



Handheld BD5-SPM4210/4220

### Suspended Solids Concentration Meter

Measurements of Suspended Solids in Air & Gas

Ref: H\_SPM4200\_IntE

*Both for SPM in Air and Liquid Turbidity Applications*



HBD3 SPM4210

### Suspended Materials Analyzer

**Range** 0-10, 1000, 10000 mg/m<sup>3</sup>

- ATC
- Multi-function
- Smart test
- Rugged design
- Sci. algorithm
- Datalog
- Communication
- Battery supply
- Printer drive

**Repeatability:** 1-2% of reading

**Usage:**

- Suspended solids
- Floating dust
- Industrial SPM

**Temperature:** < 70 °C

**Application:**

- Sanitation & anti-epidemic
- Environ analysis
- Labor protection
- Powder plant
- Research



SPM4210-90D

SPM4210-90DC  
SPM4210-90DTC



H-SPM4210 Sensor

<http://www.fullsense.com/>

SPM4210 employs light scattering turbidimetry,  
SPM4220 Light forward scattering and light attenuation turbidimetry Technology.

## Function:

- 2\*16 LCD display
- 4\*5 Full key operation
- User calibration for 8 application supported
- Temperature compensation embedded

## Applications

- TSP measurement of Air quality
- Suspended particles in industrial process or emissions
- Flue or other exhaust gas;
- Oil soot in cooking
- Fog detect
- Suspended solids in liquids

## Specifications

**Resolution:** 0.01mg/m<sup>3</sup> ICPM(Standard deviation of geometry mean 0.3u, as to calibration samples)

**Range:** 0.01-100, 0-1000, 0-10000,0-100000 mg/m<sup>3</sup>; BD5: Auto scale

**Response:** 100ms

**Accuracy:** ±5% (relative to calibration samples)

**Display:** 16x2 LCD

**Keypad:** 4x5

**Serial port:** RS232/485

**Environ temperature:** -20-70℃

**Environ humidity:** 0-90%RH

**Supply:** Chargeable Battery

**Size:** Analyzer:98X150X30mm; Probe:D24x360 mm

**Net Weight:** 0.7kg

## Standard Application Suit

Model	Order Code	Range to scale	Main parts	Usage
HBD5SPM4220	-A01	0.01mg-10mg/M <sup>3</sup> 0.1mg-100mg/M <sup>3</sup> 1-1000mg/M <sup>3</sup>	Handheld Analyzer:1; 4220 Sensor:1; 9Vcell:1; 12V DC Charger:1. Portable Case:1	Total suspended materials/Atmosphere
HBD5SPM4210	-A02	0.1mg-100mg/M <sup>3</sup> 1-1000mg/M <sup>3</sup> 10-10000mg/M <sup>3</sup>	Handheld Analyzer:1; 4210 Sensor:1; 9Vcell:1; 12V DC Charger:1. Portable Case:1 Calibration	Workshop Total suspended materials/ Plant Atmosphere
pBD5SPM4220	-A03	0.01mg-10mg/M <sup>3</sup> 0.1mg-100mg/M <sup>3</sup> 1-1000mg/M <sup>3</sup>	Handheld Analyzer:1; 4220 Sensor:1; 9Vcell:1; 12V DC Charger:1. Portable Case:1 AP6V Sampler Pump:1. Air Gun: 1. Calibration. PM10 filter: 1.	Total suspended materials/Atmosphere/TSP/ RSP(PM <sub>10</sub> ) test at lab or field.
pBD5SPM4210	-A04	0.1mg-100mg/M <sup>3</sup> 1-1000mg/M <sup>3</sup> 10-10000mg/M <sup>3</sup>	Handheld Analyzer:1; 4210 Sensor:1; 9Vcell:1;	Total suspended materials/Atmosphere/TSP/ RSP(PM <sub>10</sub> ) test at lab or

			12V DC Charger:1. Portable Case:1 AP6V Sampler Pump:1. Air Gun: 1. Calibration. PM10 filter: 1.	field.
HBD5SPM4230-DS	-A05	TSP 0.1-100,10000mg/M <sup>3</sup> TSS:0-5000mg/L; Turb:0-2000NPT	Handheld Analyzer:1; 4230 Sensor:1; 9Vcell:1; 12V DC Charger:1. Portable Case:1	Total suspended materials, both in gases and liquids. Turbidity;
HBD5-SPM4220 SMK	S01	SPM: 0.1-100mg/M <sup>3</sup> 1-1000mg/M <sup>3</sup> 10-10000mg/M <sup>3</sup> Blackness Value: 0.1-100%; Rb 0-10.0 Green:0-12	Handheld Analyzer:1 4220 Sensor:1 9Vcell:1 12V DC Charger:1. Portable Case:1 AP6V Sampler Pump:1. Smoke Gun: 1. Calibration.	Suspended particles and Engine smoke or photo opacity in one sensor; Temperature <300°C(1m pipe) 300-450°C with 1.5m cooling pipe;
HBD5-SPM4210 -PP	S02	Particles: 0.1-100mg/M <sup>3</sup> 1-1000mg/M <sup>3</sup> 10-10000mg/M	Handheld Analyzer:1; 4210 Sensor:1; 9Vcell:1; 12V DC Charger:1. Portable Case:1 Cooling Pipe sampler:1. Calibration.	Suspended particles analyzer for positive pressure resource, typically for automotive smoke test; Temperature: <300°C(1m pipe); 300-450°C with 1.5m with cooling pipe sampler;
HBD5-SPM4230 -SMK	S03	Opacity: 0-100%	Handheld Analyzer:1; 4110 Sensor:1; 9Vcell:1; 12V DC Charger:1. Portable Case:1 Cooling Pipe sampler:1. Calibration.	Blackness analyzer for positive pressure resource, typically for automotive smoke test; Temperature: <300°C(1m pipe); 300-450°C with 1.5m with cooling pipe sampler;

## Accessories

Air pump	To suck air into the sensor
Pipe connector	To connect to industrial device
Pressure conditioner	Pressure reducer
Toxic kit	Tools to collect toxic gas
Filter	PM10,PM1.0 filter for particles big than 1 or 10 um.
Air cooler	For smoke application.

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