

# FAQ

October 9, 2025

## Can the GX-Force measure % Vol.?



**Q: Can the GX-Force measure % Vol.?**

**A:** No, the GX-Force does not include a % volume sensor option. It is primarily designed for confined space safety and industrial hygiene applications, measuring combustible gases in % LEL (Lower Explosive Limit), oxygen, and toxic gases. The GX-Force does have a Leak Check mode where combustible gases can be monitored at the PPM range utilizing its catalytic sensor.

**Q: What is the difference between % LEL and % Vol.?**

**A:** % LEL (Lower Explosive Limit) indicates the concentration of a gas relative to its flammability limit in air — useful for detecting whether the sampled atmosphere is approaching flammable levels. % volume, on the other hand, measures the absolute concentration of a gas in air, which is often required for processes like purging or inerting.

**Q: Why doesn't the GX-Force include % Vol. measurement?**

**A:** The GX-Force is optimized for portability, confined space entry, and day-to-day worker safety. Adding a % volume sensor would increase size, weight, and complexity. For % volume measurements, RKI offers other instruments better suited for that purpose.

### % Volume Capable Instruments

**Q: Which RKI instruments can measure % Vol. gases?**

**A:** Instruments like the **GX-6100** and **GX-9000** include options for Thermal Conductivity (TC) sensors, which allow for accurate % volume measurements of gases such as methane, hydrogen, or other hydrocarbons.

**Q: If I need both % LEL and % Vol. measurements, what should I use?**

**A:** For users who require both safety monitoring (% LEL) and process monitoring (% volume), the **GX-6100** or **GX-9000** are recommended. These units allow you to configure multiple sensor types, including % LEL, % volume, VOCs, toxics, and even infrared sensors.

**Q: For pipeline purging, which sensor should be used?**

**A:** When purging pipelines with 100% volume natural gas, the natural gas contains a small percentage of propane or ethane, which means a **TC (Thermal Conductivity) sensor should be used**. If an IR % volume methane sensor is used in this application, readings will be inaccurate, often too high, due to interference from the small amounts of propane and ethane commonly present in natural gas.

**Q: Is the GX-Force still suitable for confined space entry if it doesn't measure % Vol.?**

**A:** Yes. In fact, confined space entry regulations (such as OSHA) require monitoring for oxygen, combustibles in % LEL, and toxic gases like CO and H<sub>2</sub>S — all of which the GX-Force is specifically designed to measure.

#### Resources:

[GX-Force Webpage](#)

[GX-6100 Webpage](#)

[GX-9000 Webpage](#)



**GX-6100**



**GX-9000**