Thelco Technology

A Revolution in Real-Time Air Monitoring

Introducing the

FLM 8500

The FLM 8500 is a real-time PID-based Volatile Organic Compound (VOC) monitor designed for detection of fugitive emissions, verification or supplementation of regulatory methods, and community monitoring. It is capable of being deployed in remote and harsh environments, requiring little maintenance and is able to withstand extreme temperatures.

The FLM can be combined with particulate sensors as well as several types of site monitoring software to provide turn-key solutions to end-users. The system also has plug-and-play capabilities for solar power, canister air sampling, and meteorological data monitoring.

Cost-Effective Monitoring

The FLM 8500 is priced for deployment of multiple units as compared to a single unit of similar features, allowing for a comprehensive monitoring network on a realistic budget.

Moisture Control

Superior filtration and moisture management ensures your system remains both operational and accurate during inclement weather.

Steady, Active Sampling

A steady & constant flowrate to the FLM 8500's PID improves the sensor's stability and response time.

Repair & Maintenance

Routine maintenance is rarely needed, and requires no technical expertise. Built in error detection methods aid in troubleshooting.

Wireless Communication

The FLM employs state of the art wireless communication, making data available anytime, anywhere via an online portal accessible by laptop, tablet, or smartphone.

Total VOC Monitoring

The FLM 8500 monitors for a long list of organic compounds, and can collect air samples for speciation or other analysis.

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Providing Solutions

The FLM 8500 features additional ports for ancillary equipment. A solenoid valve is included that can trigger an evacuated canister at a user-specified threshold concentration, for speciation to identify all present VOCs. The system is also designed for plug-and-play operation with several sonic 3D anemometers. Wind speed and direction will automatically be added to data packets when an anemometer is installed.

The FLM 8500 can detect a large array of VOCs. Real-time VOC speciation CANNOT be achieved with this system. For a comprehensive list of detected compounds, visit our website www.thelcotechnology.com. Depending on the compound being monitored, flow and sample collection components such as tubes and valves may need to be coated to protect from corrosion and contamination of samples. Consult with your distributor so that we may provide the components that best fit your needs.

Performance

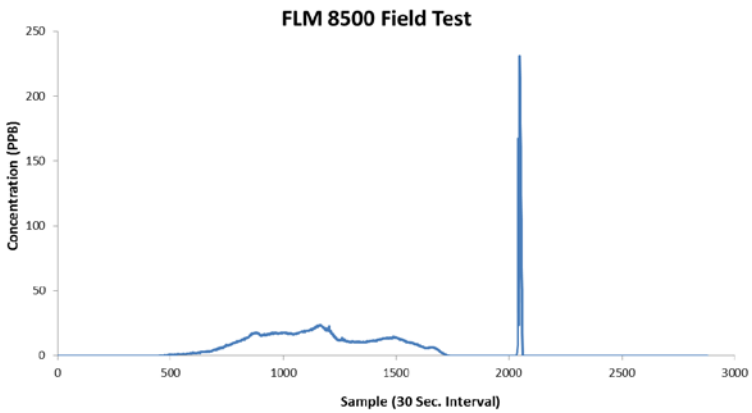
Ionization Potential (IP)	10.6 eV
Response Time	6 sec
Minimum Detectable Quantity (MDQ)	<1 PPBv Isobutylene
VOC Range	2 PPMv Isobutylene
Temperature Range	-40° - 50° C
Relative Humidity Range	0 - 99%, non-condensing
Operating Life	10 Years**

Pump/Filter

Pump Type	Diaphragm, brushless motor
Maximum Vacuum	21.5 in. Hg
Operating Voltage	12.0 VDC
Filter Type	Particulate + Water Membrane
Filtration	0.1 µm + liquid water
Maintenance Interval	6-12 months

Electrical

Supply Voltage	12 VDC / 120-240 VAC
Signal Voltage	100 - 930 mV
Power Draw	50 mW, nominal
PID Error State	See Manual



US EPA conducted field testing results. 30 second exposure to high concentration Isobutylene.

Due to the effect of geography & climate on solar panel sizing & requirements, Thelco Technology does not make any solar panel recommendations. Consult with your local distributor for sizing & selection of an appropriate solar panel.

The FLM 8500 can be operated via a standard 120-240 VAC wall outlet. If you wish to power the system this way, please consult with your distributor, and a 120-240 VAC to 12 VDC AC/DC converter can be supplied with the unit.