



LDS

LASER DETECT SYSTEMS OF AMERICA



i-SCAN Handheld IMS Explosives, Narcotics & Toxics Trace & Vapors Detector

LDS's I-SCAN is a state-of-the-art hand-held sniffer designed to detect explosives, narcotics, toxic and other hazardous substances in trace particle and vapor form.

The I-SCAN detection process targets the air surrounding concealed objects, bags, and various surfaces. The I-SCAN is also capable of detecting hazardous traces on human hands and clothing.



i-SCAN

Key Features

Highly Operative:

Designed to optimize security and flow

- Vapor and trace detection
- "Hot swap" battery mode
- Fast cleaning
- Intuitive calibration process
- Long field operational time

Simultaneous Detection of Drugs and Explosives:

Detection of positive and negative ions at the same time

- Wide range database of drugs, explosives, and chemical warfare agents
- Precursors & homemade explosives
- Peroxide based explosives

Cost Effective Consumables:

Short logistic tail, based mainly on Commercial-Of-The-Shelf (COTS) consumables

- Commercial aluminum foil swabs
- Low consumption of filter and sensitivity testers
- No need for gas carrier

Non-radioactive Ionization Source:

Ionization source based on a "Corona" chamber power source

- Environmentally friendly
- Simple to store and handle

i-SCAN Handheld IMS Explosives, Narcotics & Toxics Trace & Vapors Detector LDS 3500-i



Technical Specification

Technology	Ion Mobility Spectrometry (IMS)
Sample collection	Trace particle and vapor
Detector overall dimensions	110 x 162 x 410 mm
Weight	<3.7 kg
Measurement range of normalized (reduced) mobility of analyzed ions	0.5 – 3.0 cm ² V ⁻¹ s ⁻¹
Detection range of low-volatile organic substances based on 2,4,6 -Trinitrotoluene (TNT)	1.0 x 10 ⁻¹¹ - 2.0x10 ⁻⁷ g
Threshold for detecting low-volatile organic substances based on 2,4,6 -Trinitrotoluene (TNT)	
- particulate matter	1.0 x 10 ⁻¹¹ g
- based on vapors	1.0 x 10 ⁻¹⁴ g/cm ³
Operating mode start-up time	<10 min
Measurement time	< 5 s
False response probability	<1 %

Demonstration movie in [YouTube](#) channel 'Laser Detect Systems'

