

NextPM Datasheet

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

Version 4



Technical specifications

Designation	Values	Units
GENERAL		
Technology	Optical	-
Targeted pollutants	Particulate Matter	-
Outputs	PM1 PM2.5 PM10 Temperature ¹ Relative Humidity ¹	$\mu\text{g}/\text{m}^3$ & pcs / L °C %
Airflow	2,5	-
Size (l * w * h)	Annex 1	mm
Lifetime (MTTF) ²	Up to 10	years
PERFORMANCE		
Particle Size detection range	0,3 - 10	μm diameter
Detection efficiency with 0.3 μm 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 ³	< 3	%
Refresh rate	1 / 10 / 60	sec.
Warm-up time	10	sec.
Temperature influence	0°C to 30°C -20°C to 0°C 30°C to 70°C	0 < + 1,0 < - 0,8 %/°C
ELECTRIC SPECIFICATIONS		
Power supply	5	VDC
Power consumption in operation	< 80 300	mA mA (Maximum)
Power consumption in Sleep Mode	< 20	mA

Designation	Values	Units
COMMUNICATION		
UART / Modbus (RS485) ⁴	Download NextPM User Guide for more informations	
OTHER		
Operating conditions	-20 à +70 253 to 343	°C K
	0 - 95 uncondensed	%
	500 to 1500	hPa
Storage conditions	-20 to +70	°C
	0 - 95 uncondensed	%
	500 to 1500	hPa
Certifications	CE	
	RoHS compliant	
Dimensions and weight	L 62 mm x l 52 mm x H 23 mm 45 g L 2,4 / W 2,07 / H 0,9 inches 1.59 Oz	

¹ See NextPM User Guide for more information about these data

² Lifespan can vary depending on the operating conditions

³ Calculated with the fifteen minutes moving average output

⁴ This communication's protocol needs a converter has described in the "NEXTPM RS485" document

Mechanical specifications

