

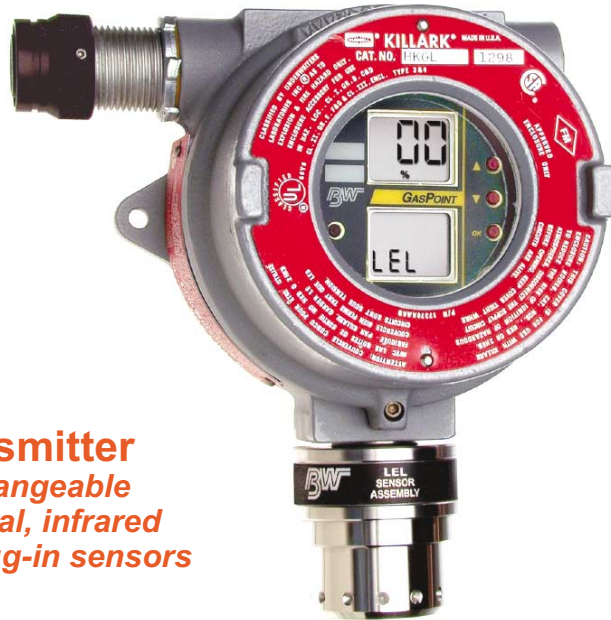
# GPoint

H<sub>2</sub>S, CO, NH<sub>3</sub>, HCN, NO<sub>2</sub>, SO<sub>2</sub>, O<sub>2</sub>, Cl<sub>2</sub>  
Combustibles (Catalytic 0-100% LEL) or  
Combustibles (IR 0-100% LEL)

Distribuição: Segurança Industrial Equipamentos  
Fone/Fax: (41) 4063-9687 ou 3287-1364  
cml@segind.com.br - segindbr@hotmail.com  
www.segind.com.br



## Gas Transmitter with Internal Alarm Relays



**One Transmitter  
with interchangeable  
electrochemical, infrared  
and catalytic plug-in sensors**



ISO 9001

## Fixed Gas Monitoring Systems

### FEATURES:

The GasPoint transmitter provides a 4-20 mA output signal that can be connected to any control system (DCS, PLC, etc.). With advanced sensor technology and microcontroller based operation, the GasPoint provides continuous monitoring of hazardous gases.

- △ The GasPoint transmitter can accept any GasPoint sensor type: electrochemical, catalytic or IR (infrared). All plug-in sensor assemblies are field-interchangeable.
- △ Full function sensor integrity test (auto) continuously advises gas sensing ability and life ended
- △ Non-intrusive, one-person calibration with auto zero and auto span
- △ Equipped with three 5-amp relay contacts—two gas alarm relays (low/high) and fault alarm. Field-selectable normally energized/de-energized and latching/non-latching alarm relay functions.
- △ Two backlit alphanumeric LCDs advise all environmental and gas hazard conditions as well as instrument and sensor status
- △ Remote toxic/oxygen sensors can be installed over 3,900 ft./1,100 m away; combustible sensors over 1,550 ft./475 m. Kit can be installed at any time.
- △ Alarm setpoints displayed on demand—simply press the external button
- △ Field programmable alarm levels
- △ Backlight (auto) in low light conditions and alarm
- △ Extensive fault diagnostics
- △ 2-way digital communication using MODBUS module

### Ordering Information

GP-WD	Gas Transmitter w/ Combustible Catalytic Sensor
GP-IR-WD	Gas Transmitter w/ Combustible Infrared Sensor
GP-HD	Gas Transmitter w/ H <sub>2</sub> S Sensor
GP-MD	Gas Transmitter w/ CO Sensor
GP-AD	Gas Transmitter w/ NH <sub>3</sub> Sensor
GP-ZD	Gas Transmitter w/ HCN Sensor
GP-DD	Gas Transmitter w/ NO <sub>2</sub> Sensor
GP-SD	Gas Transmitter w/ SO <sub>2</sub> Sensor
GP-XD	Gas Transmitter w/ O <sub>2</sub> Sensor
GP-CD	Gas Transmitter w/ Cl <sub>2</sub> Sensor

### Accessories and Spares

GP-POWER1	120-240 VAC Power Supply
GP-MBUS3	2-wire MODBUS Communication Expansion Module
GP-MBUS3-4	4-wire MODBUS Communication Expansion Module
GP-SEP	Sensor Separation Kit
GP-1	Gas Transmitter
SS-RW02	Combustible Catalytic Sensor Assembly
IR-RW03	Combustible IR Sensor Assembly
GP-SSPB	Stainless Steel Process Baffle
GP-SSCAL4	Stainless Steel GasPoint Splash Guard
GP-DUC-K1	Duct Mount Adaptor

### Replacement Sensor Assemblies

SS-RH02.....H <sub>2</sub> S	SS-RM02.....CO	SS-RA02.....NH <sub>3</sub>
SS-RZ02.....HCN	SS-RD02.....NO <sub>2</sub>	SS-RS02.....NO <sub>2</sub>
SS-RS02.....SO <sub>2</sub>	SS-RX02.....O <sub>2</sub>	SS-RC02.....Cl <sub>2</sub>

# GPoint

LEL, H<sub>2</sub>S, CO, NH<sub>3</sub>, HCN,  
NO<sub>2</sub>, SO<sub>2</sub>, Cl<sub>2</sub> or O<sub>2</sub>

4-20 mA Gas Transmitter

Display advises:

- △ Gas type monitored
- △ Continuous (%LEL, %v/v or ppm) readout of gas concentration
- △ Alarm level and type encountered—LOW/HIGH or FAULT
- △ When sensor has failed its automatic daily self-test
- △ “Sensor Replacement” and “Sensor Expired” indications
- △ When to apply gas during calibration

## Special Features

Change gases monitored in the field at any time. The GPoint Transmitter will recognize the sensor installed and test and reset itself to that sensor type.

No junction box connection required.

Daily sensor integrity test (auto) monitors sensor operation, length of time sensor has been in service and advises when sensor requires replacement.

GasPoint allows you to set or change calibration time and gas alarm setpoints in the field.

Select or modify the measuring range using a simple dipswitch.

The optional plug-in MODBUS expansion module provides an addressable communications interface (1-247).

## SPECIFICATIONS

**MONITOR:** 3-wire, 4-20 mA gas transmitter with advanced microcontroller-based circuitry  
**Power Input:** 12 to 32 volts DC  
**Output Current:** Normal Operation: Isolated linear 4-20 mA output  
 Calibration Mode: Steady 3 mA (auto reset to normal operation)  
 Fault Mode: 2 mA signal (and less)  
**Power Consumption:** Toxic Versions: 40 mA at 24 VDC  
 Combustible Version: 100 mA at 24 VDC  
 Relays: 50 mA per relay at 24 VDC

**SENSORS:** Plug-in, smart sensors  
**Detection Type:** Combustible gases: catalytic or IR; Toxic gases and Oxygen: electrochemical  
**Self-Test:** Automatic daily self-test of sensor integrity and sensor life  
**Relative Humidity:** 5 to 95% RH non-condensing  
**Drift:** Zero: <5% per year; Span: <10% per year

Gas Monitoring Specifications	Detectable Accuracy	LCD Increment	Temperature Range	Units	Programmed Measuring Ranges
Combustibles - Catalytic	1%	1	-40 to +90°C / -40 to +194°F	%LEL	0-100
Combustibles - Infrared	1%	1	-40 to +70°C / -40 to +150°F	%LEL	0-100
H <sub>2</sub> S	0.25 ppm	1	-40 to +50°C / -40 to +122°F	ppm	0-20, 0-50, 0-100, 0-500
CO	1 ppm	1	-20 to +50°C / -4 to +122°F	ppm	0-50, 0-100, 0-500, 0-1,000
NH <sub>3</sub>	1 ppm	1	-10 to +50°C / +14 to +122°F	ppm	0-200, 0-50, 0-500, 0-1,000
HCN	0.1 ppm	0.1	-20 to +50°C / -4 to +122°F	ppm	0-20.0, 0-50.0, 0-100
NO <sub>2</sub>	0.1 ppm	0.1	-20 to +50°C / -4 to +122°F	ppm	0-50.0, 0-10.0, 0-20.0, 0-99.9
SO <sub>2</sub>	1 ppm	1	-20 to +50°C / -4 to +122°F	ppm	0-100, 0-50, 0-20, 0-10
O <sub>2</sub>	0.1%	0.1	-20 to +50°C / -4 to +122°F	%v/v	0-30.0%
Cl <sub>2</sub> *	0.1 ppm	0.1	-20 to +50°C / -4 to +122°F	ppm	0-5.0, 0-10.0, 0-100.0

\*Note: Cl<sub>2</sub> not rated for Class I, Div. 1

**CALIBRATION:** Non-intrusive, via pushbutton  
 Auto zero and auto span

**DISPLAYS:** Two backlit liquid crystal displays  
**LCD 1** 3-digit continuous readout of the gas present (ppm, % LEL or %v/v)  
**LCD 2** Alphanumeric diagnostic status display

Alarm Setpoints: Two setpoints: user-selectable

**RELAY CONTACTS:** Three SPDT relays; 5 amps at 250 VAC  
 LOW/HIGH: Field selectable for normally energized/de-energized and latching/non-latching  
 FAULT: Normally energized and non-latching

**TRANSMISSION RANGES:** Relay contacts not considered. (For ranges with relays see manual.)

Conductor Size		Toxic /Oxygen Sensors	Combustible Sensors
22 AWG	0.64 mm	6,712 ft.	3,356 ft.
20 AWG	0.75 mm	10,953 ft.	5,336 ft.
18 AWG	1.0 mm	16,953 ft.	8,476 ft.

**CONTROLS:** Calibration: Non-intrusive via external pushbutton  
 Alarm Setpoints: Simple up/down pushbuttons with LCD readout of setpoints

**PHYSICAL:** Size: 6.8 x 7 x 4.3 inches / 17 x 17.8 x 10.8 cm (approx.)  
 Weight: 4.85 lb. / 2.2 kg (approx.)

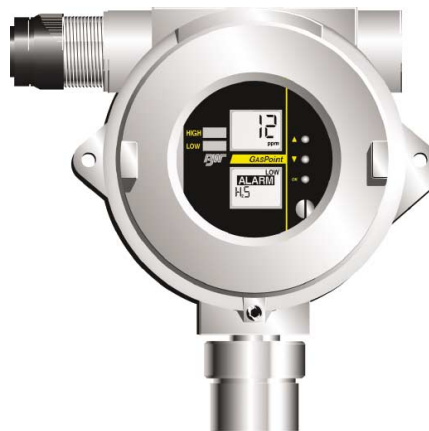
Transmitter: Nema 4, explosion-proof, anodized aluminum enclosure w/ mounting flanges  
 Sensor: Stainless steel enclosure

**WARRANTY:** Instrument: 2 years non-prorated; Sensor: 2 years full replacement warranty

DUE TO ONGOING RESEARCH AND PRODUCT IMPROVEMENT, SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

**RATINGS AND CERTIFICATIONS:** CSA Class I, Div. 1, Groups B, C, D; Class 1 Zone 0, Group IIA, IIB, IIC  
 Explosion Proof: ANSI/ISA: UL 1203; CSA: C22.2 No 30  
 Combustible Performance Standards: ANSI/ISA: ISA-S12.13; CSA: C22.2 No 152

- 1 Large, backlit LCD readout of gas concentration
- 2 Alphanumeric LCD showing transmitter STATUS and diagnostics
- 3 Non-intrusive calibration via simple pushbutton
- 4 Interchangeable sensor types: LEL (catalytic or IR), toxic gas or oxygen with common transmitter assembly
- 5 Three relays: two gas alarm relays, one fault relay



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