



## PLUG-AND-PLAY G7 CARTRIDGES

G7 is completely customizable with an exclusive modular design to accommodate diverse gas detection and safety monitoring needs.



### Standard Cartridge (lone worker)

G7 devices equipped with a standard (no-gas) cartridge function as personal safety and lone worker monitoring devices. G7's with a standard cartridge monitor the safety of workers and alert live monitoring personnel in the event of an emergency, fall or health event.



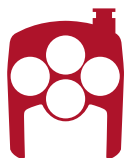
### Single-gas diffusion Cartridge

Single-gas cartridges provide targeted gas detection for environments with specific gas hazards. Most G7 gas sensors are compatible with the single-gas cartridge.



### Multi-gas diffusion Cartridge

Multi-gas diffusion cartridges support two to four gas sensors and up to five gases when fitted with a dual-toxic COSH sensor. Our multi-gas diffusion cartridge supports all sensors in the G7 portfolio.



### Multi-gas pump Cartridge

G7 devices with a multi-gas pump cartridge can monitor up to five gases (when fitted with a COSH sensor) and feature an internal pump. Ideal for confined space entry and leak check applications, users can turn the pump on and off on-the-go and temporarily change G7's functionality using configuration modes — every setting is customizable online through the Blackline Live user portal.

## Features

- If a sensor fails or reaches the end of its serviceable life, swap out the cartridge for a new one in seconds
- Quickly convert a G7 device from a single-gas to a multi-gas monitor by changing the cartridge
- G7 sensors and pumps feature a lifetime warranty
- All cartridges are compatible with G7 Dock for straightforward bump tests and calibrations
- G7 devices communicate all test data to the Blackline Safety Network, eliminating the need to manually collect data from the field
- Comprehensive confined space entry and leak check work flows for devices fitted with a pump cartridge
- Automated mapping of the confined space entries, gas exposures, usage and alerts



# DETAILED SPECIFICATION

## Gas cartridge features

Under limit  
Over limit  
Time-weighted average (TWA)  
Short-term exposure limit (STEL)  
High gas alert  
Low gas alert  
Bump test and calibration notification  
Bump test and calibration failure

## Size & weight

**G7 with Standard Cartridge**  
Size: 64 mm x 124 mm x 27 mm (2.5" x 4.9" x 1.1")  
Weight: 162 g (5.7 oz)

**G7 with Single-gas Cartridge**  
Size: 64 mm x 128 mm x 27 mm (2.5" x 5.0" x 1.1")  
Weight: 167 g (5.9 oz)

**G7 with Multi-gas diffusion Cartridge**  
Size: 66 mm x 150 mm x 27 mm (2.5" x 5.9" x 1.1")  
Weight: 192 g (6.8 oz)

**G7 with Multi-gas pump Cartridge**  
Size: 66 mm x 151 mm x 38.5 mm (2.6" x 5.95" x 1.52")  
Weight: 238 g (8.4 oz)

## User notification

**Green SureSafe® light:** Blinking (powered), continuous (connected)  
**Yellow top and front lights:** Yellow pending alarm and yellow warning alarm  
**Red top and front lights:** Red alert communicated  
**Blue LiveResponse™ top and front lights:** Confirmation that a monitoring team has acknowledged the alert  
**Alarm Indicators:** Speaker, LED lights and vibration motor  
**Speaker sound pressure level:** ~95 dB @ 30 cm (~95 dB @ 11.8")  
**Voice calling:** Speakerphone and phone modes (G7c model only)


## Power & battery

**Rechargeable Li-ion battery:** 1100 mAh Li-ion  
**Battery Life:** 18 hours at 20°C (68°F) under normal usage  
**Charge time:** 4 hours

## Environmental

**Storage temperature:** -30°C to 60°C (-22°F to 140°F)  
**Operating temperature:** -20°C to 55°C (-4°F to 131°F)  
**Charging temperature:** 0°C to 45°C (32°F to 113°F)  
**Ingress Protection:** Designed to meet IP67

## Approvals

**G7c:** SAR, RoHS, CE, RCM  
**Unit ID:** 3567xxxxxx  
**FCC ID:** W77G7C | **IC:** 8255A-G7C  
Contains FCC ID: XPY1CGM5NNN, IC: 8595A-1CGM5NNN  
**OR**  
**Unit ID:** 3566xxxxxx  
Contains FCC ID: XPY1CGM5NNN, IC: 8595A-1CGM5NNN  
**Canada & USA:** Class I Division 1 Group A,B,C,D T4; Class I Zone 0 AEx da ia IIC T4; Ex da ia IIC T4 Ga   
**IECEX:** Ex da ia IIC T4 Ga  
**ATEX:** Ex da ia IIC T4 Ga  II 1 G  
**LEL:** CSA C22.2 No.152; ISA 12.13.01  
**LEL Pump Cartridge:** CSA C22.2 No.152; 0°C ≤ Ta ≤ 40°C; ANSI/ISA-12.13.01; -10°C ≤ Ta ≤ 40°C

**G7x:** SAR, RoHS, RCM

**Canada & USA:** Class I Division 1 Group A,B,C,D T4; Class I Zone 0 AEx da ia IIC T4; Ex da ia IIC T4 Ga  
**IECEX:** Ex ib IIC T4 Gb  
**LEL:** CSA C22.2 No.152; ISA 12.13.01  
**LEL Pump Cartridge:** CSA C22.2 No.152; 0°C ≤ Ta ≤ 40°C; ANSI/ISA-12.13.01; -10°C ≤ Ta ≤ 40°C

## Warranty

**Gas sensors and pumps:** lifetime warranty with active service plan

## Gas sensors

Gas	Sensor type	Sensor model	Range	Resolution
Ammonia (NH <sub>3</sub> )	Electrochemical	Citytech, Sensoric NH3 3E 100 SE	0-100 ppm	0.1 ppm
High-range ammonia (NH <sub>3</sub> )	Electrochemical	Sensoric NH3 E3 500 SE	0-500 ppm	1 ppm
Carbon monoxide (CO)	Electrochemical	Citytech, 4CF+ CiTiCeL	0-500 ppm	1 ppm
High-range carbon monoxide (CO)	Electrochemical	Citytech 4CM	0-2000 ppm	5 ppm
Hydrogen resistant carbon monoxide (CO-H)	Electrochemical	Citytech 2CF3	0-500 ppm	1 ppm
Carbon dioxide (CO <sub>2</sub> )	NDIR	Gas Sensing Solutions, MinIR	0-50,000 ppm	50 ppm
Chlorine (Cl <sub>2</sub> )	Electrochemical	Citytech, Sensoric Cl2 3E 50	0-20 ppm	0.1 ppm
Chlorine dioxide (ClO <sub>2</sub> )	Electrochemical	Sensoric ClO2 3E 1 O	0-2 ppm	0.01 ppm
COSH	Electrochemical	Citytech, 4COSH Dual Gas CO/ H2S Sensor	0-500 ppm CO, 0-100 ppm H2S	1 ppm CO, 0.1 ppm H2S
Hydrogen cyanide (HCN)	Electrochemical	Sensoric HCN 3E 30 F	0-30 ppm	0.1 ppm
Hydrogen sulfide (H <sub>2</sub> S)	Electrochemical	City Technology, 4HS+ Hydrogen Sulfide CiTiCeL	0-100 ppm	0.1 ppm
High-range hydrogen sulfide (H <sub>2</sub> S)	Electrochemical	City Technology, 4HS+ Hydrogen Sulfide CiTiCeL	0-500 ppm	0.5 ppm
LEL-infrared (LEL-IR)	NDIR	MIPEX, O2-X-X-X.1	0-100% LEL	1% LEL
Nitrogen dioxide (NO <sub>2</sub> )	Electrochemical	City Technology, 4ND	0-50 ppm	0.1 ppm
Oxygen (O <sub>2</sub> )	Pumped electrochemical	City Technology, 4OXLL Longlife Oxygen CiTiCeL	0-25% vol	0.1% vol
Ozone (O <sub>3</sub> )	Electrochemical	Sensoric O3 3E 1	0-1 ppm	0.01 ppm
Photoionization (PID) ppm	PID	Ion Science, MiniPID 2	0-4,000 ppm*	Dynamic resolution*
Photoionization (PID) ppb	PID	Ion Science, MiniPID 2	0-10,000 ppb*	Dynamic resolution*
Sulfur dioxide (SO <sub>2</sub> )	Electrochemical	City Technology, 4S Rev. 2 Sulfur Dioxide CiTiCeL	0-100 ppm	0.1 ppm



All specifications subject to change without notice.  
\* Dependant on correction factor