



NextPM Data Sheet

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





Technical specifications

Designation	Values	Units
GENERAL		
<i>Technology</i>	<i>Optical</i>	-
<i>Targeted pollutants</i>	Particulate Matter	-
<i>Outputs</i>	PM1 PM2.5 PM10 Temperature ¹ Relative Humidity ¹	$\mu\text{g}/\text{m}^3$ & pcs / L °C %
<i>Airflow</i>	2,5	L/mn
<i>Size</i>	Annex 1	mm / Inches
<i>Lifetime</i>	>10 000	hour
PERFORMANCE		
<i>Particle Size detection range</i>	0,3 - 10	μm diameter
<i>Detection efficiency with 0.3 μm diameter particles</i>	> 50	%
<i>Concentration detection range / PM₁₀ - PM_{2.5} - PM₁</i>	0 - 1000	$\mu\text{g}/\text{m}^3$ (Arizona dust A1 equivalent)
<i>Detection Limit</i>	<1	$\mu\text{g}/\text{m}^3$ (Arizona dust A1 equivalent)
<i>Linearity error</i>	<5	%
<i>Repeatability error²</i>	<3	%
<i>Refresh rate</i>	1 / 10 / 60	sec.
<i>Warm-up time</i>	10	sec.
<i>Temperature influence</i> 0°C to 30°C -20°C to 0°C 30°C to 70°C	0 < +1.0 < -0.8	%/°C



Designation	Values	Units
ELECTRIC SPECIFICATIONS		
Power supply	5.0	VDC
<i>Power consumption in operation</i>	<80 300	mA mA (Maximum)
<i>Power consumption in Sleep Mode</i>	<20	mA
COMMUNICATION		
<i>UART / Modbus (RS485)</i> ³	Download NextPM User Guide for more informations	
OTHER		
<i>Operating conditions</i>	-20 à +70 253 to 343	°C K
	0 - 95 uncondensed	%
	500 à 1500	hPa
<i>Storage conditions</i>	-20 à +70	°C
	0 - 95 uncondensed	%
	500 à 1500	hPa
<i>Certifications</i>	CE	
	RoHS compliant	
<i>Dimensions and weight</i>	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 Calculated with the fifteen minutes moving average output

³ This communication's protocol needs a converter has described in the "NEXTPM RS485" document.



Mechanical Specifications

