



RAD Alert Radiation Monitor Model RAD3005



The RAD Alert industrial radiation monitor has been redesigned and is now available in a modular, rack-mounted version. The Model RAD3005 provides the same features and dependable operation as the original, but in a compact package for more convenience. The new model is designed so up to five RAD Alerts can be grouped together in a single 19" rack. Multiple units can be configured into a system by wiring the output contacts in series with the machine safety circuit.

The new Model RAD3005 is easy to calibrate, and does not limit the number of sensors on the machine. Another benefit of the RAD Alert design is that it provides continuous monitoring of the unit for fail-safe protection. It is capable of detecting high intensities of radiation without saturating, while providing alarm capabilities at low radiation flux levels.

The RAD Alert is designed for use on industrial, manufacturing equipment, such as electron beam processors. The RAD Alert is standard on all BroadBeam machines and is compatible with all brands of low voltage, electron beam equipment.

The RAD Alert is a radiation area-monitoring unit capable of detecting beta, gamma, and x-ray radiation. The monitoring station compares measured radiation levels against high and low reference levels. A Signal Loss alarm circuit ensures that the Geiger Mueller sensor tube, high voltage supply and the detection circuit are all operational.

The status of each RAD Alert station is displayed through three LED's located on the front of the unit. The green LED indicates that the unit has 115 VAC power and the 5 VDC power supply is active. The yellow LED indicates that the sensor or sensor power supply on the board has failed. The red LED indicates a high radiation alarm.

Each monitoring station includes a single throw double pole relay for the High Alarm function and a single throw double pole relay for the Signal Loss function. The alarms are latched and must be manually reset via the push button on the front of the unit.

RAD Alert Features:

- Easy to calibrate
- No limit to the number of sensors on the machine
- Allows output contacts on multiple units to be wired in series with the line safety relay
- Continuous monitoring of the unit for fail-safe protection
- Capable of detecting high intensities of radiation without saturating while providing alarm capabilities at low radiation flux levels



Each unit includes:

- ✦ Rack mounted Rad Alert control unit
- ✦ Sensor probe with Geiger Mueller tube and protective housing
- ✦ Adjustable mounting bracket for sensor
- ✦ Pre-wired coaxial sensor cable in lengths up to 100 feet

Available accessories include:

- ✦ 19" Rack to house up to 5 Rad Alert control units
- ✦ Filler plates to cover up unused rack slots
- ✦ Additional coaxial sensor cables
- ✦ Thorium mantels to supply background radiation for the sensor

GENERAL SPECIFICATIONS

Input Power	115 VAC 50/60 Hz
Fuse Requirements	2 amp (accessible on the back panel)
Power Supplies	Pico #SWA5S 5 VDC @ 1 amp Pico #5AV900, 900 VDC @ 50 mA
Output Contact Rating	10 amps @ 120 VAC 10 amps @ 24 VDC
Operating Temperature	5 °C to 40 °C
Operating Humidity	0 – 95% Non-condensing
Alarm Adjustment	Screwdriver adjustment in front panel
Sensor Loss Adjustment	Screwdriver adjustment in front panel
Sensor Voltage Adjustment	Screwdriver adjustment in front panel
Test Points for Adjustments	Insulated test points in front panel
Alarm Reset	Alarm trip is self-latching; a reset button is available on the front panel
Sensor Location	Up to 100 cable feet from monitor
Sensor Connection	MHV connector on back panel
High Alarm	A red LED indicates the alarm
Signal Loss Alarm	A yellow LED indicates this alarm
Power On	A green LED indicates that control power is present on board
Dimension	4-5/8" H x 3" W x 6-3/4" D
Housing Construction	All aluminum
Mounting	Conventional 19" rack mount
Sensing Range	alpha (>3MeV),b beta (>45 keV) gamma/x-ray (>6keV)

For further information and current pricing, please contact us.

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