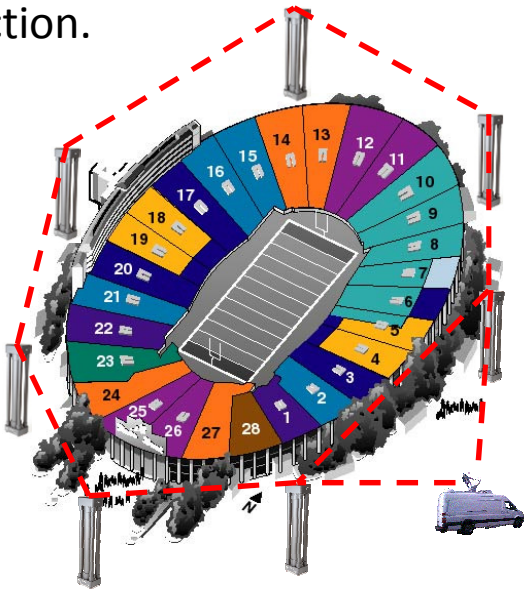
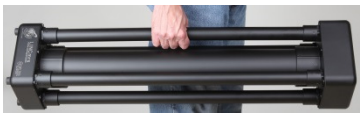
LINCmrs

Brought to you by FLIR and Safe Environment Engineering the LINC Modular Radiological System (LINCmrs)is versatile wireless transportable radiological isotope detector easily configured for different types of monitoring requirements. Examples include mobile vehicle systems, portal applications, fixed facility and grouped for events requiring increased sensitivity detection.



Event
Mesh Network Configured

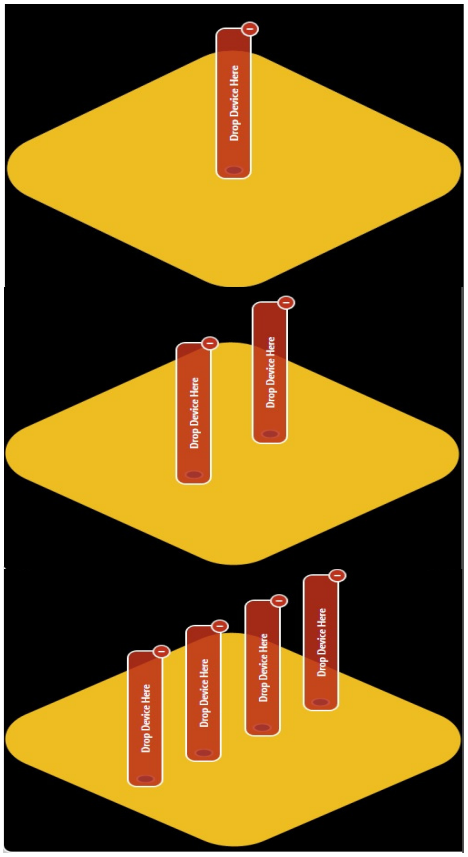
6-Pack



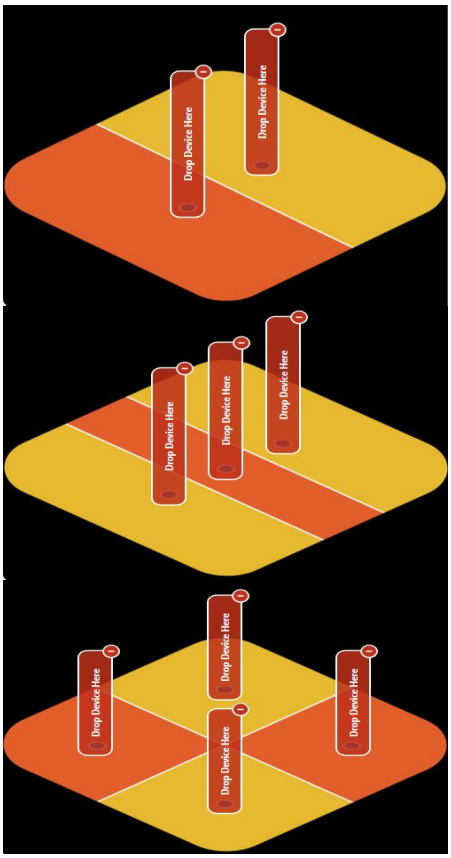
Transportable

4-Pack

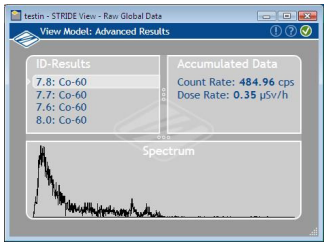
LINCmrs Configuration



LINCmrs detection units can be configured to meet the needs of the mission. The two broad categories configuration include tracking and combining. Tracking is used to determine the proximity of a source to a detection unit while combining increases the system's sensitivity.

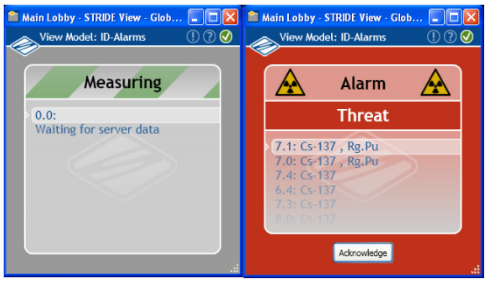


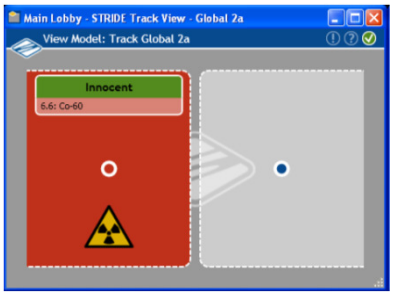
Identification and Tracking



The raw global data window is comprised of the current spectrum, count and dose rates and a list of identified nuclides.

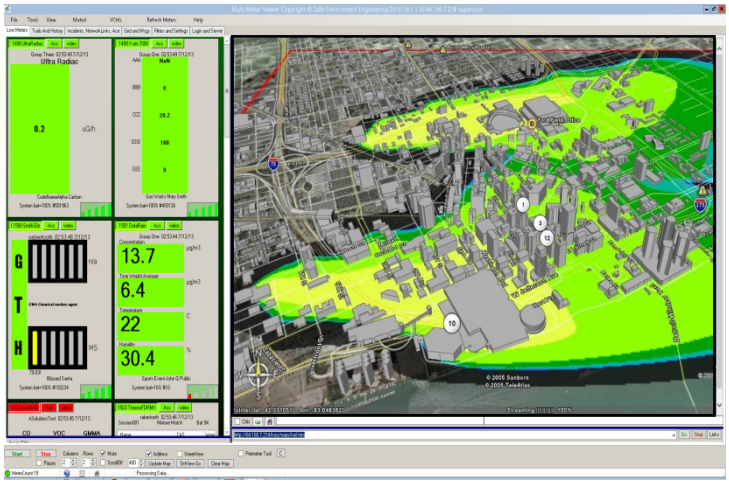
The identification window shows a summary of identified nuclides. In case of alarms, the display changes color and displays the category of the alarm





The tracking window shows the position of a detected source

Life•line MultiMeterViewer



Life•line MultiMeterViewer (MMV) provides an overview of multiple LINCmrs and other detection instruments in a real time display. The software functions as an instant command center, displaying data and providing both audible and visual alarms. A geographical information system (GIS) interface provides instrument information including tracking and survey information as map layers. Web Interfacing provides product info, references, alarm settings, guidance documents and more. The CT-Analyst® plume modeling module provides accurate, instantaneous, 3D predictions of chemical, biological, & radiological (CBR) agent transport both in urban and site specific environments.

Specifications

General
Size: 7.3" x 5.8" x33" (18.5 x 14.7 x 83.8 cm)
Weight:18lbs
Antenna: Omni Directional, 2.4GHz, 9dBi, N Male
Antenna Connector: Type N
Power:
AC 100-240V 50/60Hz 0.8A
DC 14V 2.0A
Lights: Power, WLAN, GPS, Data
Connector: MIL-DLT-26482 Miniature Cylindrical Power

Sensor
Gamma Detector: NaI(TI) 2 in x 3 in
Energy Range: 20 keV to 3 MeV
Energy Resolution: < 8% FWHM @ 662 keV
Neutron Detector: He^3 gas filled ionization
Neutron detector with 10 mm
Thick PE moderator (optional)
He^3 Detector: .075 in x 3 in, 8 atm pressure
Neutron Sensitivity: Per IAE specification for border
Monitoring equipment
Neutron Energy: 0.025 eV to 15 MeV
High Doserate: Sealed GM detector (opt)
Operating Temperature: +5˚F to +122˚F
(-15 ˚C to +50˚ V)
Storage Temperature: -40˚ F to + 203˚ F
(-40˚ C to 95˚ C)
Operating Humidity: 10 – 80%, non-condensing
Data Throughput: >100k cps
Data Input Rate: 300k cps
Corrections: Spectrum linearization
Spectrum: 1024 channels
24 bits per channel
Calibration Verification: Internal K^{40}(KCI) source
Doserate Range: 0 to 100µSv/h
(0 to 10 mrem/h)
Doserate Resolution: 10 nSv/h (1 µrem/h)
Doserate Energy: 50 keV to 1.5 MeV
Stabilization: Peak analyzing K^{40} or LED
Power: DC internal chargeable battery
Dimensions: 16.75 in x 2.6 in
(425 x 65 mm), NaI(TI) only
Weight: 4 lbs (1.8 kg)
Material: Aluminum
Protection Rating: IP 54

MESH RADIO / Access Point
Radio Characteristics
Radio: IEEE 802.11b/b, 2.4 GHz
Antenna Connector: Type N
Frequency: 2.402-2.472 GHz / U.S. (varies with country)
Modulation:
DSSS: DBPSK @ 1 Mbps, DQPSK @ 2 Mbps, CCK @ 5.5 and 11 Mbps OFDM @ 6, 12, 24, 36, 48 and 54 Mbps
Max. RF Transmit Power: 25 dBm +/- 1 dB
Receiver Sensitivity:

1 Mbps: -97 dBm +/1 1dB
6 Mbps: -94 dBm +/1 1dB
24 Mbps: -86 dBm +/1 1dB
2 Mbps: -96 dBm +/1 1dB
9 Mbps: -93 dBm +/1 1dB
36 Mbps: -83 dBm +/1 1dB
5.5 Mbps: -95 dBm +/1 1dB
12 Mbps: -91 dBm +/1 1dB
48 Mbps: -77 dBm +/1 1dB
11 Mbps: -92 dBm +/1 1dB
18 Mbps: -90 dBm +/1 1dB
54 Mbps: -74 dBm +/1 1dB

Network:
VLAN and QoS Support; Access Point; Bridge; Gateway; DHCP; NAT and Port Forwarding; Automatic Protocol Tunneling (APT).
Security:
Supports IEEE 802.11i: AES-CCMP and TKIP encryption, WPA-Personal/Enterprise, WPA2-Personal/Enterprise, 802.1x; 64/128-bit WEP; AES-256 encryption and HMAC-SHA1 authentication between Gateways; Access Control Lists; Compatible with Layer-2 and Layer-3 client/server and peer-to-peer security solutions; Compatible with Harris SecNet 54® encryption.
Certification: FCC Part 15 (USA), ICES-003 and RSS-210 (Canada)
Power:
Input Voltage: 10.5-25 VDC
Power: 3 W @ 24 VDC typical (4.5 W @ 24 VDC peak)
Temperature: Operating -20˚C to 70˚C (-4˚F to 158˚F)
Humidity: 5-95% (condensing)

Contact

Safe Environment Engineering
28474 Westinghouse Place
Valencia, CA 91355
(661) 295-5500 • (661) 294-9246 Fax
www.safeenv.com • info@safeenv.com