



RC17 WATCHDOG

Low Level Radiation Detection



The **RC17 WatchDog** Radiation Detection System was designed specifically for the scrap and recycling industry to provide the absolute highest level of radioactive source detection in real-time for small to medium size weigh scale applications. RadComm Systems is a leading provider of innovative, radiation detection solutions for the Recycling industry. For more than 20 years, RadComm has been supplying the cutting edge and industry-leading radiation detection systems designed and developed exclusively for the metals and recycling industries. All of our advanced technology is based on real-world designs for real-world applications.

RadComm is uniquely positioned to provide the Scrap Industry with a new and innovative radiation monitoring solution for low level radioactivity for small weigh scale applications. The design of the RC17 addresses all the challenges associated with monitoring small and medium volumes of material as it is being weighed in and out on the weigh scale.

The RadComm RC17 detection system provides a wide angle-of-view to ensure the entire weigh scale loading points will be scanned at all times during weighing periods. The RC17 WatchDog features a large 1054ⁱⁿ³ (17.3L) of the highest grade Polyvinyl Toluene (PVT) to ensure all material and storage equipment (i.e.: Gaylord Boxes, Tippers, Bins, etc.) are automatically scanned quickly and efficiently with the most advanced technology available for detecting low level radiation emissions.



RC17 WATCHDOG

The RC17 will arrive on your site ready to go to work. The system is virtually plug and play; the end-user simply needs to plug the system into a 87-240 VAC supply and bolt it to the floor. No on-site set-up or commissioning assistance is required.

The RC17 comes complete with a self-supporting stand, embedded audio/visual indicators, network connection, quick reset capabilities, and an embedded large backlit LCD. On startup, the RC17 automatically sets a series of sensitive alarm thresholds while compensating for ambient background radiation. This allows the RC17 to detect very low radiation levels even when radioactive sources are buried under recycled materials.

SPECIFICATIONS

SIZE:

- Detector box size: 96 x 9 x 6 in. (244 x 23 x 20 cm)
- Detector Weight: *90 lbs (*41 kgs) *Estimated
- Large Premium Grade PVT Detector – 1,054 in³ / 17.3 Liters
- Display – Backlit RGB Color LCD 320x240 resolution
- Viewing area: 3.5 " Diagonal (9 cm)
- Insulated Detector Box with Neman 4 (IP 66) rating

ELECTRONICS:

- Hi Signal to Noise Ratio Integral PMT with EM Shielding
- High Speed Micro-Controller with High Speed Pulse Processor
- Audio (up to 90 dB) with Red Light/Green Light and Large Reset Button
- Stable Low Noise, High Voltage Power Supply
- 87-240Vac power supply input
- Internal Non-Radioactive Test Source for detailed and repeatable checks
- Retro Reflective Optical Sensor
- RJ45 connector
- Internal Electronics Operating Temperature: -4°F to 131°F (-20°C to +55°C)
- Internal Rechargeable Battery for system backup power – up to 6 hours

SOFTWARE:

- Menu Driven User Interface
- Selectable Units of Measure: CPS, Sv/h, R/h
- Dose measurement: Sv, R
- Adjustable Dose and ROI Alarm Thresholds
- Smart Mode Optical Sensor
- Noise Reduction Software
- RJ45 connection for Online Service and Support
- Internal Memory up to 200 alarm events
- Optional PC RadView PC Software

RESPONSE – SENSITIVITY:

- Energy Range: 45 KeV – 2.0 MeV
- Sensitivity: 260 cps/uCi of Cs137 @ 1 Meter
- Photon and Particle Sensitivity: X-Ray and Gamma

