:	Gravimetric reference NIST-traceable SAE fine test dust – ISO 12103-1
Filter Holder:	47 mm, FRM style
Relative Humidity Sensor Range:	5 to 100% RH
Display:	Graphical color touch screen
Alarm Output:	Internal, 90 dB at 3 ft External, 90 dB at 9 ft and visual strobe *(optional)*
Recording Time:	1 sec to 24 mo
Sampling Rate:	1 sec, 5 sec, 10 sec, 1 min, 15 min, 30 min, or 1 hr
Data Storage:	75,000 data points
Memory and Time Storage:	> 5 years
Real-time Clock and Data Display:	Hours, minutes, seconds and day, month, year
Graphical Data Display:	Concentration in mg/m^3 and TWA, MAX, MIN, STEL, date, time, temperature, and relative humidity
Digital Output:	RS-232 serial 9-pin D sub and USB; removable CF card and Ethernet port
Software:	Windows driven for graphical and data translation, *requires Windows XP or 7*
Power:	Rechargeable and interchangeable Li-Ion battery
Operating Time:	≥ 24 hours (Li-Ion battery), continuous (AC or solar)
Charging Time:	Approximately 5 hrs
Operating Temperature and Humidity:	14 to 122 F (-10 to 50 C), 95% non-condensing
Storage Temperature:	-4 to 158 F (-20 to 70 C)
Case Dimensions:	4 x 10 x 9 in (10.2 x 25.4 x 22.9 cm)
Weight:	7 lbs (3.2 kg)

Contact SKC to custom order the EPAM-7500!