

ACP-OPA



Visibility measurement and gas detection for road tunnels

- **Detection equipment for your safety**
- **Reduced installation and maintenance costs**
- **Easy calibration without dismantling**
- **Compact housing**

ACP OPA: optimizing air quality in your tunnel

It is essential to provide tunnel or car park users satisfactory air quality. The role of the ACP-OPA equipment is, using a single device, to permanently check the different toxic gas levels (CO + NO₂ or NO) and the opacity. Its all-in-one design enables a quick installation and an easier maintenance.

MECHANICAL SPECIFICATIONS

Material	Stainless steel 1.4404/AISI 316L/Z3CND18-12-02
Protection	IP69K
Dimensions/Weight	230 x 170 x 140 mm / 4 kg
Cable input	PG13.5 cable gland for 6 to 12 mm diameter cables
Water spray protection system	Built-in
Particle filter	Built-in

METROLOGICAL SPECIFICATIONS

Opacity	
Measuring principle	<i>Scattered light Measurement</i>
Measurement range	0 to 100% or 0 to 15.10 ⁻³ E/m
Display resolution	0.1% or 0.01 x 10 ⁻³ E/m or E.m ⁻¹
Measurement resolution	2,048 points
Gas	
Measuring principle	<i>Electrochemical cell – Lifetime: up to 3/4* year</i>
Measurement range	CO: 0-20 to 0-300ppm; NO: 0-10 to 0-100ppm; NO ₂ : 0-1 to 0-20ppm
Resolution	CO and NO: 0.2ppm; NO ₂ : 0.02ppm
Accuracy %	+/- 2%
Lower detection limit	CO: 1ppm; NO: 0.5ppm; NO ₂ : 0.2ppm
Response time	< 30s
Intended service life	> 3 years
Measurement drift	CO and NO: < 5% per year ; NO ₂ : 10% per year
Temperature range	-20 °C to +65 °C
Surrounding conditions	0 to 100% relative humidity; 700 to 1,300 hPa

*with maintenance once a year

ELECTRIC SPECIFICATIONS

Power supply	24VDC +10 / -15%
Consumption	20 W (+-) With Heater
Interfacing	RS485 (Modbus) / 3 x 4/20 mA insulated outputs / 2 on-off outputs
Fault / Maintenance alarms	1 on-off output

OPTIONS

Interfacing	Ethernet (Modbus) – Profibus
110-250VAC / 24VDC Power supply	In a junction box

CERTIFICATIONS AND STANDARDS

Compliance	ECM directive 2014/30/UE, NF EN 61000-6-2, NF EN 61000-6-4 NF EN ISO 9001(2015), ISO 14001 (2015)
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