



NextPM Datasheet

Next Generation Particulate Matter OEM Sensor - PM_{10} | $PM_{2.5}$ | PM_1



Manufactured by



Last update : 02/06

Distributed by



Version : 1.0

Author : A. DUMAS (TERA Sensor)

→ Technical Specifications

Designation	Values	Units
GENERAL		
Technology	Optical	-
Targeted pollutants	Particulate Matter	-
Outputs	PM ₁ PM _{2.5} PM ₁₀ Temperature ¹ Relative Humidity ¹	µg/m ³ & pcs/L °F %
Airflow	2,5	L/mn
Size	Annex 1	mm / Inches
Lifetime	>10 000	hour
PERFORMANCE		
Particle Size detection range	0,3 - 10	µm diameter
Detection efficiency with 0.3 µm diameter particles	> 50	%
Concentration detection range / PM ₁₀ - PM _{2.5} - PM ₁	0 - 1000	µg/m ³ (Arizona dust A1 equivalent)
Detection Limit	<1	µg/m ³ (Arizona dust A1 equivalent)
Linearity error	<5	%
Repeatability error ²	<3	%
Refresh rate	1 / 10 / 60	sec.
Warm-up time	10	sec.
Temperature influence 32°F to 86°F -4°F to 32°F 86°F to 158°F	0 < +1.0 < -0.8	%/°F

¹ - See NextPM User Guide for more information about these data

² - Calculated with the fifteen minutes moving average output

→ Technical Specifications

Designation	Values	Units
ELECTRIC SPECIFICATIONS		
Power supply	5.0	VDC
Power consumption in operation	< 80 300	mA mA (Maximum)
Power consumption in Sleep Mode	< 20	mA
COMMUNICATION		
UART / Modbus (RS485) ³	Download NextPM User Guide for more informations	
OTHER		
Operating conditions	-20 à +158 253 to 343	°F K
	0 - 95 uncondensed	%
	500 à 1500	hPa
Storage conditions	-20 à 158	°F
	0 - 95 uncondensed	%
	500 à 1500	hPa
Certifications	CE	
	RoHS compliant	
Dimensions and weight	L 62mm x l 52mm x H 23mm 45g L 2,4 / W 2,07 / H 0,9 inches 1.59Oz	

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

→ Mechanical Specifications

