

Product Specification of:

NO - Sensor / Type I-27A

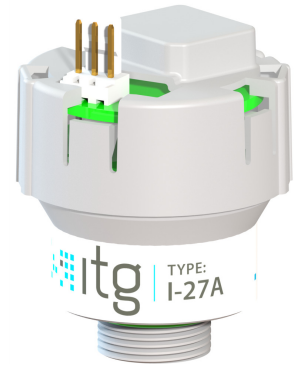


.: KEY FEATURE .:

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

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 (potentiostat integrated, battery buffered)	
Warm-Up Time:	none	
Measurement Range:	5 to 800 ppb	
Maximum Overload:	1 ppm	
Expected Operating Life:	24 months	
Signal Difference:	< 6 % (1. to 2. Measurement, 25s testgas, 55s zero gas)	
Sensitivity:	300 to 1600 mV/ppm (depending on flow, flow feeding to the sensor, tubing system and dead spaces in manifold)	
Baseline:	< 90 mV	
Response Time t_{90}:	< 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)	
Electrical Connector:	3-pin Molex®	
Electrical interface:	analogue	
Gas Connector:	fits for M16x1 DIN 13 or 5/8-24 UNEF	
Operating Temperature:	5 to 40 °C	
Temperature Compensation:	none, compensation by software necessary	
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 Hydrogen Peroxide:	< 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
	1 ppm Ozone:	≤ - 1 % of NO sensitivity
Weight:	34 - 36g	
Material in Contact with Media:	PTFE, PVDF, FKM	



This data sheet is subject to change without prior notice. [I-27A-Rev09-2020_0107.doc]

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:: STORAGE CONDITIONS IN UNOPENED ORIGINAL PACKAGE ::

Temperature Range:	recommended: 15 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.	Other Specifics
NO - Sensor I-27A	48 02 37	RoHS compliant, lead free, analog sensor output signal