

SEMTECH® HI-FLOW 2



For over 50 years, Sensors, Inc. has built a reputation for gas and particulate measurement products under the SEMTECH® brand in the automotive industry.

Our fugitive methane analyzer is the latest entry in Sensors Emissions Measurement Technology (SEMTECH®) family.

Sensors' fugitive methane analyzer brings to bear our emission measurement experience into the oil and gas industry with a focus on leak detection and repair (LDAR).

"While advocates of natural gas often promote its abundance and "green" credentials, its primary component (methane) is a powerful greenhouse gas. With 2-3% of methane lost due to leakages, the accurate quantification of fugitive methane is receiving significant attention across all stakeholders, and more accurate techniques are required for climate governance." – Sensors' Dr. David Booker, CTO

Sensors, Inc. is proud to present the latest in direct quantification of leaks in the 0.0005 to 25 CFM range with accuracy better than 5%. This device uses state-of-the-art flow and gas sensing technologies that are integrated into a handheld unit for accurate measurement during established LDAR programs.

For ultimate flexibility, the SEMTECH® HI-FLOW 2 is separated into:



Sampler - Handheld device with a high-volume vacuum sampling fan and total flowrate monitor (as shown above)

Analyzer - Portable control module (which can be carried, placed on the floor, or mounted to a backpack) housing the gas sensor technologies, control electronics, and battery pack

The combination of these two components (with a variety of sampling adapters) allows the entire fugitive methane emission to be captured, diluted, and quantified accurately.

SEMTECH® HI-FLOW 2 preliminary fugitive methane analyzer performance:

SPECIFICATIONS (Preliminary)	
Total Flow Rate*	5-30 CFM (Upper limit dependent on accessories)
Measurable Leak Rate*	0.0005 to 25 CFM
Accuracy	<5% of full scale or 20% of point, whichever is higher
Power	Fan speed dependent, @ max flow, 50W
Warm up time	< 5 minutes
Storage temperature	Dry -10 to 60 °C ambient
Operating environment	-10 to 45°C ambient
Dimensions (W x D x H) Electronics and Gas Module	30 x 30 x 8.75 cm 12 x 12.0 x 3.5 in.
Dimensions (W x D x H) Handheld Unit w/o extension	61 x 19 x 12.7 cm 24 x 7.5 x 10.5 in.
Weight (Electronic and Gas Module)^	8.2 kg. 18.1 lbs.
Weight (Handheld Unit)	<2.5 kg. < 5.5 lbs.
Data transmission	Ethernet

*Inlet restrictions on the HI-FLOW 2 Handheld sampling unit will reduce the maximum achievable flow.

^Weight assuming full battery pack installed for 8+ hours of continuous operation.

By utilizing Tunable Laser Absorption Spectroscopy (TDLAS) for the accurate measurement of the fugitive methane, the dynamic range for concentrations can accurately span 4 to 5 orders of magnitude and moreover without any cross-interference from other gases present in the captured leak. Coupled with an accurate measurement of the extracted flow (methane leak and ambient air) the volume- and mass-based leak rate of the fugitive methane can be determined with high accuracy over a wide range (for example 0.0005 to 25 CFM).

Designed for intuitive and convenient operation

- Modern Wi-Fi web-based GUI interface with manual override and LED status indicators
- Up to 200 Whr battery pack for uninterrupted daily operation
- Lightweight and flexible umbilical connections between various components to access those hard-to-reach places
- Detachable shoulder strap

As we enter our final product engineering and certification processes, we welcome your valued input at info@sensors-inc.com

