The FLIR Griffin G510e Gas Chromatograph Mass Spectrometer (GC/MS) is a versatile, person-portable chemical identifier. It complements presumptive techniques used during emergency missions, by enabling responders to analyze all phases of matter (liquid, solid, vapor) and by performing rapid field- confirmation of chemical hazards. The integrated heated sample probe enables hot zone operators to identify vapor-phase chemical threats within seconds when operated in Survey Mode. The G510e focuses specifically on environmental applications that require better separation and sensitivity to lighter volatile organic chemicals (VOCs). The G510e uses a specialized column and preconcentrator combination to meet this demand. The 9” on-board touchscreen delivers automated user controls and can be operated while wearing full personal protective equipment downrange. It is built with an IP65-rated enclosure for harsh environments and supports passive defense, interdiction, elimination, and consequence management missions. Long-lasting, on-board batteries ensure environmental missions are supported from beginning to end.

www.flir.com/G510
Griffin G510e

**Technology**
Gas Chromatography/Mass Spectrometry (GC/MS)

**Dimensions (L x W x H)**
13.25 x 13.25 x 15.75 in (33.7 x 33.7 x 40 cm) - includes batteries, carrier gas, and vacuum system

**Weight**
36 lbs (16.3 kg) - includes batteries, carrier gas, and vacuum system

**Optional Vehicle Mount Kit (L x W x H)**
- Road-Ready Version: 16.7 x 14 x 15.2 in (with G510e installed)
- Off-Road Version: 16.7 x 17.5 x 16.2 in (with G510e installed)

**Operating Temp / Humidity**
32 to 104°F (0 to 40°C), <95% relative humidity

**Storage Temp**
-13 to 131°F (-25 to 55°C)

**Decontamination**
Sealed for Survey Mode operation in hot-zone; IP65-rated enclosure is dust-tight and spray-resistant

**Power Supply**
100-240V 50-60Hz (220 W max); 19V (DC); 2 x #2590 @ 15V Li Ion batteries (included)

**Battery Life**
4 hrs in Survey Mode, 2 hrs in Confirmation Mode; hot swappable

**Start Up Time**
15 minutes to full operation from cold

**Calibrant**
On-board FC-43 (Perfluorotributylamine)

**Carrier Gas**
On-board helium; external helium connector, automatic switching (Hydrogen capable)

**System Interface**

**Display**
9” Multitouch Color Display
(1280x720 WVGA; 1300 nits brightness)

**Alerts**
Audible and visual (touchscreen and handheld probe)

**Software**
GSS Level 1 Touch; multiple user levels

**Communication**
2 x USB 2.0, Bluetooth 4.0, WiFi 802.11n, Ethernet via USB, integrated GPS

**Data Storage**
Internal ≥128GB SSD

**Training Requirements**
2 hours basic operation; 8 hours Operator Certification

**Sampling & Identification**

**Sample Phase**
Solid, liquid, and vapor

**Sample Introduction**
Heated Sample Probe (included standard):
- Vapor survey mode via Membrane Introduction Mass Spectrometry (MIMS) Inlet
- Vapor confirmation via Internal Dual-Bed Preconcentrator

Split/splitless injector (included standard) accepts:
- Direct liquid sampling (organic solution) via syringe
- Liquid extraction via SPME fiber or PSI-Probe w/ Gerstel Twister™*
- Headspace Sampler

**Threats**
Detects and identifies CWAs, TICs, environmental pollutants, and other chemicals

**Standard Reference Database**

**Sampling & Analysis**
Full identification in 4-15 minutes for most chemicals; identification within seconds (near real-time) when operating in Survey Mode

*optional accessories

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