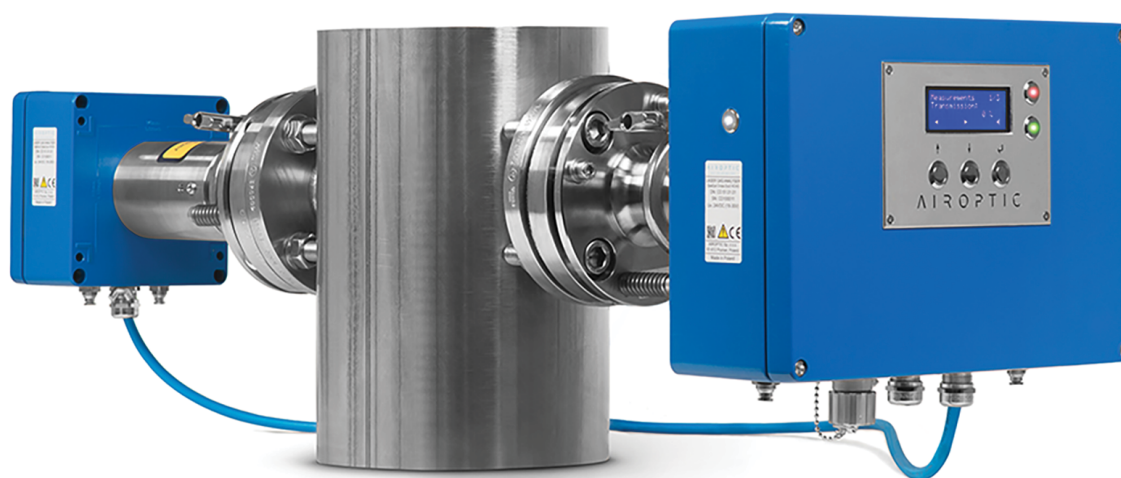


## GasEye Cross Duct H2S *in-situ* hydrogen sulfide analyzer



GasEye H2S is a high performance *in-situ* hydrogen sulfide vapor analyzer. Suitable for emission monitoring and process control. 24/7 continuous operation. No sample preparation. No zero drift. No field calibration. Low cost of ownership.

### Features

- H2S ranges **0 – 200 ppmv / 0 – 2%vol**
- Process temperature **0-550°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 5 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

- Petrochemical industry
- Chemical industry
- Paper industry

### Example Industries

- Power industry
- MWI
- Pulp and paper
- Steel

## Application type: H2S CD 75.01.01-AAA

### Analytical performance

**H2S measurement range:** from 0 – 200 ppmv to 0 – 100 vol%

**Detection limit:** 5 ppmv @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/Nm<sup>3</sup> 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:** < 20VA

### 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, 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, H2S 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, Modbus (TCP/IP), Modbus RTU, Profibus

#### 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

## 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.

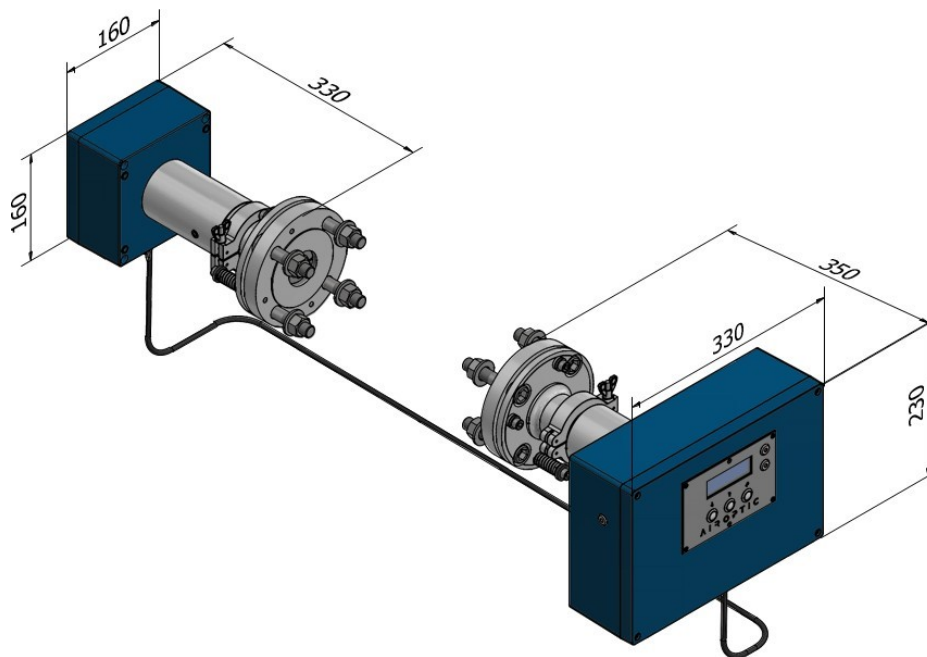
### Instrument dimensions:

**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**

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

**Measurement conditions**

<b>Sample gas pressure:</b>	0.9 - 1.1 atm
<b>Sample gas temperature:</b>	0°C to 550°C

**Process Purging (if necessary)**

<b>Purging gas flow rate:</b>	5 – 50 l/min
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**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

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



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

Certificate No. KDB 20ATEX0003X

IECEx Zone 2/22

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



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

Certificate No. IECEx KDB 19.0004X

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