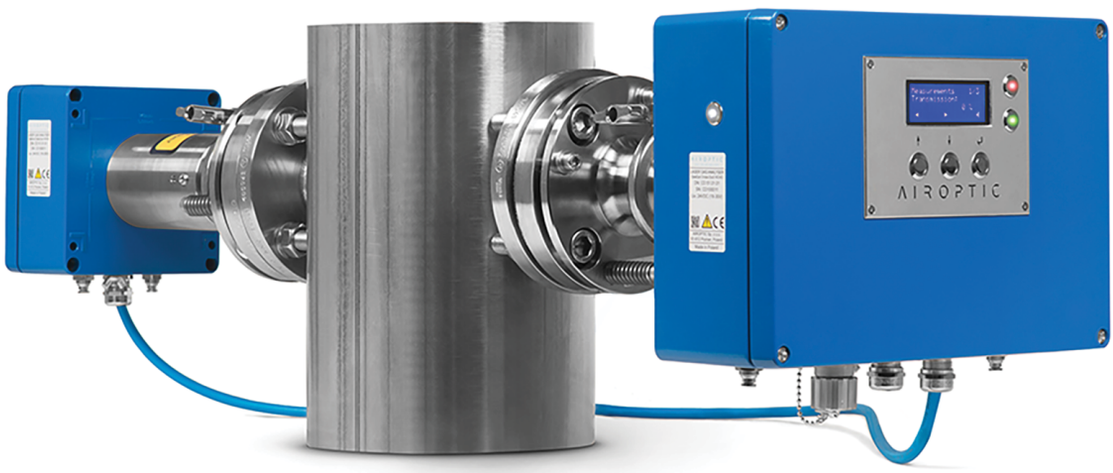
GasEye Cross Duct H2O / O2 - *IN-SITU* ANALYZER



GasEye H2O and O2 is a high performance *in-situ* combined water vapor and oxygen 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

- **H2O ranges:** 0 – 1 ppmv / 0 – 100%vol
- **O2 ranges:** 0-200 ppmv / 0-100%
- **Process temperatures:** 0-1350°C
- **Process pressures:** 0.7-2 barA
- **Real time sensing** – response time below 0.1 second
- **High sensitivity** – detection limit below 0.05 ppm per meter
- **High selectivity** – automatic compensation for interference effect from other constituents in the gas sample
- ***In-situ* monitoring** – direct in the process, no sample preparation
- **Maintenance free** – equipped with a self-calibrating feature, no field calibration necessary
- **Robustness** – IP66 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/IECEx** version available

Example Applications

- **Chlorine drying process**
- **Gas quality measurement**
- **Safety monitoring**
- **Process control**

Example Industries

- Electrolysis Plant
- Petrochemical industry
- Power industry
- Steel industry
- Chemical industry

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REAL TIME GAS ANALYZERS

H2O/O2 ANALYZER

TECHNICAL SPECIFICATION

Application type: H2O/O2 CD 15.11.01-AAA

Analytical performance

H2O / O2 measurement range: 0 – 30 vol% / 0 – 21 vol%

Detection limit (LOD): < 0.01 vol% *m / 0.01 vol% @STP and 3 sec response time

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

Accuracy: LOD or 2% of the measured value, 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: < 15VA (< 25VA if IECEx/ATEX)

Dynamic performance

Warm-up time: approx. 5 minutes

Minimum response time (T90): 200 milliseconds

Electric inputs and outputs

Inputs:
4 x analog input, (4-20 mA, process temperature and pressure, 2 x AUX) - 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, concentration, process transmission, 2 x AUX,) active or passive - easy user selection via DIP switch between active/passive mode

8 x Digital output (NAMUR)

Optional:
Profinet, Profibus, 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 webbrowser
   - Windows based program – GasEye logger for real time data acquisition

Remote access:
Ethernet port for remote service and diagnostics

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Mechanical specification

Degree of protection: In accordance with IP66

Process flange: DN50PN16

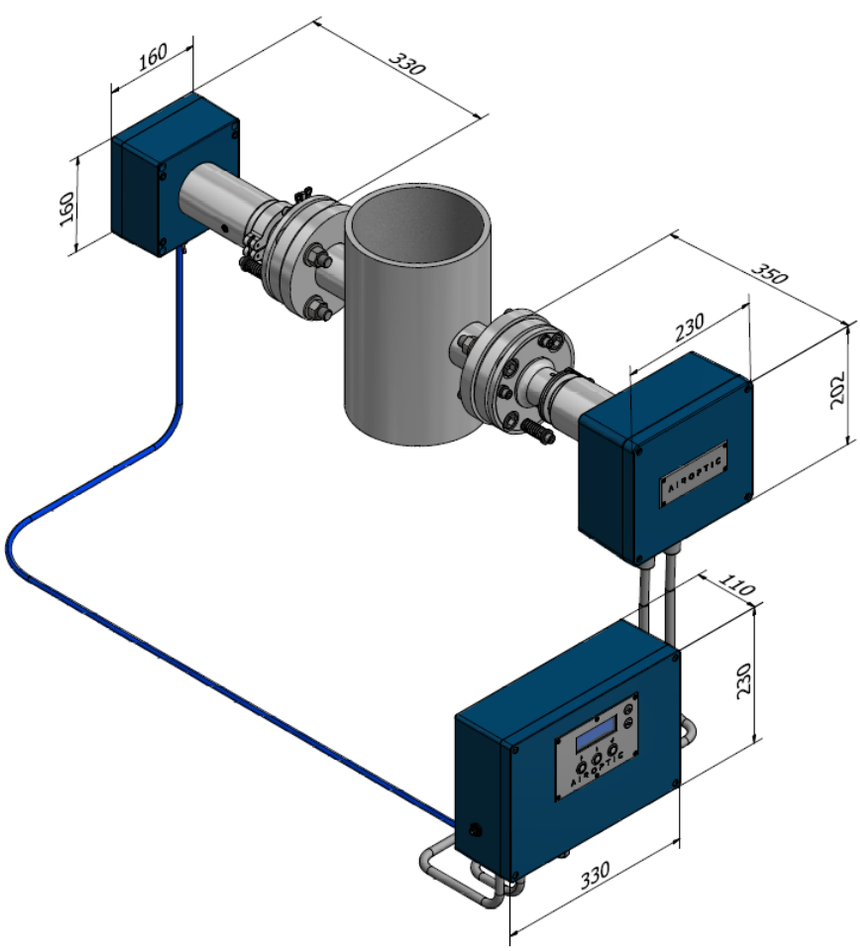
Process windows: F.Silica window, Helium leak tested and certified in accordance to EN1779:1999 norm.

Instrument dimensions:

Transmitter	W x H x L: 330 mm x 230 mm x 350 mm
Receiver	W x H x L: 160 mm x 160 mm x 330 mm
Central unit	W x H x L: 330 mm x 230 mm x 110 mm

Weight:
Receiver unit (including flange): 13 kg
Transmitter unit(including flange): 16 kg
Central unit: 5 kg

Materials:
Housing: aluminium
Coating: RAL5010
Process interface: Stainless steel 316



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TECHNICAL SPECIFICATION

H2O / O2 ANALYZER

Climatic conditions

Ambient temperature:	-30ºC to +60ºC
Ambient pressure:	800 - 1200 hPa
Ambient humidity:	RH < 99%, non-condensing

Measurement conditions

Sample gas pressure:	0.7 - 2 barA
Sample gas temperature:	0ºC to 70ºC

Sensor and Process Purging (Nitrogen)

Purging gas flow rate:	5 – 50 l/min

Safety

Low Voltage Directive (LVD) 2014/35/EU

CE

CLASS 1
LASER PRODUCT

- **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

- **EN IEC 60079-0:2018**
- **EN 60079-2:2014**
- **EN 60079-26:2015**
- **EN 60079-28:2015**

Ex

II 1/2G Ex pxb op is IIC T6 Ga/Gb
II 1/2D Ex pxb op is IIIC T85°C Da/Db

Certificate No. KDB 20ATEX0003X

IECEx Zone 2/22

- **EN IEC 60079-0:2017**
- **EN 60079-2:2014**
- **EN 60079-28:2015**

IECEx

Ex op is pzc IIC T6 Gc
Ex op is pzc IIIC T85°C Dc

Certificate No. IECEx KDB 19.0004X

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