



THE MULTI-GAS CONTROLLER FOR THE DETECTION OF TOXIC, COMBUSTIBLE AND HAZARDOUS GASES IN INDUSTRIAL ENVIRONMENTS.

The PolyGuard®2 MGC2-K controller is designed to detect and alert to toxic and/or explosive atmospheres. It is directly connected to a low-voltage power supply in accordance with standard EN 50 082. It displays the measured values and activates the alarm relays if the alarm setpoints are exceeded.

It is designed to work with up to 11 sensors:

- Three analogue sensors with a 4-20mA signal
- Eight digital sensors

Equipped with the RS-485 MODBUS protocol, the Sensepoint XCL and XRL can be distributed along a digital line, which reduces installation costs.

Applications with Sensepoint XRL: waste water, power plants, vehicles, laboratories, and the food & beverage industry

Applications with Sensepoint XCL: hospitals, laboratories, boiler room, transportation and parking garages.

The MGC2 controller complies with SIL2-certified development processes for the use of 4-20mA signal inputs/outputs.



FEATURES

INPUT & OUTPUT SPECIFICATIONS

- Digital inputs:** Potential-free
- Analogue inputs:** 4-20mA, overload and short-circuit proof, input resistance 200 Ω
- Analogue output signal:** Proportional, overload and short-circuit proof, load ≤500 Ω
 - 4-20mA = measuring range
 - 3.0 < 4mA = underrange
 - 20 to 21.2mA = overrange
 - 2.0mA = fault (not preset)
- Transistor output:** 24V DC / 0.1 A (switching to plus) (only with a 24V DC power supply)

ALARMS

- Relays:** 240V AC, 5 A, potential-free, change-over contact (SPDT)

TECHNICAL DATA

- Size:** 5.12 x 5.12 x 2.95 in. / 13.0 x 13.0 x 7.5 cm
- Weight:** 1.32 lb / 0.6 kg
- Protection Class:** NEMA 4X (IP65)
- Display:** LCD, Two lines, 16 characters each, background highlighted in two colors
Opération: Menu-driven via six push-buttons
Visual indicators: LED
- Installation:** Wall mounting
- Temperature:** -13°F to +122°F / -25°C to +50°C
- Humidity:** 15-95% RH non-condensing
- Power supply:** 24V DC ±20%, reverse-polarity protected, 24V AC ±15%
- Power consumption:** (24V DC)
Control board: Max. 60 mA (1.5 VA), without sensor
Per sensor (analog): Max. 85 mA (2.1 VA)
Horn / warning light: Max. 40 mA (1.0 VA)
- Field Bus:** RS-485 / 19,200 Baud
- Approvals:** EMC directives 2014/30/EU
Low voltage directive 2014/35/EU
CE
EN 61010-1:2010
- Warranty:** 1 year

SETUP EXAMPLE

