

# RADIATION BORE-SCOPE FOR CARGO CONTAINERS & TRUCKS

## Model # RAD-1-CANSCAN

### FEATURES:

- SIMULTANEOUS NON DESTRUCTIVE VISUAL & RADIATION DATA
- RAD1CANSCAN DOES NOT EMIT GAMMA OR X-RAYS. NO NEED TO EVACUATE AREA DURING SCAN
- GIVES DETAILED INTERNAL INFORMATION
- DETECTS - ALL RADIOACTIVE MATERIALS, SOURCES & CONTAMINATION
- MORE SENSITIVE and BETTER RESOLUTION THAN OTHER STYLES
- CREATES LINEAR MAP OF INTERIOR
- PIN-POINTS LOCATION OF RADIOACTIVE CONTRABAND
- REQUIRES ACCESS ONLY TO THE ONE SIDE OF CONTAINER DOOR
- DETECTOR SLIDES INTO AIR SPACE

### BACKGROUND:

Large numbers of loaded shipping containers pass through and are stored at seaports around the world. We need to know which containers, if any, carry Radioactive Materials. Entering and doing a manual search of large numbers of containers is not feasible for many reasons. The **RAD-1CANSCAN** gives highly detailed interior information. No need to unload cargo. Unlike the highly successful x-ray and gamma scanners, the **RAD-1CANSCAN** only requires access to the door side of each container, so it can even be used to scan stacked containers.

**DESCRIPTION:** The **RAD-1CANSCAN** has three main elements.

1. The 3" dia x 40' long slide-tube, (76mm dia x 12m) ST-A or ST-B.
2. Camera/scintillitor deployment reel.
3. High resolution color video and radiation display console.

The lighter weight slide-tube (ST-A) can be inserted into the container so it rests on the top of the cargo. Heavier, longer, and rigid (ST-B) slide tube is self supporting and can be fastened to deployment platform.

### DEPLOYMENT METHOD

1. On an inspection truck which backs up to the container door so slide-tube can be inserted.
2. On a crane which slides in the slide-tube and detector



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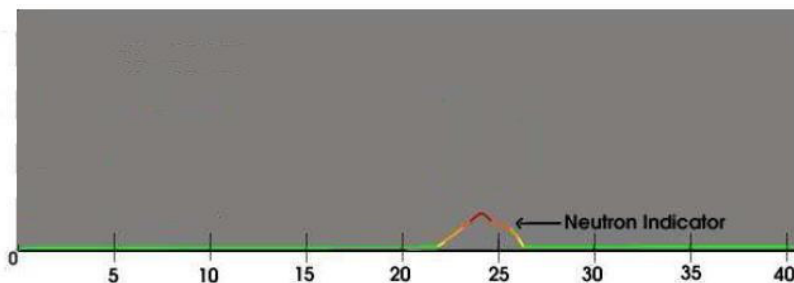
SPECIFICATIONS	SLIDE-TUBE (ST-A)	CAMERA REEL	CONSOLE
OVERALL DIMENSIONS	40' X 3" DIA	32' X 14' X 30"	20' X 20 X 18"
WEIGHT	50 LBS	23 LBS	26 LBS

### DETECTORS

RAD TYPE	SCINTILLATORS	RAD-1 CANSCAN	RAD-1N CANSCAN
Gamma and High Energy Beta	2" dia x 1" NaI(Tl) Scintillator	YES	YES
Visual	Color Camera with LED Lights	YES	YES
Neutron	He-3 tube	-----	YES

Electronics:  
Location Data:

Each detector has pre-amp and HV.  
Deployment length reads mechanically via calibration marks on the camera reel. The computer uses the detector data to plot Radiation level versus 0 to 40ft. probe insertion depth.



Optional Linear Map of Gamma and Neutron location



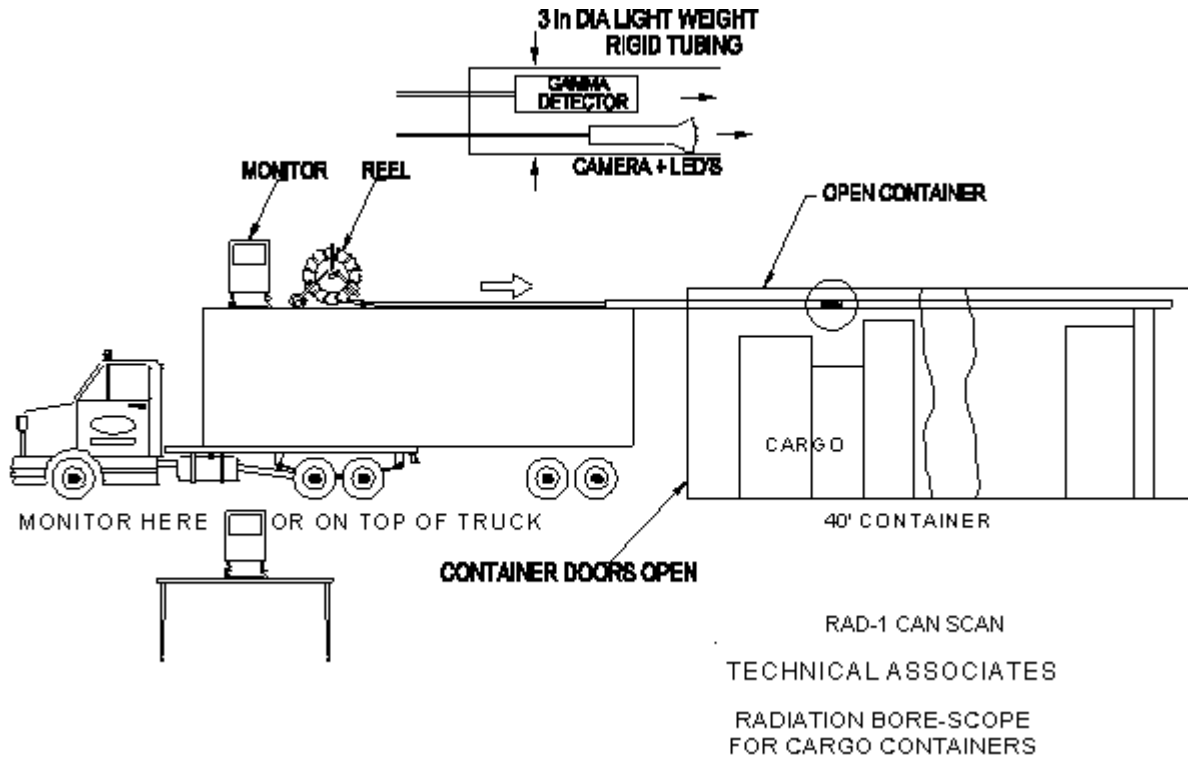
### Scintillation Probes (Gamma and High Beta):

•**PGS-3L** Gamma Scintillation Probe utilizing a highly gamma sensitive crystal (NaI(Tl)). 2" diameter x 2" long hermetically sealed crystal optically coupled to photomultiplier tube. Gamma sensitivity is 800 times greater than GM tubes.

Since sensitivity of the PGS-3L is in the order of 1,000,000 cpm per mR/hr, probe should only be used with instruments allowing high count rates.,

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