



# Geopal GP-ELK



**Geopal GP-ELK**  
*Detector for electrochemical sensor*

Geopal GP-ELK is a stand-alone detector, a new generation of gas detectors with electrochemical sensors. The detector continuously monitors the specific level of toxic and harmful gases.

In GP-ELK the sensor signal is converted to a 4-20 mA output signal adjusted to the current measurement range and compatible with external control equipment, DDC / PLC control systems, automation systems, etc.

The analog signal from the detector is linear over the range.

Optionally, the Geopal GP-ELK is available in a version equipped with relays for low alarm, high alarm and fault.

On delivery the detector will be calibrated as agreed upon and no further service is required except for regular test with a test gas.

Examples of gases:

H <sub>2</sub> O <sub>2</sub>	Hydrogen peroxide
H <sub>2</sub> S	Hydrogen sulphide
HCL	Hydrochloric acid
C <sub>2</sub> H <sub>4</sub>	Ethylene
CH <sub>2</sub> O	Formaldehyde
C <sub>2</sub> H <sub>4</sub> O	Ethylene oxide
Cl <sub>2</sub>	Chlorine
CO	Carbon Monoxide
NH <sub>3</sub>	Ammonia
NO <sub>x</sub>	Nitrogen oxides
O <sub>2</sub>	Oxygen
O <sub>3</sub>	Ozone
PH <sub>3</sub>	Phosphine
...	...



Ammonia Storage



ITS11ATEXQ7268



DBI reg.Nr. 233.301

ISO 9001:2008  
34498

# Technical Data

## Description:

## Specifications:

### GP-ELK

Gases -	H <sub>2</sub> O <sub>2</sub>	Hydrogen peroxide	0-5 ppm
Detection range:	H <sub>2</sub> S	Hydrogen sulphide	0-50 ppm
	C <sub>2</sub> H <sub>4</sub>	Ethylene	0-10 ppm
	CH <sub>2</sub> O	Formaldehyde	0-10 ppm
	C <sub>2</sub> H <sub>4</sub> O	Ethylene oxide	0-10 ppm
	Cl <sub>2</sub>	Chlorine	0-20 ppm
	CO	Carbon Monoxide	0-300 ppm
	NH <sub>3</sub>	Ammonia	0-200 ppm
	NO <sub>x</sub>	Nitrogen oxides	0-20 ppm
	O <sub>3</sub>	Ozone	0-5 ppm
	PH <sub>3</sub>	Phosphine	0-5 ppm
Long-term stability:	< 5 % over 12 months		
Repeat accuracy:	< 5 %		
Response time, to gases T <sub>90</sub> :	< 50 seconds		
Linearity:	< 5 %		
Start-up time, Warm-up:	30 minutes		
Expected operating lift:	> 6 years in normal use, from date of manufacture		
Supply voltage:	20-30 Volt DC		
Power requirement:	20 mA		
Electrical output, current:	4-20 mA, max. load 600 Ω		
Electrical output, relay:	2 alarm levels and 1 fault 4-20 mA, 0-5 V or 0-10 V		
Pressure range:	1 atm. ±10 %		
Operating temperature:	-10 °C to +50 °C		
Operating humidity:	15-90 % rh, non-condensing		
Material:	PC (polycarbonate) POM (polyoxymethylene)		
Dimensions box (w x l x h):	82 x 82 x 57,5 mm		
Color:	Black		
Weight:	Approx. 0.3 kg		
Protection:	IP56, DIN 40050		
Approvals:	EN 61000-6-2, Electromagnetic compatibility (EMC) – Part 6-2: Generic standards - Immunity standard for industrial environments EN 61000-6-3, Electromagnetic compatibility (EMC) – Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments		
Safety:	EN 61010-1 & IEC 1010-1: Safety requirements for electrical equipment for measurement, control and laboratory use – Part 1		