



NextPS Data Sheet

NEXT GENERATION OPTICAL PARTICLE SIZER OEM SENSOR

Date : 19/10/2022



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 pollutant</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 / m3 °C %
<i>Airflow</i>	2,5	L/min
<i>Lifetime</i>	10 000	hour
<i>Dimensions</i>	detailed p. 3	mm / Inches
PERFORMANCE		
<i>Size range</i>	0.3 to 10	µm
<i>Concentration Range¹</i>	0 to 3.3 . 10 ⁹	pcs/m ³
<i>Lowest detectable concentration</i>	250	pcs/m ³
<i>Detection efficiency @ 0.3 µm²</i>	50 +/- 30	%
<i>Detection efficiency @ 0.5 µm²</i>	100 +/- 20	%
<i>Linearity error</i>	<5	%
<i>Repeatability error³</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> <i>Temperature</i> <i>Relative humidity</i>	1 5	°C %



<i>Refresh rate</i>	1 to 60	sec.
<i>Warm-up time</i>	10	sec.

¹ Loss of linearity over this threshold

² According to ISO 21 501-4 Standards

³ Calculated with the fifteen minutes moving average output

Designation	Values	Units
ELECTRIC SPECIFICATIONS		
<i>Power supply</i>	5.0	VDC
<i>Power consumption in operation</i>	<80	mA
<i>Power consumption in Sleep Mode</i>	<20	mA
COMMUNICATION		
<i>UART / Modbus (RS232 and RS485)</i>	Download NextPS 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 +70 253 to 343	°C K
	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	

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



Mechanical Specifications

