

CR-Mobile

Cargo Radiation Detection Solution



Security & Detection Systems

Bring high-resolution, high-throughput container scanning to storage and transshipment yards, while keeping costs down and efficiency up

The CR-Mobile is a radiation detection solution that provides mobile high-resolution, high-throughput radiation scanning of cargo containers.

CR-Mobile provides port operators with the ability to scan 100 percent of containers via the stack. The CR-Mobile easily integrates into port operations by rapidly and accurately scanning vertical container stacks using the highest radiation detection performance technology with very low false alarm rate (<1/1,000 scans). Medical, industrial and special nuclear materials (SNM) are identified in cargo containers while differentiating from benign normally occurring radioactive materials (NORM) present in the stream of commerce.

The radiation detection and isotopic content identification functions are performed as the CR-Mobile passes over the containers. Detectors and optical character recognition

(OCR) sensors are placed at each container level to allow scanning of vertical stacks as rapidly as single container level.

Two radiation detection panel (RDP) types are used: NaI/non-He-3 detectors for primary scans and HPGe/non-He-3 detectors for secondary scans. State of health (SOH) information and scan results are acquired and processed by the onboard communications system and transmitted wirelessly and securely to a remote command and control station (CCS) for immediate action if necessary.

When dispatched, the operator drives the CR-Mobile to a container stack for scanning. The OCR and GPS system provides CCS automatic confirmation when specified scans are completed.



SPECIFICATIONS

Standard Features

- High scanning throughput in primary mode > 2,000 TEU/day
- Easily integrates into existing port operations
- Best-in class Gamma-neutron monitors meet NNSA Megaports Standards (including targeted SNM detection levels)
- False alarm rate less than 1 per 1,000 scans
- NNSA-approved and tested Threat Assessment Algorithm (TAA) with NORM masking adjudication
- Robust and fielded StradSCAN™ data fusion of radiation, container number and position
- ICD 1 and 2 data output per ANSI N42.42
- Container number reader (OCR)
- Automatic data logging with wide range of users - configurable interfaces and displays
- Wireless, encrypted connection to command and control station
- Remote state-of-health monitoring, diagnosis and restart capability
- Rugged design proven against severe maritime environments
- Ergonomic, comfortable operator cabin

Optional Features

- Use of NORM-rejection PVT detection systems for primary scanning
- Container surface contamination detection capable
- Manifest data integration
- Design and Installation of port-specific command and control station
- Cold or warm climate packages for front or side mounted cab
- Automatic collision avoidance systems
- CR-Mobile detection package available as “bolt-on” kit to any existing, modified straddle carrier with power plant on top-deck

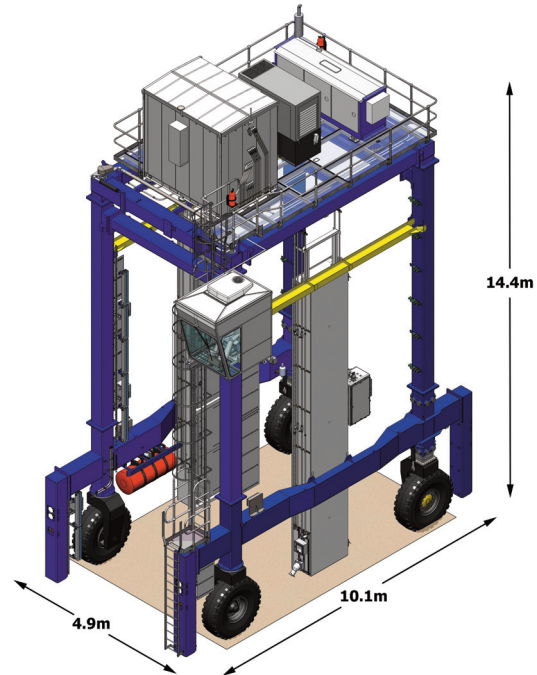
Safety

- Meets applicable U.S. and European regulatory safety requirements for radiation scanning systems
- Safety interlocks for scanning speeds, source positions and emergency stops
- Visual and audible warning systems for operator
- Designed for compliance with UL and CE requirements



Comprehensive Solutions

L-3's Cargo Solutions provide both configurable products and customized solutions that address unique, cutting edge requirements. The CR-Mobile is part of a family of radiation detection platforms that serve the full range of cargo environments and applications.



Dimensions are provided for a three-high CR-Mobile system but can be adapted to specific application.



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