



Overview

GTEK P2510 Particulate Sensor is a technological breakthrough in optical PM sensors. Its measurement principle is based on laser scattering. This technology, together with high-quality and long-lasting components, enables precise measurements from its first operation and throughout its lifetime of more than ten years. In addition, our advanced algorithms provide superior precision for different particulate types and higher-resolution particle size binning, opening up new possibilities for the detection of different sorts of environmental dust and other particles.




Sensor Specifications

Mass concentration precision	$\pm 15 \mu\text{g}/\text{m}^3$ @ 0 to $100 \mu\text{g}/\text{m}^3$ $\pm 15 \%$ @ 100 to $1000 \mu\text{g}/\text{m}^3$
Mass concentration range	0 to $1000 \mu\text{g}/\text{m}^3$
Resolution	$0.1 \mu\text{g}/\text{m}^3$
Particle detection size range	Mass concentration: PM1.0, PM2.5, PM4 and PM10 Number concentration: PM0.5, PM1.0, PM2.5, PM4 and PM10
Switching Freq. / Ripple Amplitude Max	100 kHz / 20 mV
Minimum sampling interval	1 sec (continuous mode)
Lifetime	> 10 years operating continuously 24h/day
Sensor Protection	Anodized powder-coated aluminum
Operating temperature range	-10 to +60 °C
Storage temperature range	-40 to +70 °C

Electrical Specifications

Interface	UART, I ² C
Power Supply voltage	3.3 – 5.5 V
Average supply current @ 1 Hz measurement rate	55 mA

Laser wavelength (DIN EN 60825-1 Class 1)	 LASER 1	typ.	650	nm
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Particulate matter sensor specifications. Default conditions of 25±2 °C, 50±10% relative humidity and 5 V supply voltage apply

Contact Us:



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