



NextPM CR Data Sheet

NEXT GENERATION PARTICULATE MATTER OEM
SENSOR FOR CLEAN ROOMS



Detection limit : 0.3 μm

5 Channels

Dimensions : L 62 mm x l 52 mm x H 23 mm

Lifetime > 10 000 hours



Technical specifications

Designation	Values	Units
GENERAL		
<i>Technology</i>	<i>Optical</i>	-
<i>Targeted pollutants</i>	Particulate Matter	-
<i>Outputs</i>	Channel 1 : pcs >0.3 µm Channel 2 : pcs >0.5 µm Channel 3 : pcs >1.0 µm Channel 4 : pcs >2.5 µm Channel 5 : pcs >5.0 µm Temperature Relative Humidity	pcs / m ³ °C %
<i>Airflow</i>	2,5	L/min
<i>Lifetime</i>	>10 000	hour
<i>Size</i>	<i>Annex 1</i>	mm / Inches
PERFORMANCE		
<i>Size range</i>	0.3 to 10	µm
<i>Concentration Limit¹</i>	< 5.10 ⁷	pcs/m ³
<i>Detection efficiency with 0.3 µm diameter particles</i>	> 50	%
<i>Linearity error</i>	<5	%
<i>Repeatability error²</i> Channel 1 : pcs >0.3 µm Channel 2 : pcs >0.5 µm Channel 3 : pcs >1.0 µm Channel 4 : pcs >2.5 µm Channel 5 : pcs >5.0 µm	<3 <3 <5 <10 <15	%
<i>Accuracy</i> Temperature Relative humidity	1 5	°C %
<i>Refresh rate</i>	1 to 60	sec.



Warm-up time	10	sec.
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¹ Loss of linearity over this threshold

² Calculated with the fifteen minutes moving average output

Designation	Values	Units
ELECTRIC SPECIFICATIONS		
Power supply	5.0	VDC
Power consumption in operation	<80	mA
Power consumption in Sleep Mode	<20	mA
COMMUNICATION		
UART / Modbus (RS485) ³	Download NextPM CR User Guide for more informations	
OTHER		
Operating conditions	-20 à +70 253 to 343	°C K
	0 - 95 uncondensed	%
	500 à 1500	hPa
Storage conditions	-20 à +70 253 to 343	°C K
	0 - 95 uncondensed	%
	500 à 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	

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



Mechanical Specifications

