

	PM ₁	PM _{2.5}	PM ₄	PM ₁₀	TSP	TPC
Type	Optical particle counter	Optical particle counter	Optical particle counter	Optical particle counter	Optical particle counter	Optical particle counter
Unit of measurement	µg/m³	µg/m³	µg/m³ ^(A)	µg/m³ ^(A)	µg/m³ ^(A)	counts/cm³ ^(A)
Measurement range ⁽¹⁾	0 - 1,000 µg/m³	0 - 2,000 µg/m³ ^(A) 0 - 1,000 µg/m³ ^(B)	0 - 2,000 µg/m³ ^(A)	0 - 10,000 µg/m³ ^(A) 0 - 1,000 µg/m³ ^(B)	0 - 15,000 µg/m³ ^(A)	0 - 8,000 counts/cm³ ^(A)
Resolution ⁽²⁾	1 µg/m³	1 µg/m³	1 µg/m³ ^(A)	1 µg/m³	1 µg/m³ ^(A)	1 counts /cm³ ^(A)
Operating temp. range ⁽³⁾	-10 to 50 °C ^(A) -10 to 60 °C ^(B)	-10 to 50 °C ^(A) -10 to 60 °C ^(B)	-10 to 50 °C ^(A)	-10 to 50 °C ^(A) -10 to 60 °C ^(B)	-10 to 50 °C ^(A)	-10 to 50 °C ^(A)
Operating RH range ⁽⁴⁾	0 to 99 %RH	0 to 99 %RH	0 to 99 %RH ^(A)	0 to 99 %RH	0 to 99 %RH ^(A)	0 to 99 %RH ^(A)
Recommended RH range ⁽⁴⁾	0 to 95 %RH ^(A)	0 to 95 %RH ^(A)	0 to 95 %RH ^(A)	0 to 95 %RH	0 to 95 %RH ^(A)	0 to 95 %RH ^(A)
Operating life ⁽⁵⁾	> 24 months	> 24 months	> 24 months ^(A)	> 24 months	> 24 months ^(A)	> 24 months ^(A)
LOD - Limit of Detection ⁽⁷⁾	0.5 µg/m³ ^(A) 0.5 µg/m³ ^(B)	0.5 µg/m³ ^(A) 0.5 µg/m³ ^(B)	0.5 µg/m³ ^(A)	0.5 µg/m³ ^(A) 0.5 µg/m³ ^(B)	1 µg/m³ ^(A)	-
Repeatability ⁽⁸⁾	2 µg/m³ ^(A) 3 µg/m³ ^(B)	3 µg/m³	3 µg/m³ ^(A)	5 µg/m³ ^(A) 6 µg/m³ ^(B)	6 µg/m³ ^(A)	-
Response Time ⁽⁹⁾	< 10 sec	< 10 sec	< 10 sec ^(A)	< 10 sec	< 10 sec ^(A)	< 10 sec ^(A)
Typical Accuracy - MAE ⁽¹⁰⁾	±2 µg/m³ ^(A) ±3 µg/m³ ^(B)	±3 µg/m³	±3 µg/m³ ^(A)	±4 µg/m³ ^(A) ±6 µg/m³ ^(B) *	±6 µg/m³ ^(A)	-
Typical precision - R² ⁽¹⁰⁾	> 0.9 ^(A) > 0.7 ^(B)	> 0.8 ^(A) > 0.75 ^(B)	> 0.8 ^(A)	> 0.7 ^(A) > 0.5 ^(B) *	> 0.7 ^(A)	> 0.8 ^(A)
Typical Slope ⁽¹⁰⁾	0.85 - 1.18 ^(A) 0.80 - 1.25 ^(B)	0.85 - 1.18 ^(A) 0.83 - 1.20 ^(B)	0.85 - 1.18 ^(A)	0.85 - 1.18 ^(A) 0.75 - 1.35 ^(B) *	0.85 - 1.18 ^(A)	-
Typical Intercept (a) ⁽¹⁰⁾	-1.8 µg/m³ ≤ a ≤ +1.8 µg/m³ ^(A) -2 µg/m³ ≤ a ≤ +2 µg/m³ ^(B)	-2 µg/m³ ≤ a ≤ +2 µg/m³ ^(A) -3 µg/m³ ≤ a ≤ +3 µg/m³ ^(B)	-2 µg/m³ ≤ a ≤ +2 µg/m³ ^(A)	-3 µg/m³ ≤ a ≤ +3 µg/m³ ^(A) -9 µg/m³ ≤ a ≤ +9 µg/m³ ^(B) *	-4 µg/m³ ≤ a ≤ +4 µg/m³ ^(A)	-
DQO - Typical U(exp) ⁽¹¹⁾	< 50%	< 50%	< 50% ^(A)	< 50% ^(A) < 75% ^(B) *	< 50% ^(A)	-
Typical intra-model variability ⁽¹²⁾	< 2 µg/m³ ^(A)	< 2 µg/m³ ^(A)	< 2 µg/m³ ^(A)	< 2 µg/m³ ^(A)	< 2 µg/m³ ^(A)	-