# LINCmrs

Manufactured by Safe Environment Engineering and powered by FLIR the LINC Mobile Radiological System (LINCmrs)is versatile self-contained wireless multi-mission 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.
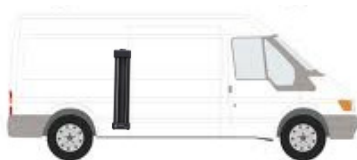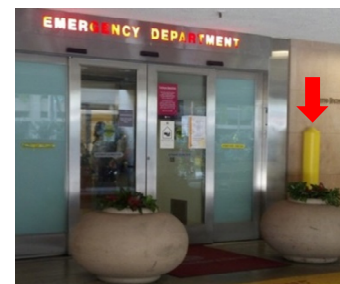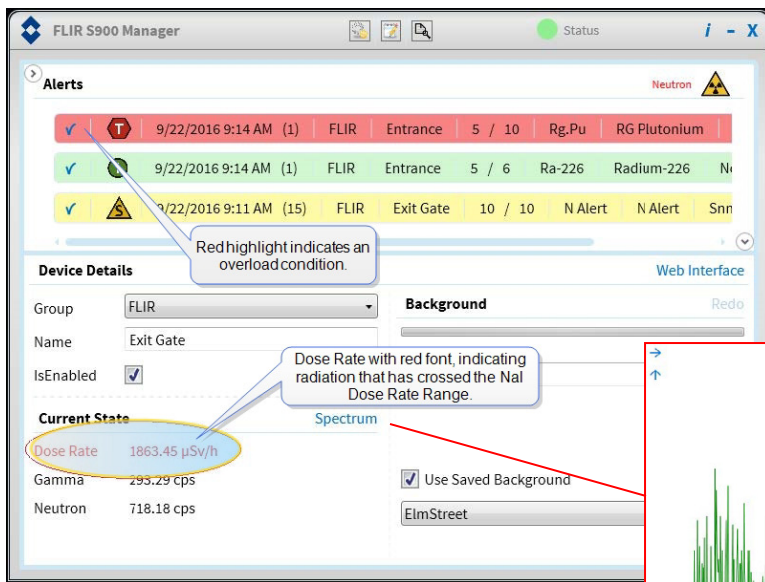
Events

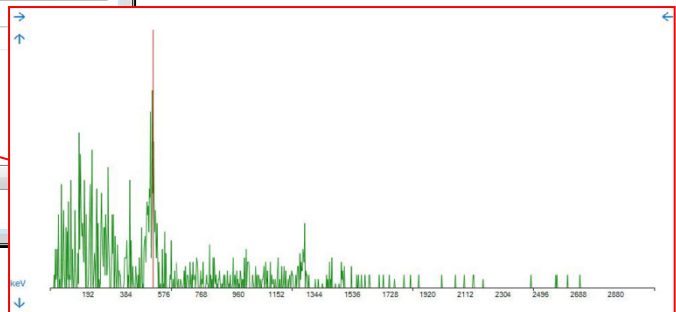**Mobile**
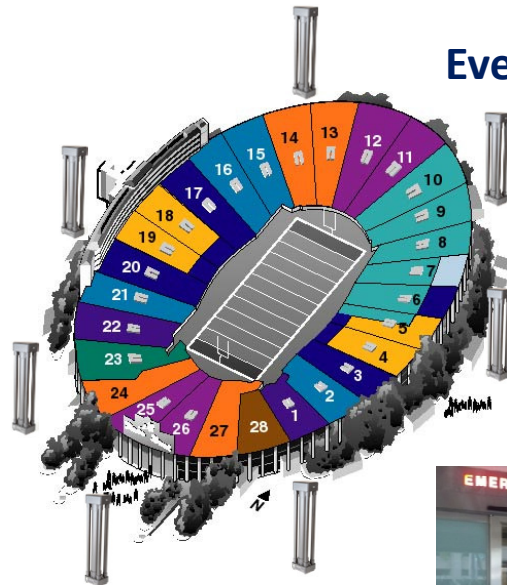
Transportable

Fixed

Integrated Software Tools

Identification and Spectra Acquisition - Integrated FLIR S900 software provides local access for isotope identification, alarm notifications and live/historical spectral analysis.

Configuration - Users can custom configure isotope detection alarm and warning states to meet their unique facility or incident requirements

Wireless Smartphone remote control providing simple single click operation for multi LINCmrs control.

Integrated Monitoring Application – Monitors all aspects of the LINCmrs. This Meter Application monitors the detector's readings, internal battery level, LTE signal strength and quality, computer temperature /memory use and GPS location information. The application provides warning and alarms in the event of a low battery, poor coverage and/or excessive heat conditions and can report radiological data to RadResponder

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
Antennas: Omni Directional, 2.4GHz, 5dBi, SMA
Dipole Blade, 698-2700MHz, 2/3dBi, SMA
GPS, 1575MHz, -0.5dBi, SMA
Power: Battery Li-ion 15 Hour Operation
AC 100-240V 50/60Hz 0.8A
DC 14V 2.0A
Lights: None – Remote Smartphone Operation
Connector: MIL-DLT-26482 Power, Bluetooth

Detectors
Gamma NaI: 2 in (50.8 mm) 3 in (76.2 mm)
Gamma (High Dose Rate): Energy Compensated Geiger-Müller Detector
Neutron ³He Proportional Counter Tube: 19 mm (0.75 in) 106.7 mm (4.20 in); net: 18 mm (0.71 in) 75.7 mm (2.98 in); 8 atm (8.106 bar); surrounded by polyethelene moderator

Performance
Energy Resolution: Typically ≤ 8 % FWHM at 662 keV at 20 °C (68 °F) ambient temperature
Energy Range (Gamma Spectrum): 20 keV – 3 MeV
Throughput: > 100 kcps
Input Count Rate: 300 kcps
Auto Calibration: Yes
Corrections: Deadtime corrected realtime
Spectrum Linearization: Real-time gamma spectrum linearization
Dose Rate Range: 0.01 µSv/h – 1 Sv/h
Dose Rate Resolution: 10 nSv/h
Dose Rate Accuracy: 30 % (50 keV – 1500 keV)
Energy Range (Dose Rate): 50 keV – 1500 keV
Neutron Sensitivity: 11 cps/nv 20%, thermal neutrons
Stabilization: LED and 40K
Measuring Modes: PHA; MPHA

Environmental
Ambient/Operating Temperature: -15 °C – +50 °C (+5 °F – +122 °F)
Storage Temperature: -30 °C – +70 °C (-22 °F – +158 °F)
Humidity: 10 % – 80 %; Non Condensing
Protection Rating: IP 54

Cellular Router - Cradlepoint

LTE: Embedded LTE-Advanced 600 Mbps Modem & DC-HSPA+ Fallback

WiFi: Dual-band, dual-concurrent WiFi; 802.11 a/b/g/n/ac wave 2

Carriers: All North American, European & Asia Pacific, Saudi Arabia

Ethernet Ports: 2 LAN/WAN switchable 10/100/1000

GPS/GNSS: TAIP & NMEA 0183 V3.0

Cloud Managed: NetCloud Manager

Integrated Computer
Processor:
Intel Cherry Trail Z8350 Quad Core
Base Frequency: 1.44GHz (1.92GHz Burst Frequency)
Operating System: Windows 10 IoT Enterprise
RAM: 4GB DDR3L
Storage Capacity: 64GB
GPU: Intel HD, 12 EUs @200-500Mhz, single-channel memory
USB: 3.0 x 1, USB 2.0 x 2
Connectivity:
Wi-Fi 802.11n 2.4G
Bluetooth 4.0
Integrated Arduino Co-processor: ATmega32u4 (Leonardo)
Video output: HDMI and MIPI-DSI
Onboard touch panel overlay connector
Supports 100Mbps Ethernet
Intel Processor GPIO x 6
ATmega Processor GPIO x 20
Gravity Interface Connectors x 6

Contact

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