

# Transmitter EC 23

State-of-the-art monitoring of  
Oxygen and Toxic Gases  
- ToxicSense Series

OX  
TOX



For use in Non-Hazardous Areas  
Sensors with long term stability  
High Selectivity  
Easy Handling  
4 ... 20 mA output signal (linearized)  
Microprocessor based  
One-man calibration on site  
Solid PVC enclosure IP65  
Option for relay contact

# Stationary monitoring of Oxygen and Toxic Gases

The Transmitter EC 23 is a low-cost, robust gas transmitter for the monitoring of oxygen and toxic gas concentration in safe environment. Through potentiometer and test sockets behind a service lid, the calibration can be exercised with little hindling onsite. The enclosure protection can be delivered IP 65 as standard and upgradable to IP 68, that means it is dirt, dust and water proof. The transmitter EC 23 can be operated alone or in combination with a **GfG** controller. Its important features are the easy handling and long life.

## One-man Auto Calibration

Simply press a button, the SMART microprocessor will automatically recognize the data inside the sensor, and auto-calibrate itself, without any trimmers.

## Off-site Sensor Calibration

All **GfG** SMART sensors are pre-calibrated in our lab, and simply install any SMART sensor with no further calibration required. calibration data automatically uploads to the transmitter to ensure precise calibration.

## Rapid Warm-up

Ready to calibrate after power is applied. Does not require bias voltage to stay ready or long wait for stabilization.

## EC 23 Series

# Technical Data

### General

#### Gas

Oxygen (O<sub>2</sub>)  
Carbon Monoxide (CO)  
Hydrogen Sulphide (H<sub>2</sub>S)

#### Other Toxic Gases

Upon Request  
(refer to Toxic Gas List)

#### Sensor Type

EC - Electrochemical Type

#### Measuring Range

Oxygen 0 ... 30%Vol  
CO 0 ... 300, 500 ppm  
0 ... 1000, 2000ppm  
H2S 0 ... 50, 100, 300 ppm

#### Gas Supply

Diffusion through stainless steel sintered filter. Flow thru via flow adapter (flow rate 0.5 L/min +/- 0.1 L/min)

#### Fast Response Time

T 90 < 10 - 30 seconds  
(depending on type of gas)

#### Accuracy

+ / - 3% F.S.

#### Repeatability

1% of signal

#### Output Linearity

Linear

#### Expected Sensor Life

> 2 years (depending on sensor type)

#### Environmental Conditions

Temperature : -20 ... +50°C  
-25 ... +55°C tested  
Humidity : 5 ... 95% r.h.  
Pressure : 950 ... 1100 hPa

#### Signal Connection to Controller

2 shielded wire  
LIYCY 2 x 1,5 mm<sup>2</sup>; < 1000m  
PG 9 gland

#### Output Signal

4 ... 20mA

#### Power supply

18 ... 24 Vdc  
Less than 25mA

#### Relay

1 Relay contact (optional)

#### Housing

PVC non-Ex proof

#### Casing Protection

IP 65 for Safe Area Use  
IP 68, up to 10m water column (optional)

#### Physical measurements

Weight 380gm  
Dimension 100 x 100 x 50(mm)

#### Display

Non Display type

#### Calibration

Microprocessor based for Auto  
Zero and Auto Calibration