

GasEye Cross Duct CO - *in-situ* carbon monoxide analyzer



GasEye CO is a high performance *in-situ* carbon monoxide analyzer. Suitable for safety applications and process control. 24/7 continuous operation. No sample preparation. No zero drift. No field calibration. Low cost of ownership.

Features

- CO ranges: **0 – 1 ppmv / 0 – 10 ppmv / 0 – 1000 ppmv / 0 – 1%vol / 0 – 100%vol**
- Process temperature **0-1350°C**
- **Real time sensing** – response time below 0.1 second
- **High selectivity** – automatic compensation for interference effect from other constituents in the gas sample
- **High sensitivity** – detection limit below 0.02 ppm per meter
- **In-situ monitoring** – direct in the process, no sample preparation
- **Maintenance free** – equipped with a self-calibrating feature, no field calibration necessary
- **Robustness** – IP65 enclosure, suitable for outdoor and indoor installations and harsh environments
- **Insensitive to dust and smoke** in the measured process (up to 50 g/m³)
- **ATEX** version available

Example Applications

- Combustion control (boilers)
- Safety monitoring
- Electrofilter Protection

Example Industries

- Power industry
- Chemical industry
- Steel industry
- Food industry

Application type: Carbon monoxide CD 21.01.01-AAA

Analytical performance

Carbon monoxide concentration measurement range: 0 – 2000 ppmv

Detection limit (LOD): 0.2 ppmv*m @STP and 3 sec response time

Precision: 1% of the measured value or LOD, whichever is larger @STP and 3 sec response time

Accuracy: 2% of the measured value or LOD, whichever is larger @STP and 3 sec response time

Process dust load: up to 50 g/Nm³ depending on the process

Calibration: Certified span gas

Zero drift and span drift: negligible

Electric characteristics

Power input: 24 VDC nominal (19 - 30 VDC)

Power consumption: < 15 VA

Dynamic performance

Warm-up time: approx. 5 minutes

Minimum response time (T90): 100 milliseconds

Electric inputs and outputs

Inputs:

4 x analog input, (4-20 mA, process temperature and pressure) - easy user selection via DIP switch between active/passive mode

1 x RTD

8 x digital input

Outputs:

4 x analog output, (4-20 mA, CO concentration, process transmission, 2 x AUX) - easy user selection via DIP switch between active/passive mode

8 x digital output (NAMUR)

Optional:

PROFINET, Modbus (TCP/IP), Modbus RTU

Local User Interface:

1. Local user interface (LUI) – LCD backlight display located on the transmitter housing lid

2. Ethernet:

- WebServer application – system configuration and data acquisition via web browser
- Windows based program – GasEye logger for real time data acquisition

Remote access:

Ethernet port for remote service and diagnostics

Mechanical specification

Degree of protection: In accordance with IP65

Process flange: DN50

Process windows: Fused silica window, Helium leak tested and certified in accordance to EN1779:1999 norm.

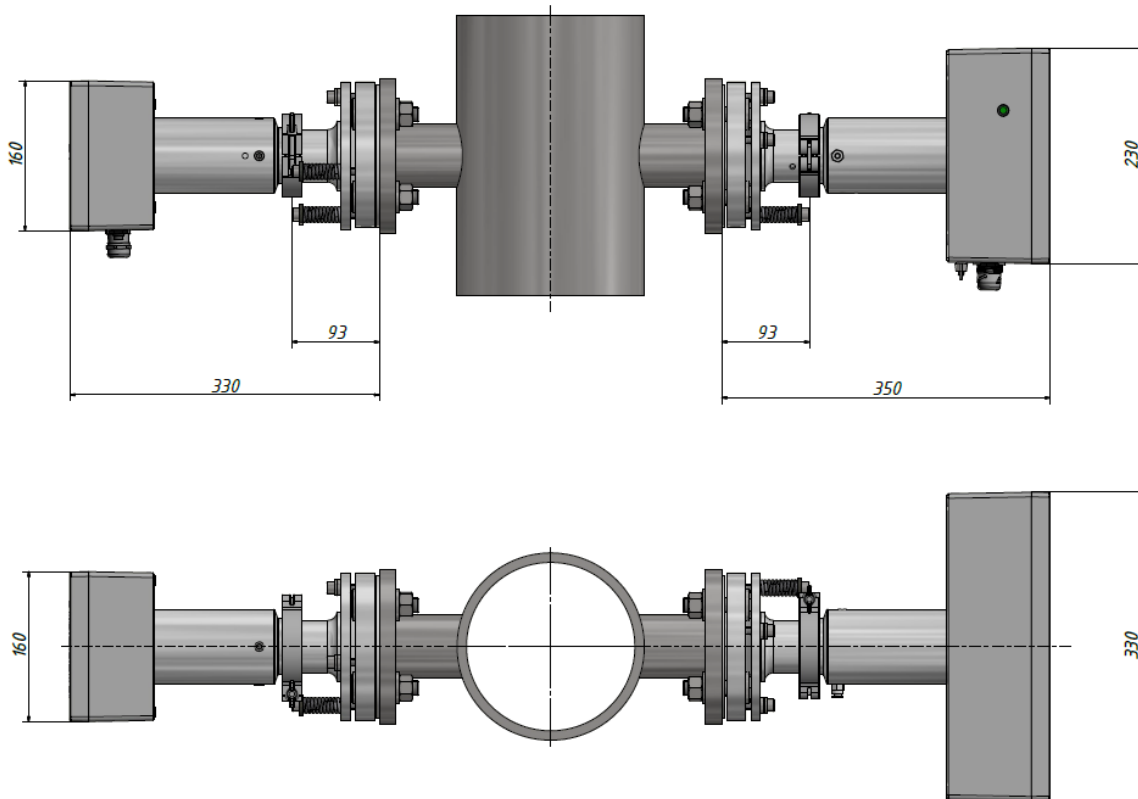
Instrument dimensions:

Transmitter: Width x height: 330 mm x 230 mm
Length: 350 mm

Receiver: Width x height: 160 mm x 160 mm
Length: 330 mm

Weight: Receiver unit: 13 kg
Transmitter unit: 15 kg

Materials: Housing: aluminium
Coating: RAL 5010
Process interface: Stainless steel 316



Climatic conditions

Ambient temperature:	-20°C to +55°C
Ambient pressure:	800 - 1200 hPa
Ambient humidity:	RH < 99%, non-condensing

Measurement conditions

Sample gas pressure:	ambient
Sample gas temperature:	150°C to 220°C

Process Purging (if necessary)

Purging gas flow rate:	5 – 50 l/min
------------------------	--------------

Safety

Low Voltage Directive (LVD) 2014/35/EU



- PN-EN 61010-1:2011
- Laser radiation: Laser Class I product acc. to PN-EN 60825-1:2014-11

EMC Directive 2014/30/EU

- EN 61326-1:2013

RoHS Directive 2011/65/EU

ATEX Directive 2014/34/EU

Direct Sales Office:

Airoptic Sp. z o.o.

Ul. Rubiez 46 B, 61-612 Poznan, Poland

sales@airoptic.pl

www.airoptic.pl

tel. +48 61 6272 128