Product Data Sheet: VS-SSDV Dual-View NII Mobile X-ray Inspection Van

Manufacturer/Integrator: VectorScan Mobility Solutions, LLC

Configuration shown is representative and may be tailored to mission needs while maintaining RFI constraints.

1. System Overview

- Small-scale dual-view NII (top + side) X-ray imaging integrated into a mobile platform for relocatable inspection operations.
- Designed around a 1 m x 1 m tunnel aperture with fold-down conveyor sections for deployment while maintaining a constrained vehicle footprint.
- Operator console with dual displays and optional network connectivity for reporting and remote support.

2. Key Technical Specifications

Specification	Value
Vehicle dimensions (over-the-road)	L 248 in; W 96 in; H 97.5 in
Vehicle dimensions (deployed)	L 248 in; W 172 in; H 97.5 in
GVWR	11,000 lb
Tunnel aperture	1016 mm (W) x 1016 mm (H)
Conveyor belt width	1000 mm
Conveyor total length	3600 mm
Conveyor height from ground	850-950 (adjustable; nominal 900) mm
Max object width	1000 mm
Max object weight	200 kg (distributed load)
Imaging views	Dual view (top + side) in one pass
Image resolution	>= 36 AWG (meets requirement); typical 38 AWG
Penetration	>= 24 mm steel equivalent (meets requirement); typical 28-30 mm
Radiation leakage	< 0.5 mR/hr at 2 in from cabinet surface (verified by survey during acceptance)
Power (shore)	208 VAC, 1-phase, 60 Hz, 40 A (max) or 120/240 VAC

	split-phase, 50 A
Power (generator option)	12 kW diesel generator with automatic transfer switch (ATS)
Operating temperature	0 to 40 C

3. Mobility + Deployment Concept

- Transit: vehicle remains within over-the-road envelope for urban and port-of-entry mobility.
- Deployment: fold-down conveyor sections and standoff controls provide operational flow while keeping deployed width within constraint.
- Stability: wheel chocks, leveling, and defined set-up checklist before enabling X-ray generation.

4. Safety Features (Summary)

- Emergency stop (E-stop) circuit at operator console and conveyor ends; de-energizes X-ray and conveyor motion.
- Access-panel interlocks prevent X-ray generation when service panels are open.
- Warning beacons and signage; defined operating area with standoff markings.
- Radiation survey verification performed during acceptance and after major service events.

5. Service + Sustainment (Summary)

- LRU-based maintenance model for key scanner and conveyor components.
- Planned maintenance schedule (monthly/quarterly/annual) with documented checklists.
- Remote support and SLA tiers available for fleet operations.