

## NextPM Lite Datasheet

NEXT GENERATION PARTICULATE MATTER OEM SENSOR  
PM 10, PM 2.5, PM 1



### Advantages

TERA Sensor's accuracy

Durability

The Smallest

Designed for **indoor air quality monitoring and home equipment**, NextPM Lite provides real-time measurements of PM1, PM2.5 and PM10 in  $\mu\text{g}/\text{m}^3$  and  $\text{pcs}/\text{L}$ .

NextPM Lite is **one of the smallest** sensors on the market with the most advanced performance.

## Technical specifications

Designation	Values	Units
<b>GENERAL</b>		
Technology	Optical	-
Targeted pollutants	Particulate Matter	-
Outputs	PM1 PM2.5 PM10  Channel 1 : >0.3 $\mu\text{m}$ Channel 2 : >0.5 $\mu\text{m}$ Channel 3 : >1.0 $\mu\text{m}$ Channel 4 : >2.5 $\mu\text{m}$ Channel 5 : >5.0 $\mu\text{m}$	$\mu\text{g}/\text{m}^3$ & number of particles / L      number of particles / L
Airflow	1	L/mn
Size (l * w * h)	Annex 1	mm
Lifetime (MTTF) <sup>1</sup>	up to 10	years
<b>PERFORMANCE</b>		
Particle Size detection range	0.3 - 10	$\mu\text{m}$ diameter
Detection efficiency with 0.3 $\mu\text{m}$ diameter particles	> 50	%
Concentration detection range / PM10 - PM2,5 - PM1	0 - 1000	$\mu\text{g}/\text{m}^3$ (Arizona dust A1 equivalent)
Detection Limit	< 1	$\mu\text{g}/\text{m}^3$ (Arizona dust A1 equivalent)
Linearity error	< 5	%
Repeatability error <sup>2</sup>	< 3	%
Refresh rate	1/10	sec.
Warm-up time	10	sec.
Temperature influence	< 0.01	$\mu\text{g}/\text{m}^3 / ^\circ\text{C}$
<b>ELECTRIC SPECIFICATIONS</b>		
Power supply	5	VDC
Power consumption in operation	< 80	mA
Power consumption in Sleep Mode	< 5	mA

Designation	Values	Units
<b>COMMUNICATION</b>		
UART, Modbus or I2C	Download NextPM Lite User Guide for more informations	
<b>OTHER</b>		
Operating conditions	0 to +50	°C
	0 - 70 uncondensed	%
	500 to 1500	hPa
Storage conditions	-20 to +60	°C
	0 - 95 uncondensed	%
	500 to 1500	hPa
Certifications	CE	
	REACH	
	RoHS compliant	
Dimensions and weight	L 34.3 mm x W 32.4 mm x H 18.9 mm   < 16 g L 1.34 in / W 1.26 in / H 0.71 in   < 0.57 Oz	

<sup>1</sup> Lifespan can vary depending on the operating conditions

<sup>2</sup> Calculated with the fifteen minutes moving average output

## Mechanical specifications

