

EXO 8 is a cloud-connected area monitor that continuously measures gas concentrations in the ambient environment at sites, facilities, and fence lines. EXO activates notifications when concentrations of toxic and combustible gases or gamma exceed configured setpoints.

HARDWARE

EXO is available in two versions: EXO 8 (EX8N) and EXO 8 Gamma (EX8G). Both versions are available in Pump and Diffusion configurations, providing flexibility for different monitoring applications. Blackline Safety also offers an optional gas expansion module that enables EXO to detect up to four additional gases.

Pump

The Pump configuration can be used to remotely sample up to four confined spaces or locations.



Diffusion

The Diffusion configuration effectively monitors and measures ambient gas concentrations.



EXO 8 Gamma

EXO 8 Gamma is equipped with a factory-installed gamma radiation sensor, which measures both gas and gamma radiation.

NOTE: Gamma sensors are factory-installed only.



Gas Expansion Module

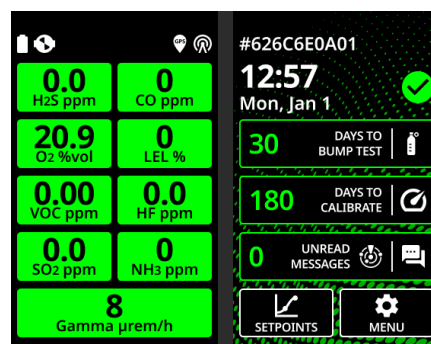
The gas expansion module includes a pump and four additional gas sensors. It can be installed in both EXO 8 and EXO 8 Gamma pump and diffusion devices.



EXO 8 DISPLAY

The Home screen conveys the current device status and event information through screen status and banner messages.

EXO's live readings screen displays real-time gas levels. EXO's dashboard screen displays alerts, calibration and bump due dates, and provides shortcuts to menu options, setpoints, and compliance operations.



POWERING ON EXO 8

To power on EXO:

1. Press and hold the power button for two seconds. EXO emits a chime, the top lights flash, the screen displays the active features, and the green connectivity light goes solid, indicating EXO is connected.

If an **O₂ stabilizing** message displays on EXO's screen, it means EXO is not monitoring. Stabilization typically takes approximately 10 seconds but can take up to 20 minutes.

2. After you power on EXO and complete the startup sequence, EXO opens the main menu with Setup wizard selected.
3. Press the center button to start the Setup wizard.

EXO continues to monitor for gas during the Setup wizard. Low urgency notifications, an SOS latch pull, or dangerous gas levels override the Setup wizard.

PLACING EXO 8

When placing EXO:

- Keep EXO upright and accessible.
- Do not hang EXO by its handle alone. Use the Hanging Mount Kit accessory.

MENU

Use EXO's menu to access functionality such as gas options, messages, settings, and advanced information.

There are two ways to open EXO's menu:

- Press the center button to open the main menu.
- From the Dashboard screen, use the left and right buttons to scroll and then select Menu by pressing the center button.

CHARGING EXO 8

Use any of the following EXO accessories to charge EXO:

- Trickle charger
- Solar panel
- Quick charger

NOTIFICATIONS

EXO 8 communicates notifications using lights, sound, and an on-screen message specific to the event. Notifications must be acknowledged, and the triggering conditions addressed before they can be cleared from the device.

IMPORTANT: Always follow your company's safety protocol for responding to notifications. For low and high urgency notifications, Blackline Safety recommends leaving the area.

GREEN LIGHT

A flashing connectivity light indicates that EXO is trying to establish a connection to Blackline Live and is not yet transmitting data.

A solid connectivity light indicates that EXO is connected to Blackline Live and is actively transmitting data.

BLUE LIGHT

The blue LiveResponse light lets you know that remote monitoring personnel are responding to an alert by following your organization's emergency protocol. When monitoring personnel have confirmed the safety of everyone in the area and resolved the alert, the blue LiveResponse light turns off.

YELLOW LIGHT

Yellow lights indicate two types of notifications. Both types of notifications include yellow flashing lights, sound, and an on-screen message specific to the event.

Operational:

- Triggered by routine and expected device operations.
- Local to your device; monitoring personnel are not notified.

Low urgency:

- Triggered by an unexpected condition that could pose a safety risk if not addressed in a timely manner.
- Local to your device; monitoring personnel are not notified.

RED LIGHT

A red light at the top of your EXO device indicates a **High urgency** notification.

- High urgency notifications are triggered by events that require your immediate attention and action.
- If your organization is monitored, high urgency notifications are immediately communicated to monitoring personnel and automatically generate an alert in Blackline Live.

To acknowledge and mute a notification:

Press and hold the left and right buttons at the same time to mute the notification and acknowledge the banner message.

NOTE: For continuous gas exposure, EXO unmutes itself after two minutes for low urgency notifications and one minute for high urgency notifications if detected gas levels have not returned to normal.



GAS SAMPLING

EXO 8 Pump configuration has four inlets. When connected to tubing, the inlets allow a single EXO to monitor multiple remote areas. Inlets must be assigned before they are functional.

To assign inlets:

1. Power on EXO and press the center button to open the Main menu.
2. Use the left, right, and center button to select **Gas options**.
3. Select **Inlet settings**. By default, the pump inlets (1-4) display as OFF.
4. Using a tube fitted with a quick connect coupling insert, attach the tube to the desired inlet.
5. Select **Inlet settings**, and then select the inlet you connected the tube to in step 4.
6. Use the left, right, and center button to toggle the inlet to ON. This pump inlet is now functional.

Single gas sampling inlet

When one inlet is toggled on, EXO first purges for two minutes to clear out any gas from the sensors, then continuously draws air from the inlet.

This setup is best for confined-space entry, or any other situation where it is vital to continuously sample from a hazardous area.

Multi gas sampling inlet

When multiple inlets are toggled on, EXO starts a sampling cycle. EXO cycles through each inlet by pulling in gas from one inlet at a time and then purging in between each of the samples. While EXO is purging itself, there are gaps in readings.

Due to these gaps in readings, a multiple-inlet sample setup is best used for long-term monitoring of remote areas.

IMPORTANT: If you start the pump while operating at temperatures of -20°C (-4°F) or lower, EXO generates a pump-blocked alarm that persists until the inlet warms up and begins operating normally. In a multiple inlet sampling cycle, the inlets do not have time to warm up. For temperatures below -20°C (-4°F), use only single-gas sampling.

GAS EXPANSION MODULE

The gas expansion module has one pump inlet and always operates in a pumped mode. When installed in an EXO 8 with the diffusion configuration, the gas expansion module converts the device to a pumped configuration. The gas expansion module enables EXO 8 to detect up to eight gases. For full instructions on installing the gas expansion module, refer to the [Gas Expansion Module Installation Guide](#).

To use the gas expansion module:

1. Using a tube fitted with a quick connect coupling insert, attach the tube to the pump inlet.
2. Power on EXO. The start up sequence initiates. When EXO completes the start-up sequence, the pump automatically turns on.

BUMP TESTING AND CALIBRATING

Bump testing and calibration verify that your device's gas sensors and notification indicators are functioning correctly.

NOTE: If you are bump testing or calibrating the Diffusion module in a windy environment, you must use the wind guard.

NOTE: Manual calibration is not required for the gamma sensor, as the sensor is factory calibrated.



To bump test or calibrate EXO:

1. Connect a gas cylinder to EXO's manual calibration inlet using calibration tubing.
2. From the Home screen, use the left and right buttons to scroll and select **Days To Bump Test** or **Days To Calibrate**.
3. Confirm your selection by selecting **Yes**. EXO initiates an audio/visual self test.
4. Follow the screen prompts to complete the bump test or calibration, ensuring that you select the sensors you want to test. You are prompted to bump test or calibrate until the selected sensors have been tested.

TECHNICAL SUPPORT

Visit support.blacklinesafety.com to find support and training materials for EXO, including the comprehensive [EXO 8 Technical User Manual](#).

North America (24 hours)

Toll Free: 1-877-869-7212

support@blacklinesafety.com

United Kingdom (8am-5pm GMT)

+44 1787 222684

eusupport@blacklinesafety.com

International (24 hours)

+1-403-451-0327

support@blacklinesafety.com