



GAS DETECTION SYSTEM
SDG 6000

■ FLAMMABLE AND TOXIC GASES DETECTION SYSTEM



INCREDIBLE FLEXIBILITY
IN OUTPUTS
CONFIGURATION

CDG 6000

The gas detection system enables the detection and signalling of flammable gases leakage (natural gas-methane, propane-butane gas) and dangerous concentrations of carbon monoxide. The system consists of a CDG 6000 gas detection unit and several addressable PSG-6000 gas detectors operating in the control panel line.

Depending on the detectors used, the gas detection system can be used in garages, allowing for simultaneous control of ventilation. It can also be used in gas boilers, allowing the gas shut off valve to be operated in case of unsealing of the system. It is complemented by ASG-2000 (autonomous gas detectors) that can work independently or create small system of several cooperating detectors.

Gas detection control panel CDG 6000

The CDG 6000 Addressable Gas Detection Panel is designed to signal the leakage of combustible gases (CNG, LPG) and dangerous concentrations of carbon monoxide (CO), upon receipt of information from its associated PSG-6000 gas detectors. 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. By means of built-in monitoring lines it is possible to control the status of controlled external signalling and control devices. The CDG 6000 is capable of transmitting alarm information to the fire alarm systems installed on the premises of the POLON 4000 / POLON 6000.

The CDG 6000 can signal three alarm levels related to the corresponding gas levels reported by the connected detectors. The control panel indicates alarming detector by displaying it's number on the display. The panel has an extensive self-diagnostic and connected external devices diagnostic system. Similarly to alarms, also any faults information in the system is displayed on the control panel display.

All the information is stored in the internal non-volatile memory of the control panel as an event log. The capacity of the log is 1000 events. Configuring and programming of the CDG 6000, as well as reading the event log, is performed using the CDG6000 Configurator. Addressable PSG-6000 detectors work on a specially designed detection line, which can configured either as an open line or a loop. In the loop mode, the end of the line must be connected back to the control panel. This allows the system to work properly even when the line has got a single brake. Detec-

tors have built-in short circuit isolators which, when activated, isolate the short circuit in the line so that the maximum number of detectors is still working properly.

Technical data

Power supply:	
• Mains input voltage	230 V + 10% - 15%/50 Hz
• Battery	1 x 12 V / 2,3 Ah
Number of detection lines	1
Operating gas detectors	type PSG-6000
Max detectors' number in the line	16
Relay outputs	4
Relay outputs' max current load	8 A / 30 V DC, 8 A / 250 V AC
Shut-off valve control output	12 V / 10 A
Monitoring inputs	4
Auxiliary devices power supply output	0,5 A / 12 V
Events log	1000
Operating temperature range	from -10°C to +55°C
Enclosure IP rate	IP 56
Dimensions (without cable glands)	300 x 230 x 86 mm

**EASY INSTALLATION
= LOW COSTS**

PSG-6000



Addressable gas detectors range PSG-6000

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. 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.

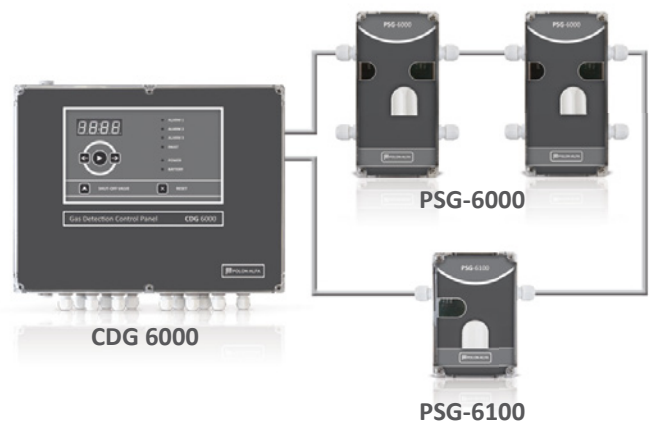
PSG-6000 detectors operate only on surveillance lines of addressable CDG 6000 gas detection panels. They require additional, external 12 V or 24 V DC power supply (except PSG-6103).

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

Type of detector	Detected gas	External DC power
PSG-6001	CNG (natural gas)	9 to 30 V DC
PSG-6002	LPG (propane-butane)	9 to 30 V DC
PSG-6003	CO (carbon monoxide)	9 to 30 V DC
PSG-6103	CO (carbon monoxide)	loop powered

Technical data

Power supply:	
PSG-600x	from 9 to 30 V DC
PSG-6103	loop powered
Current consumption from external PSU:	
PSG-600x	30 mA / 12 V, 15 mA / 24 V
Current consumption from detection line:	
PSG-600x	< 150 μ A
PSG-6103	< 250 μ A
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





HIGHER LEVEL OF
SECURITY

ASG-2000

Autonomous gas detectors range ASG-2000

Autonomous ASG-2000 gas detectors range ASG-2000 are designed to detect flammable and toxic gases in hazardous areas such as garage, car parking and boiler room etc. Each detector has got three alarm thresholds, strictly related to a defined gas concentration in the air. When the particular threshold is exceeded, the detector's optical indicator is activated and appropriate outputs for controlling the external sounder beacon are activated. It is also possible to start ventilation to vent and remove harmful gases from the room.

ASG-2000 detectors are designed for independent operation, but can be also connected between creating a small gas detection installations. Detectors have got built-in interchangeable gas sensor modules that reduce the cost of their operation. If it is necessary to perform the sensor calibration, the detector will indicate that. Detector enclosure guarantee a high IP rate, allowing them to be installed in a difficult environmental conditions. Detectors are powered with an external 12 V DC (24 V DC) power supply or with a 230 V AC.

Autonomous detectors range ASG-2000 are available in the following variants:

Type of detector	Detected gas	External DC power
ASG-2001	CNG (natural gas)	9 to 30 V DC
ASG-2001HV	CNG (natural gas)	230 V AC
ASG-2002	LPG (propane-butane)	9 to 30 V DC
ASG-2002HV	LPG (propane-butane)	230 V AC
ASG-2003	CO (carbon monoxide)	9 to 30 V DC
ASG-2003HV	CO (carbon monoxide)	230 V AC

Technical data

Power supply:	
ASG-200x	from 9 to 30 V DC
ASG-200xHV	230 V ± 10% AC
Max current consumption	120 mA / 12 V; 60 mA / 24 V
Type of the sensor:	
ASG-2001/HV, ASG-2002/HV	solid-state
ASG-2003/HV	electromechanical
Sensor's lifetime	max 10 years
Number of alarm thresholds	3
Alarm relays' current load	3 A / 30 V DC, 3 A / 250 V AC
Operating temperature range	from -20°C to +50°C
Enclosure IP rate	IP 54
Dimensions	80 x 216 x 68 mm

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