HCTM CO., LTD.

AirSens^{PM}

PS-1602PM (Particulate Matter Sensor)

The AirSens^{PM} functions both as a particle counter, measuring particles across 16 channels, and as a real-time measuring device capable of measuring $PM_{1.0}$, $PM_{2.5}$, and PM_{10} simultaneously. It demonstrates excellent counting statistics and reproducibility in both low and high dust concentrations. The LCD display and included software enable real-time monitoring both on-site and at remote locations. The inlet heater reduces measurement errors caused by moisture, while sheath air is used to minimize contamination of internal optical components.

The PS-1602PM model offers stable and versatile real-time measurements for indoor air quality. They can also be used outdoors when installed in a Stevenson screen.



Features

- Particle number & mass concentration
- Particle Sizing from 0.25 ㎛ ~ 10.0 ㎛
- Up to 16 channels of simultaneous count data
- Measure $PM_{1.0}$, $PM_{2.5}$, PM_{10}
- 1.2 L/min flow rate
- 90° Light scattering method
- A heater is built into the inlet to reduce moisture-related measurement errors
- Direct mount temperature & relative humidity probe
- 3.2" LCD Display for Real-time Monitoring
- Stand-alone Monitoring Program

Monitoring Program

- Particle Mass Data



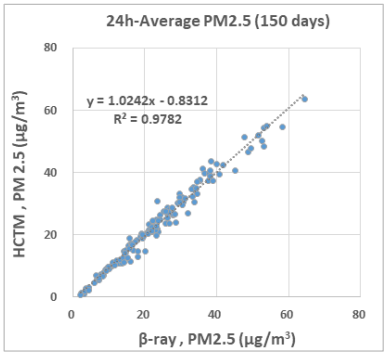
- Particle Mass Chart Graph



Applications

- Air quality data for research
- Process control in industry
- Indoor Air Quality (IAQ) monitoring
- Epidemiological studies
- Local area air quality monitoring
- Dust pollution measurements
- Aerosol science
- Workplace monitoring

Comparison test with ß-ray ($PM_{2.5}$)



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Specifications

Model	PS-1602PM
Size range	0.25 ~ 10.0 ㎛
Particle size resolution	16 CH
Measured mass fractions	$PM_{1.0}$, $PM_{2.5}$, PM_{10}
Counting efficiency	50 % at 0.25 ㎛ (per ISO-21501-4 & JIS 9921B)
Consentration limits	10 mg/m³ @ 10% coincidence loss 94,000,000 particles/ft³ @ 10% coincidence loss
Zero count level	≤ 7 counts/㎥ (per ISO-21501-4 & JIS 9921B : ≤ 7 counts/㎥)
Flow rate	1.2 L/min
Sampling time	1 sec ~ 24 hrs (User selectable)
Vaccum source	Internal Pump
Light source	Laser diode
Environmental Sensors	Direct Mount Temperature & Relative Humidity probe
Display	3.2 inch LCD touch screen display
Communication Modes	Ethernet (TCP/IP, Modbus TCP)
Battery	Li-Ion Battery (up to 2 hr)
Dimension (LWH)	19.2 x 8.3 x 32.5 cm (7.56 x 3.27 x 12.8 in)
Weight	1.8 kg (3.97 lb with Battery)
Enclosure	Alloy
Power	Adapter (Rated voltage : 100 ~ 240 V, 50/60 Hz / Output: 19 VDC, 6.3 A)
Operation Environment	-20 ~ 45 ℃, 1 ~ 95 %RH, Non condensing
Warranty	1 year (Except pump)

- **ACCESSORIES** Adapter / Purge Filter / Single-host Monitoring program
- **OPTIONAL ACCESSORIES** Multi-location Monitoring program

Distributed by

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