



DUOSCAN™

EXPLOSIVES AND NARCOTICS TRACE & VAPOR DETECTOR



DUOSCAN™ is a ruggedized explosives, improvised materials, narcotics and contraband detector capable of trace particle and vapor detection. Its award-winning and patented HF-QCM nanotechnology sensors provide the latest threat detection and identification capabilities including military, plastic, peroxide, and nitrate explosives in addition to narcotics as well as fentanyl and synthetic opioids.

DUOSCAN™ enables on-site decision making in seconds and rapid clear-down providing operators more time to sample and less time waiting. With thousands of units deployed in over 42 countries, DUOSCAN™ is the most trusted explosives and narcotics trace and vapor detector for countering terrorist activities and drug-trafficking and smuggling activities.



Feature Highlights

- HF-QCM sensors
- Lightweight (850 gr. with battery)
- No radioactive source
- High-throughput sampling
- Fast warm-up time
- Self-calibration
- Fast decontamination
- Easy-to-operate
- Low cost-of-ownership



Market Applications

- Customs & Border Control
- Police & Law Enforcement
- Prisons & Correction Centers
- Sea Ports & Cargo
- Aviation Security & Air Cargo
- Rail & Mass Transit
- Critical Infrastructures
- EOD & Military Operations
- Hotels & Malls



User-Friendly Interface

DUOSCAN's onboard processor automatically handles all data logging, including time, date, and sample analysis for each alarm. A complete history of saved data and alarm files can be viewed, analyzed, downloaded, and printed at any time.

Technical Specifications

DUOSCAN™	
Technology	High-Frequency Quartz Crystal Microbalance Nanotechnology Sensors (HF-QCM) No gas carrier. No radioactive source.
Sample Collection	
Sample Collection Mode	Trace Particle Mode; Vapor Sampling Mode; Vapor Sniffing Mode
Trace Particles Mode	Sample collection and surface swipe of trace particles via cost-effective sampling swabs
Vapor Sampling Mode	Vapor sample collection with a portable and battery-operated Vapor Sampler; supplied with two types of sampling probes and a DC charger
Vapor Sniffing Mode	Direct vapor sniffing via a vapor sniffing nozzle
Detection Capabilities	
Explosives	<ul style="list-style-type: none"> • Military and plastic explosives, including: TNT, Tetryl, RDX, C4, PETN, Semtex, HMX, Detasheet, Nitroglycerine, and others* • Peroxide-based explosives, including: TATP, HMTD, and others • Nitrate-based explosives, including: Ammonium Nitrate, Urea Nitrate, and others • Propellants and Taggants, including: Black and Smokeless Powder, EGDN, and others** <p>*Additional explosives as per expandable threat library ** Programmed threat substances depend on detector version and regulatory authority</p>
Narcotics	<ul style="list-style-type: none"> • Heroin, Cocaine, Amphetamine, Methamphetamine, Ketamine, MDA, THC, LSD, Ecstasy, and others* • Synthetic Opioids: Fentanyl, Carfentanyl, W-18, and others** <p>* Additional narcotics as per expandable threat library ** Programmed threat substances depend on detector version and regulatory authority</p>
Sensitivity	<p>* Particles: low nanogram (ng) range * Vapors: low parts of billion (ppb) range</p>
False Alarm Rate	Less than 2%
Analysis Time	7-15 seconds or less
System Interface	
Data Display	3.5" high-resolution, anti-reflective, color touch screen
Printer	Optional USB printer
Alarm Method	Configurable audio alarm and alarm resolution
Software Features	
Warm-Up Time	Less than 2 minutes
Alarm Type	Audio and visual with substance identification
Multi-Language Support	English, French, Spanish, Italian, Portuguese, Russian, Chinese, Korean, Japanese, Arabic, and more
Data Storage	Unlimited data logging, including date, time, analysis results and system status
Data Transfer	Micro USB 2.0. Optional Bluetooth and/or Wi-Fi
Power	
Input Voltage	100-240V AC, 50-60Hz
Battery	12-V rechargeable Lithium-Ion battery with 6 to 8 hours of field operations; hot swappable for extended operating time
Environmental	
Operating Humidity	Less than 95% non-condensing
Operating Temperature	-4°F to +131°F (-20°C to + 55°C)
Operating Altitude	Up to 15,000 ft (4572 m)
Physical Features	
Weight	1.87 lbs (850 g), battery included
Dimensions	(L x W x H): 7.78" x 3.50" x 2.78" (19.75 x 8.89 x 7.05 cm)
Enclosure & Protection	
Carrying Vest	Supplied with a black breathable vest providing secure attachments for the detector, the Vapor Sampler, and sampling probes.
Case	Supplied with a ruggedized, MILSPEC case
Safety	No hazardous parts and tamper-proof casing
Certification	
Product	CE Mark, EMC and FCC certification
Manufacturing Standards	ISO 9001:2015 manufacturing standards

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