

# PolyGard<sup>®</sup> Nitrogen Dioxide NO<sub>2</sub> Analog Transmitter AT52- 1130

## Description

Analog NO<sub>2</sub>-gas transmitter for the detection of nitrogen dioxide in the ambient air.

## Application

To sense nitrogen dioxide (NO<sub>2</sub>) within a wide range of commercial applications such as vehicle exhaust in parking structures (e.g. underground garages), engine repair shops, tunnels, equipment rooms and ventilation systems etc. Due to the 4 – 20 mA analog signal the NO<sub>2</sub> transmitter is compatible to any electronic analog control, DDC/PLC control or automation system (e.g. PolyGard Series MGC by the MSR-E)

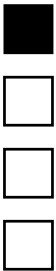


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Stainless steel

## Features

- Continuous monitoring
- Low output and zero point drift
- Poisoning stable
- Long life sensor
- Modular plug-in technology
- Easy maintenance / calibration
- Reverse polarity protected
- Overload protected
- 4 – 20 mA analog signal output
- Relay package (optional)
- Duct mounted (optional)
- IP 65 protected (optional)



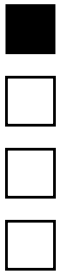
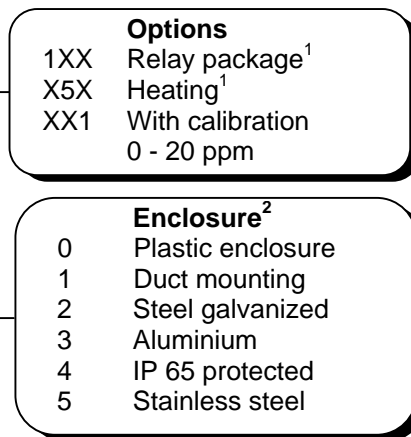
## Specifications

<b>Electrical</b>	
Power supply	18 - 28 VDC (reverse polarity protected)
Power consumption	22 mA, max. (0,6 VA)
<b>Sensor Performance</b>	
Detected gas	Nitrogen dioxide (NO <sub>2</sub> )
Sensor element	Electrochemical, diffusion
Measuring range	0 – 20 ppm factory set, 0 - 10 to 0 – 20 ppm, adjustable via calibration
Stability & resolution	0,1 ppm
Repeatability	± 2 % of reading
Long term output drift	< 2 % signal loss/month
Response time	t <sub>90</sub> ≤ 60 sec.
Sensor life expectancy	2 years, normal operating environment
Mounting height	0,6 to 0,8 m ( to 2 ft.) above floor
<b>Type of Control</b>	
Analog output signal	Proportional, 4 – 20 mA, load ≤ 500 Ω overload and short-circuit proofed
<b>Operating Environment</b>	
Humidity range	15 to 90 % RH non-condensing
Working temperature	-20 °C to + 45 °C (14 °F to 113 °F)
Storage temperature	0 °C to + 45 °C (32 °F to 113 °F)
Pressure range	Atmospheric ±10%
<b>Physical characteristics</b>	
Enclosure material*	Stainless Steel
Enclosure color*	Natural, untreated
Dimensions (HxWxD)*	135 x 113 x 45 mm (5.35 x 4.5 x 1.8 in.)
Weight*	0.5 kg (1.1 lbs.)
Protection class*	IP 55
Mounting*	Wall mounted, pillar mounted
Cable entry	1 x M 20
Wire connection	Screw type terminal, min. 0.25 mm <sup>2</sup> (24 AWG) max. 2.5 mm <sup>2</sup> (14 AWG)
Wire distance	Max. loop resist. 500 Ω (= wire resistor + controller input resistor)
<b>Guideline</b>	EMV- Directive 89/336/EWG
	CE
<b>Warranty</b>	One year on material and workmanship (Without sensor)

\*For option "stainless steel" and further enclosure types see datasheet AT-DT Enclosure.

## Ordering Information

AT-52-1130-0-001

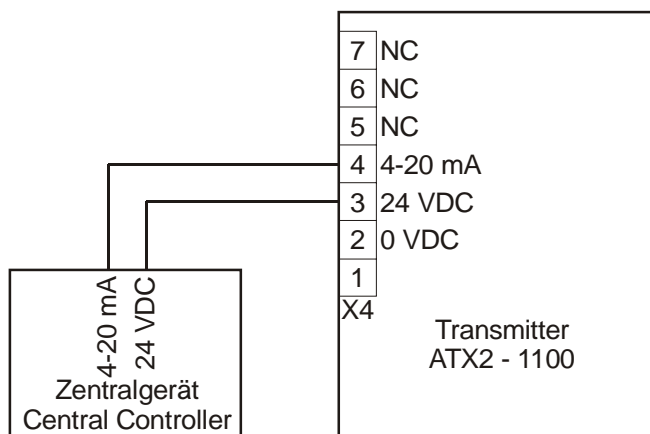


<sup>1</sup> See Data sheet „AT-Options“

<sup>2</sup> See Data sheet „PolyGard AT/DT Enclosure“

**Example:** NO<sub>2</sub> – transmitter with calibration 0 – 20 ppm, stainless steel enclosure  
**Ordering Number: AT-52 1130-5-001**

## Connecting Diagram



## Dimensions

See Data sheet „PolyGard AT/DT Enclosure“