FLIR GRIFFIN™ G465

Mobile GC/MS with Real-Time Vapor Survey Mode

The FLIR Griffin G465 is the most flexible transportable GC/MS (Gas Chromatograph/Mass Spectrometer) system available for mobile and forward-deployed labs, reconnaissance vehicles, and other portable platforms. Like the Griffin G460, the G465 features an integrated split/splitless injector and universal sampling port. The addition of a heated sampling line enables survey mode for near real-time vapor threat identification. Industry-leading chemical matching techniques provide high-confidence results in complex environments and eliminate data interpretation in the field. Intuitive user controls, on-screen guidance, and simple data presentation expedite decision making for field operators. The Griffin G465 provides the ease of use and intelligence needed to perform real-time countermeasures that protect public safety.

Vehicle mount with integrated real-time vapor sampling

Universal Sampling Port with quick-connect Griffin X-Sorber™ portable air sampler

BEST-IN-CLASS CHEMICAL IDENTIFICATION AND BETTER INFORMED DECISION-MAKING

Guesswork is eliminated with high-confidence chemical matching in complex environments

- Method selection tool guides user through operation
- Automated chemical matching eliminates data interpretation in the field
- Color-coded, go/no-go alarms expedite on-site decision-making

THE MOST FLEXIBLE GC/MS WITH REAL-TIME VAPOR SURVEY MODE

Always mission-ready with unmatched sampling options for vapor, liquid, and solid samples

- Integrated heated sampling line for survey mode missions
- Integrated split/splitless injector accepts traditional syringe, SPME fiber, headspace, and PSI-Probe injections
- Integrated Universal Sampling Port provides continuous air monitoring capability and quick-connect fitting for portable plug-and-play samplers

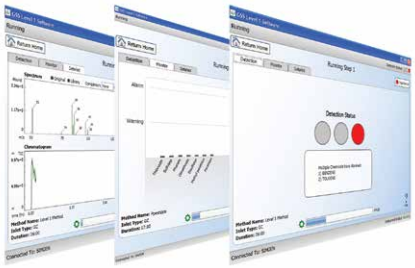
RUGGED, VEHICLE-MOUNTABLE PLATFORM

GC/MS operates while in motion to expedite mission completion

- MIL-STD 810G design resists shock and vibration
- Internal active vacuum pumping maximizes system uptime
- Integrated shock isolation system minimizes footprint on a vehicle

Specifications

	Griffin G465
TECHNOLOGY	
Technology	GC/MS; fully integrated low thermal mass gas chromatograph (LTM-GC) and MS/MS-capable ion trap mass analyzer
Mass Range / Scan Rate	35-425 m/z; up to 10,000 m/z per second @ 20 points per m/z
Ionization Type	Internal electron ionization (EI)
Detector	Conversion dynode electron multiplier
LTM-GC Column	Standard VB-5MS (15 m x .18 mm x .18 µm); others available; programmable 40 to 300°C
Calibrant	Onboard FC-43 (Perfluorotributylamine)
Carrier Gas	Connection for external gas source (choice of He or H_2); available from many vendors; H_2 generator available
SAMPLING & ANALYSIS	
Sample Introduction	Split/splitless injector accepts: - Direct syringe injection (1 syringe included) - SPME fiber (optional) - Manual headspace sampler (optional) - Autosampler (optional) - PSI-Probe™ thermal separation via TAG™ (optional) - PSI-Probe thermal separation via GERSTEL-Twister® (optional) Universal Sampling Port with standard Tenax TA and Carboxen 1017 dual bed preconcentration tubes accepts: - Direct air intake onto precon tubes (adaptor included) - Griffin Purge and Trap for water analysis (optional) - Griffin X-Sorber handheld vapor sampler (optional) Membrane Introduction Mass Spectrometry (MIMS) Inlet: - Direct air intake for near real-time air monitoring capability
Sample Phase	Solid, liquid, and vapor
Threats	Detects and identifies explosives, narcotics, CWAs, TICs, environmental pollutants, and other chemicals
Sampling & Analysis	Full identification in 4-15 mins for most chemicals, near real-time in survey mode
SYSTEM INTERFACE	
Display & Alerts	Full automation by connection with computer
Communication	Ethernet connection TCP/IP; remote operation and diagnostics
Data Storage	Data automatically stored on supplied laptop (500 GB)
Simplified User Interface	Griffin System Software (GSS); GriffinLib, NIST and AMDIS mass spectral libraries included; capable of user-defined library
Training Requirements	1-2 days depending on level of training desired; Operator, Developer, and Full System certifications available
POWER	
Input Voltage	100–240 VAC; 24 VDC (+/- 5%, 25 A, 1000 W)
Cold Start Time	<30 mins (includes automatic tuning/calibration)
ENVIRONMENTAL	
Operating Temp / Humidity	41 to 104°F (5 to 40°C); <85% relative humidity
Storage Temp	-13 to 131°F (-25 to 55°C)
PHYSICAL FEATURES	
Dimensions (L x W x H)	19.2 x 19.2 x 21.1 in (48.8 x 48.8 x 53.6 cm)
Weight	99.5 lbs (45.0 kg)
Enclosure & Protection	Rugged, internal shock mounting system; integrated vacuum system contains mini turbomolecular pump & quad diaphragm; no external shock table or vacuum system required



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