

GRIFFIN 824

Trace Detection Mass Spectrometer



OVERVIEW

The Griffin™ 824 is the first desktop mass spectrometer designed specifically for explosives and narcotics trace detection. Mass Spectrometry (MS) is a widely trusted technique used for definitive chemical analysis. Its inherent ability to provide selective chemical identification in complex operational environments is unmatched by existing Ion Mobility Spectrometry (IMS) technology. Today's high consequence applications require high confidence results that only mass spectrometry can provide. The Griffin 824 mass spectrometer offers ease of adoption across a broad range of existing and emerging trace detection applications. Selectable detection modes allow customers to tailor the system to their operations using explosives only, narcotics only, or explosives-narcotics simultaneous mode.

Operators collect trace residue by wiping personal belongings, skin, parcels/cargo, and other surfaces with a sample ticket. The sample ticket is inserted into the Griffin 824 sample inlet where analysis is performed via MS in less than 10 seconds. Simple audio and visual alarms via GSS Touch™ alert the operator when a threat is present, expediting on-site decision making. Alarm reports are saved on the internal hard drive and can also be printed via the built in printer.

The Griffin 824 was designed to maximize system operational time by incorporating an open loop that does not recycle air inside the system. No cleaners are required, minimizing consumable costs and allowing rapid clear down after a true alarm.

BENEFITS

- High confidence alarms using mass spectrometry
- Consistent results in complex operational environments
- Selectable detection modes to fit high-consequence customer applications
- Rapid analysis times that meet industry standards
- Simplified color touch screen interface allows for quick user commands
- Built-in printer and internal data storage
- Maximizes system operational time with limited maintenance requirements
- Rapid clear down (seconds to minutes) after alarm

APPLICATIONS

- CHECKPOINT SCREENING
- CUSTOMS AND BORDER CONTROL
- CRITICAL INFRASTRUCTURE
- MILITARY INSTALLATIONS
- FORENSICS INVESTIGATIONS
- LAW ENFORCEMENT
- PRIVATE EVENT AND VENUE SECURITY
- CORRECTIONAL FACILITIES



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SPECIFICATIONS

Technology	Mass Spectrometry (MS)
Mass Analyzer	Ion trap
Sample Acquisition	Surface wipe
Detection Modes	Explosives only, Narcotics only, Explosives/Narcotics Simultaneous
Explosives Detected	A broad range of military, commercial, and home-made explosives (to include peroxide-based explosives) that meet current threats
Narcotics Detected	A broad range of commonly abused narcotics and controlled substances
Analysis Time	10 sec
Sensitivity	Nanogram level
Alarm Notification	Audible and Visual
Data Transfer Capability	Two USB ports, Ethernet port
Printer	On-board thermal printer
System Dimensions	21" L x 14.5" W x 20.7" H (53.3 cm x 36.8 cm x 52.6 cm) with display 21" L x 14.5" W x 10.8" H (53.3 cm x 36.8 cm x 27.4 cm) w/o display
System Weight	50 lbs (22.7 kg)
Display	10.4" XGA-TFT LCD with IR Touch, 1024 x 768 pixels, 1000 nits brightness
User Interface	GSS Touch "
Ionization Source	Non-radioactive positive ionization source
Warm-up Time (Cold Start)	<30 min
Operating temp	0 to 40°C (32 to 104°F) 95% humidity
Power	110-240 VAC, 50/60 Hz
Packaging	Custom fit protective transport case with handle and wheels
Consumable and Routine Maintenance Items	Sample Tickets, Thermal Printer Paper Rolls, Verification Pen, Ionization Filament

