VIJAYANTA

WSC
ISO – 9001-2015

PM 2.5 SENSOR WITH SIGNAL CONDITIONING INBUILT POWER SUPPLY

Operating principal	**Laser scattering**
Detection	PM2.5
Output data	PM2.5 in µg/m^3
Concentration range	0 µg/m^3 to 1.000 µg/m^3
Accuracy (at 25ºC ±5ºC): **0 µg/m^3 to 100 µg/m^3** **100 µg/m^3 to 1000 µg/m^3**	 **PM2.5:±**15 µg/m^3 **PM2.5:±**15 µg/m^3
Response time	<6s
Supply voltage	5V ±0.2V
Switching frequency max.	100kHz
Ripple amplitude max.	20mV
R.M.S Noise max.	1mV (Noise bandwidth 10 MHz)
Standby current (at 25ºC ±5ºC)	<20 mA
Supply current (at 25ºC ±5ºC)	<80 mA
Inrush current max. (25ºC ±5ºC)	600mA
Temperature: **Operating** **Storage**	 -20ºC to 50ºC [-4ºF to 122ºF] -30ºC to 65ºC [-22ºF to 149ºF]
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** **Intermittent mode**	 10 years Depends on duty cycle
Laser class	Laser class: 1: IEC/EN 60825-1:650nm
ESD	±4 kV contact: ±8kVair per IEC 61000-4-2
Radiated immunity	1V/m (80 MHz to 1000MHz) per IEC 61000-4-3
Fast transient	±0.5 kV per IEC 61000-4-4
Immunity to conducted disturbances **Radiated emissions**	3V per IEC 61000-4-6
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)	43 mm X 36 mm X 23.7 mm [1.69 in X 1.42 in X 0.93 in]

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

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