Prevent costly radioactive contamination of your scrap yard, steel plant, equipment, product and personnel with the RC4000 series vehicle radiation detection system!

- Innovative Design with Multiple Detector Sizes
- Energy Specific Alarm and Background Statistical Analyses
- Real-Time Density Tracking Algorithm
- Unique PVT Aging Monitoring
- Network Capability with Email
- Easy to install, User Friendly, Easy to Operate

RC4000

VEHICLE RADIATION DETECTION SYSTEMS

Detection of Radioactivity in High Density Materials

The RC4000 series of radiation detection systems have been designed to detect very low Gamma Ray emissions in high density materials. The vehicle size and type will help determine the appropriate panel size and configuration. The RC4000 is supplied in three detector panel sizes (69L, 91L, 138L) with any configuration with up to 8 detector panels. The RC4000 detection systems all utilize RadComm's high quality specially prepare Polyvinyl Toluene (PVT) scintillators, electronics and Dual Photomultiplier Tubes (PMT´s).

Simplified System Operation

The RC4000 utilizes real-time statistical algorithms that are based on Gamma Energy Distribution to ensure alarm thresholds levels are optimized. The RC4000 utilize a User Friendly Graphical interface allowing the operator to easily move through the wide range of User options. All detailed Clean Scan, Testing and Alarms records are stored on the internal hard drive and can be easily retrieved and interpreted as required.

Remote System Access

The RC4000 Controller is equipped with a network adaptor allowing remote monitoring, data retrieval and maintenance functions. The internal software and hardware designs are extremely flexible allowing remote software updates and electronic hardware adjustments when necessary. Supervisors can monitor the system operation in real-time to ensure normal system operation is maintained. Also, with a network connection the system has the capability of emailing alarms and system malfunctions.

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The 4000 series consists of:

- Detector assemblies (1-8 panels)
- Power supply control unit
- Windows based PC
- Smart Infrared presence sensors
- Large touch screen monitor
- Remote communications package (optional)

Controller features

- Large touch screen LCD monitor
- Windows™ based PC with high speed processing unit for menu and data management
- Large storage capacity for system operational information and alarms
- Easy to follow multilingual menu outlines and descriptions
- Multi-level security password control
- Detailed alarm data storage
- Manual scanning for pinpointing source location within the vehicle's load
- Easy to set alarm configuration menu
- Network access for remote service and monitoring
- Radiation levels displayed in counts per second (mR/h, nSv/h)
- Vehicle speed measurement in Km/h and mph
- Ambient temperature displayed in Celsius and Fahrenheit
- Adjustable audio alarm
- Counter for number of scans in a 24 hour period and to-date incoming and outgoing
- Detailed alarm information displayed and stored after every alarm

Detector features

- Large premium grade PVT scintillators
- 34.3 to 69 liters PVT volumes available (single panel)
- Low density shield on face of detector panel
- Dual layer thermal insulation protection (-20° to +50°C)
- High signal to noise ratio PMTs (2)
- High speed micro-controller with programmable CPLD technology for signal/alarm analysis
- Dual input high speed pulse processor
- Noise reduction hardware/software
- Background characterization for variable ambient background suppression
- Smart infrared vehicle presence with speed monitoring
- 8 output drivers (24Vdc@50mA) for remote indicators
- Internal non-radioactive test source for detailed and repeatable system checks
- 24Vdc input voltage @1.5A

Energy range: 18KeV to 3.0MeV (incident)

Model #	RC4069	RC4110	RC4138
System Size (in^3)	4,216	5,264	8,432
System Size (L)	69	91	138
System size is based on 2 panels. Systems may be expanded with additional panels			
PER/Panel Size (in^3)	2,108	2,632	4,216
PER/Panel Size (L)	34.5	45.5	69
# of PMT's/panel	2	2	2
*Detection Capability/Overall Sensitivity- Unshielded Source (Shielded Source)	1.6uCi (58mCi)	1.4uCi (50mCi)	1.1uCi (41.mCi)

* Radiation measurement of 137Cs (point source) at 1 meter from the face of the detector (the radiation exposure level is comparable to a 75mmø x 150mm 137Cs lead sealed source buried in 65 lbs/ft^3 (1.0 g/cm^3) of scrap metal)

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