

.: KEY FEATURE .:

Factory programmed amperometric gas sensor with no warm-up time, high sensitivity, measures down to ppb levels, digital sensor output signal.

All characteristics are based on conditions at 22°C, 50% RH, 1013 hPa and gas flow 100 mL/min.

Operating Principle:	3-electrode potentiostatic cell with potentiostat
Measurement Range:	5 to 800 ppb
Maximum Overload:	1 ppm
Resolution:	15 Bit used (16 Bit processor, 1 Bit for algebraic sign)
Output signal:	0 to 32768 Digits
Electrical connector:	4-pin Molex (digital sensor output signal, I ² C interface)
Power Consumption (maximum):	3.5 mW (1ppm NO test gas; 5.0V supply voltage)
Expected Operating Life:	24 months
Warm-Up Time:	none
Gas Connector:	fits for M16x1 DIN 13 or 5/8-24 UNEF
Signal Difference:	< 6 % (1. to 2. Measurement, 25s testgas, 55s zero gas)
Sensitivity:	4800 - 25600 Digits/ppm (depending on flow, flow feeding to the sensor, tubing system and dead spaces in manifold)
Baseline:	< 1440 Digits
Response Time t₉₀:	< 10 s (depending on flow, tubing system and dead spaces in manifold)
Drift:	< 5 % signal/year
Linearity Error:	< ±5% (5 - 300 ppb) < ±10% (300 - 800ppb)
Temperature compensation:	NTC on sensor PCB (sensor signal is not temperature compensated [separate temperature read out]; compensation by device software necessary)
Operating Temperature:	5 to 40 °C
Pressure Range:	500 to 1250 hPa (complete sensor exposed to under- / overpressure)
Humidity Range:	20 to 80 % RH (15% RH for more than 2 weeks may lead to an increase in response time)
Interferences:	100 ppb Acetaldehyde: < 1 % of NO sensitivity 10 ppm Acetone: < 0.5 % of NO sensitivity 100 ppb Acetonitrile: none 500 ppb Ammonia: < 0.5 % of NO sensitivity 8 % CO ₂ : none 50 ppm CO: none 165 ppm Ethanol: < 0.5 % of NO sensitivity 50 ppm H ₂ : none 1 ppm H ₂ O ₂ : < 0.5 % of NO sensitivity 1 ppm H ₂ S: < 5 % of NO sensitivity 1 ppm Isoprene: < 0.5 % of NO sensitivity 200 ppb NO ₂ : < 5 % of NO sensitivity 21% O ₂ : none
Weight:	35 - 37g
Material in Contact with Media:	PTFE, PVDF, stainless steel, PPS, FKM



:: STORAGE CONDITIONS IN UNOPENED ORIGINAL PACKAGE ::

Temperature Range: recommended: 5 to 25 °C
maximum: -20 to 70 °C (< 72 hours)
Ambient Pressure: 500 to 1250 hPa
Humidity: 10 to 99 % RH (non condensing)

:: RELATED PRODUCTS ::

Product	Part-No.	Housing Colour	Other Specifics
NO – Sensor I-27D	48 01 37	translucent	RoHS compliant, lead free, digital sensor output signal