



## ADDRESSABLE GAS DETECTORS RANGE

# PSG-6000

### Overview

Addressable PSG-6000 gas detectors are designed to detect and continuously monitor the presence of flammable and toxic gases in potentially hazardous areas, especially in garages and boiler rooms. When they are exceeded, the detectors send information to the cooperating CDG 6000. The control panel triggers the ventilation in order to remove excess harmful gases from the room and may also provide a control signal to the gas shut off valve.

PSG-6000 detectors operate only on surveillance lines of addressable CDG 6000 gas detection panels. They require additional, external 12 V or 24 V DC power supply (except PSG-6103).

Addressable detectors range PSG-6000 are available in the following variants:

Detector	Detected gas	External DC power
<b>PSG-6001</b>	CNG (natural gas-methane)	9 V to 30 V DC
<b>PSG-6002</b>	LPG (propane-butane)	9 V to 30 V DC
<b>PSG-6003</b>	CO (carbon monoxide)	9 V to 30 V DC
<b>PSG-6103</b>	CO (carbon monoxide)	loop powered

PSG-6000 range of detector are not intended for use in potentially explosion hazard zone.

### Principle of operation

The microprocessors measurement system continuously analyses the concentration of the measured gas and compares it with the value of the appropriate alarm threshold.

Each detector has a set of three alarm thresholds, related to a strictly defined concentration of gas in the air. When they are exceeded, the detectors send information to the cooperating CDG 6000. The control panel also states that the sensor has been damaged or that it needs to be calibrated. Detectors have built-in removable gas sensor modules. They are equipped with double-sided short-circuit isolators.

### Design

The ASG-2000 type detectors are made in the form of a printed circuit board with electronic components and connectors and replaceable MSG-6000 gas sensor modules located in a plastic enclosure. The ventilation element installed in the housing allows the detected gas to reach the sensor. Enclosures have holes for mounting on the wall in the corners and cable glands inputs for the connection of power and control wires. Enclosure guarantee a high level of ingress protection IP level, enabling installation of detectors in a difficult environmental conditions.

### Technical data

Power supply:	
PSG-6001, PSG-6002, PSG-6003	from 9 to 30 V DC
PSG-6103	loop powered
Current consumption from external PSU:	
PSG-6001, PSG-6002, PSG-6003	30 mA / 12 V, 15 mA / 24 V
Power supply voltage from the detection line	16,5 V ÷ 24,6 V
Current consumption from detection line:	
PSG-6001, PSG-6002, PSG-6003	<150 µA
PSG-6103	<250 µA
Detected gases:	
PSG-6001	CNG (natural gas-methane)
PSG-6002	LPG (propane-butane)
PSG-6003/6103	CO (carbon monoxide)
Type of the sensor:	
PSG-6001, PSG-6002	solid-state
PSG-6003/PSG-6103	electromechanical
Sensor's lifetime	max 10 years
Number of alarm thresholds	3
Operating temperature range	from -20 °C to +50 °C
Enclosure IP rate	IP 54
Dimensions:	
PSG-600x	124 x 160 x 68 mm
PSG-6103	124 x 120 x 68 mm
Cable connectors (cable diameter)	M12 gland (3-6.5 mm)
Weight:	
PSG-600x	0,25 kg
PSG-6103	0,2 kg