

PM 10 SENSOR WITH SINGLE CONDITIONING INBUILT POWER SUPPLY



Operating principal	Laser scattering
Detection	PM10
Output data	PM10 in $\mu\text{g}/\text{m}^3$
Concentration range	0 $\mu\text{g}/\text{m}^3$ to 1.000 $\mu\text{g}/\text{m}^3$
Accuracy (at 25°C \pm5°C): 0 $\mu\text{g}/\text{m}^3$ to 100 $\mu\text{g}/\text{m}^3$ 100 $\mu\text{g}/\text{m}^3$ to 1000 $\mu\text{g}/\text{m}^3$	PM10: \pm25 $\mu\text{g}/\text{m}^3$ PM10: \pm25 $\mu\text{g}/\text{m}^3$
Response time	<6s
Supply voltage	5V \pm 0.2V
Switching frequency max.	100kHz
Ripple amplitude max.	20mV
R.M.S Noise max.	1mV (Noise bandwidth 10 MHz)
Standby current (at 25°C \pm5°C)	<20 mA
Supply current (at 25°C \pm5°C)	<80 mA
Inrush current max. (25°C \pm5°C)	600mA
Temperature:	
Operating	-20°C to 70°C [-4°F to 158°F]
Storage	-40°C to 85°C [-40°F to 185°F]
Humidity (operating and storage)	0% RH to 95% RH non- condensing
Output protocol	UART: baud rate:9600, databits: 8, stopbits: 1.party:no
Operating time:	
Continuous mode	10 years
Intermittent mode	Depends on duty cycle
Laser class	Laser class: 1: IEC/EN 60825-1:650nm
ESD	\pm 4 kV contact: \pm 8kVair per IEC 61000-4-2
Radiated immunity	1V/m (80 MHz to 1000MHz) per IEC 61000-4-3
Fast transient	\pm 0.5 kV per IEC 61000-4-4
Immunity to conducted disturbances	3V per IEC 61000-4-6
Radiated emissions	
Radiated emissions	40dB 30 MHz to 230 MHz: 47 dB 230 MHz to 1000 MHz per CISPR 14
Conducted emissions	0.15 MHz to 230 MHz in compliance with CISPR 14
Dimensions (L X W X H)	44 mm X 36 mm X 12 mm [1.73 in X 1.42 in X .048 in]

NOTE: There may be any change in specification due to continuous R & D without notice.

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