

Technical specs

	CO	CO ₂	NO	NO ₂	O ₂	O ₃	H ₂ S	SO ₂	NH ₃	VOCs	CH ₄	HCl	HCN
Type	Electrochemical	Non-dispersive infrared (NDIR)	Electrochemical	Electrochemical	Electrochemical	Electrochemical	Electrochemical	Electrochemical	Electrochemical	Photo-ionization detector	NDIR ^(A) N.A. ^(C) TDLAS ^(C)	Electrochemical	Electrochemical
Unit of measurement	µg/m³, ppb ^(A) mg/m³, ppm ^(B)	mg/m³, ppm	µg/m³, ppb	µg/m³, ppb	%	µg/m³, ppb	µg/m³, ppb ^(A) mg/m³, ppm ^(B)	µg/m³, ppb	mg/m³, ppm	µg/m³, ppb ^(A) mg/m³, ppm ^(B)	mg/m³, ppm	mg/m³, ppm	mg/m3, ppm
Measurement range ⁽¹⁾	0 - 12,000 ppb ^(A) 0 - 500 ppm ^(B)	0-5,000 ppm	0-5,000 ppb	0-5,000 ppb	0-30 %	0-2,000 ppb	0 - 2,000 ppb ^(A) 0 - 20 ppm ^(B)	0-10,000 ppb	0-50 ppm ^(A) 0 - 1,500 ppm ^(B) 0 - 50 ppm ^(C)	0 - 3,000 ppb ^(A) 0 - 40 ppm ^(B)	1,000-50,000 ppm ^{(B)(N/A)} ^(A) 2-300 ppm ^(C) 0-1,000 ppm ^(D)	0-20 ppm	0 - 50 ppm
Resolution ⁽²⁾	1 ppb ^(A) 0.01 ppm ^(B)	0.01 ppm	1 ppb	1 ppb	0.01%	1 ppb	1 ppb ^(A) 0.01 ppm ^(B)	1 ppb	0.01 ppm	1 ppb ^(A) 0.01 ppm ^(B)	100 ppm ^(A) 0.01 ppm ^(C-D)	0.01 ppm	0.01 ppm
Operating temp. range ⁽³⁾	-30 to 50 °C	-20 to 50 °C	-30 to 45 °C	-30 to 45 °C	-30 to 50 °C	-30 to 45 °C	-30 to 50 °C	-30 to 40 °C	-10 to 50 °C ^(A) -20 to 43 °C ^(B) -20 to 40 °C ^(C)	-40 to 60 °C	-20 to 50 °C ^(A) -30 to 60 °C ^(B)	-20 to 50 °C	-20 to 45°C
Operating RH range ⁽⁴⁾	0 to 99 %RH	0 to 99 %RH	0 to 99 %RH	0 to 99 %RH	0 to 99 %RH (short periods)	0 to 99 %RH	0 to 99 %RH	0 to 99 %RH	0 to 99 %RH	0 to 99% RH	0 to 99 %RH ^(A) 10 to 99 %RH ^(C) 0 to 98 %RH ^(D)	0 to 99 %RH	0 to 99 %RH
Recommended RH range ⁽⁴⁾	15 to 90 %RH	15 to 95 %RH	15 to 85 %RH	15 to 85 %RH	5 a 95 %RH	15 to 85 %RH	15 to 90 %RH	15 to 90 %RH	15 to 90 %RH	0 to 99% RH	15 to 95 %RH ^(A) 15 to 90 %RH ^(C)	15 to 90 %RH	15 to 90 %RH
Operating life ⁽⁵⁾	> 24 months	> 4 years	> 24 months	> 24 months	> 4 years	> 24 months	> 24 months	> 24 months	> 24 months	10,000 hours	> 4 years ^(A) > 24 months ^(C) > 5 years ^(D)	> 24 months	> 24 months
Guarantee range ⁽⁶⁾	1,000 ppm	-	20 ppm	20 ppm	50 %	20 ppm	100 ppm	100 ppm	100 ppm ^(A) 5,000 ppm ^(B) 200 ppm ^(C)	50 ppm ^(A) 60 ppm ^(B)	100% vol ^(A) 10,000 ppm ^(C-D)	200 ppm	200 ppm
LOD - Limit of detection ⁽⁷⁾	10 ppb ^(A) 0.02 ppm ^(B)	-	2 ppb	2 ppb	-	3 ppb	2 ppb ^(A) 0.01 ppm ^(B)	3 ppb	0.02 ppm ^(A-C) 0.15 ppm ^(B)	1 ppb ^(A) 0.01 ppm ^(B)	1,000 ppm ^(A) < 0.05 ppm ^(C-D)	0.01 ppm	0.02 ppm
Repeatability ⁽⁸⁾	20 ppb ^(A) 0.05 ppm ^(B)	-	4 ppb	4 ppb	-	4 ppb	4 ppb ^(A) 0.01 ppm ^(B)	5 ppb	0.03 ppm ^(A) 0.5 ppm ^(B) 0.1 ppm ^(C)	5 ppb ^(A) 0.02 ppm ^(B)	500 ppm ^(A) < 0.35 ppm ^(C) < 0.30 ppm ^(D)	0.02 ppm	0.03 ppm
Response time ⁽⁹⁾	< 30 sec ^(A) < 180 sec ^(B)	< 30 sec	< 30 sec	< 60 sec	< 10 sec	< 70 sec	< 60 sec	< 60 sec	< 45 sec ^(A) < 90 sec ^(B-C)	< 12 sec ^(A) < 10 sec ^(B)	< 90 sec ^(A) < 120 sec ^(C) < 20 sec ^(D)	< 45 sec	< 160 sec
Typical accuracy ^{(11) (12)}	± 80 ppb ^(A) ± 0.1 ppm ^(B)	±20 ppm	±4 ppb	±5 ppb	±0.3 %	±8 ppb	± 10 ppb ^(A) ± 0.05 ppm ^(B)	±15 ppb	±0.3 ppm ^(A) ±1.5 ppm ^(B) ±0.5 ppm ^(C)	-	±3% of F.S. ^(A) ±1 ppm + 10% of reading ^(C) ±0.5 ppm + 1% of reading ^(D)	±0.1 ppm	± 0.1 ppm
Typical precision - R² ⁽¹⁰⁾	> 0.85	> 0,8	> 0.9	> 0.85	-	> 0.9	> 0.75	> 0.7	-	-	< 0.85 ^(C) < 0.90 ^(D)	-	-
Typical slope ⁽¹⁰⁾	0.78 - 1.29	0.6 - 1.66	0.9 - 1.12	0.78 - 1.29	-	0.85 - 1.18	0.78 - 1.29	0.78 - 1.29	-	-	-	-	-
Typical intercept (a) ⁽¹⁰⁾	-50 ppb ≤ a ≤ +50 ppb ^(A) -0.1 ppm ≤ a ≤ +0.1 ppm ^(B)	-170 ppm ≤ a ≤ 170 ppm	-2 ppb ≤ a ≤ +2 ppb	-4 ppb ≤ a ≤ +4 ppb	-	-3 ppb ≤ a ≤ +3 ppb	-5 ppb ≤ a ≤ +5 ppb ^(A) -0.05 ppm ≤ a ≤ +0.05 ppm ^(B)	-5 ppb ≤ a ≤ +5 ppb	-	-	-	-	-
DOO - Typical U(exp) ⁽¹³⁾	< 20%	-	< 20%	< 25%	-	< 20%	-	< 25%	-	-	-	-	-
Typical intra-model variability ⁽¹⁴⁾	< 3 ppb ^(A) < 0.05 ppm ^(B)	< 0,5 ppm	< 1 ppb	< 1 ppb	0.1%	< 1 ppb	< 2 ppb ^(A) < 0.02 ppm ^(B)	< 3 ppb	< 0.1 ppm ^(A-C) < 0.2 ppm ^(B)	< 3 ppb ^(A) < 0.1 ppm ^(B)	< 500 ppm ^(A)	< 0.1 ppm	< 0.1 ppm