

## Prevent costly radioactive contamination of your scrap yard, steel plant, equipment, product and personnel with the RC2000 series vehicle radiation detection system!

- Innovative Design with Multiple Detector Sizes
- User Friendly, Easy to Operate
- Detailed Data Storage
- Adjustable Alarm Threshold Settings
- Network Capability with Email
- Easy to install and setup.

# RC2000

## VEHICLE RADIATION DETECTION SYSTEMS

### Detection of Radioactivity in Moderate Density Materials

The RC2000 series of radiation detection systems have been designed for moderate density materials such as compressed waste and processed scrap metal. The vehicle size and type will help determine the appropriate detector panel size (69L, 91L, 138L) and configuration. The RC2000 detection systems all utilize RadComm's high quality specially prepared Polyvinyl Toluene (PVT) scintillators, electronics and Photomultiplier Tube (PMT).

### Simplified System Operation

The RC2000 provides a high level of detection capability for buried Gamma Ray sources in low to moderate material densities. System operation is completely automated providing specific alarm thresholds in real-time during each scanning period. The RC2000 series utilize a User Friendly Graphical interface allowing the operator to easily move through the wide range of User options. Detailed alarms records are stored on the internal hard drive and can be easily retrieved.

### Networkable Remote System Access

The RC2000 Controller is equipped with a network adaptor allowing remote monitoring, data retrieval and maintenance functions. The internal RC2000 software and hardware designs are extremely flexible allowing remote software updates and electronic hardware adjustments when necessary. With a network connection Supervisors can monitor the system operation in virtual real-time to ensure normal system operation is maintained.





## The 2000 series consists of:

- Detector assemblies (1-5 panels)
- RadLink embedded controller
- Smart Infrared presence sensors
- Large touch screen monitor
- Remote communications package (optional)



## RadLink features

- Large touch screen LCD monitor
- 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
- Easy to set alarm configuration menu
- Radiation levels displayed in counts per second (mR/h, nSv/h)
- Vehicle speed measurement in Km/h or mph
- Adjustable audio alarm
- Counter for number of scans in a 24 hour period and to-date
- Detailed alarm information displayed and stored after every alarm
- Network access for remote service and monitoring

## Detector features

- Large premium grade PVT scintillators
- 34.5 to 69 liters PVT volumes available (single panel)
- Low density shield on face of detector panel
- Dual layer thermal insulation protection (-20° to +55°C)
- High signal to noise ratio PMT
- High speed micro-controller with programmable CPLD technology for signal/alarm analysis
- Single 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

## Options

- Camera
- External alarms
- Supervisory Software

**Energy range:** 20KeV to 3.0MeV (incident)

| Model #  | RC2069         | RC2110         | RC2138         |
|--|----------------|----------------|----------------|
| System Size (in <sup>3</sup> )   | 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 <sup>3</sup> )  | 2,108          | 2,632          | 4,216          |
| PER/Panel Size (L)   | 34.5           | 45.5           | 69             |
| # of PMT's/panel   | 1              | 2              | 2              |
| *Detection Capability/Overall Sensitivity-unshielded source (Shielded Source)    | 2.3uCi (82mCi) | 2.0uCi (71mCi) | 1.6uCi (58mCi) |

\* Radiation measurement of <sup>137</sup>Cs (point source) at 1 meter from the face of the detector (the radiation exposure level is comparable to a 75mmø x 150mm <sup>137</sup>Cs lead sealed source buried in 40lbs/ft<sup>3</sup> (0.64 g/cm<sup>3</sup>) of scrap metal)

