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RAD IQ™ AP100
Advanced Radiation Portal

The **RAD IQ™ AP100** is a spectroscopic radiation monitoring portal providing specific radionuclide identification in a convenient and discreet form factor. The unit is suitable for both the detection of Special Nuclear Material (SNM) as well as materials that might be used in Radiological Dispersive Devices ("Dirty Bombs").

The portal is intended for security check points. It is ideal for pedestrian applications and provides an excellent low cost alternative for spectroscopic vehicle check point. The form factor is also suitable for baggage or courier packages on conveyor belt systems. Easy set up and suitability for rapid deployment is well suited to arena events with large numbers of spectators. These same qualities make it suitable for emergency response situations where many people may fear that they have been contaminated when, in fact, only a small number have been.

The system is equipped with collimated 3x3 inch NaI(Tl) detectors, and the necessary electronics. Local alarm enunciation is provided as well as the ability to reproduce alarms at a central command station. Communication is accomplished via Ethernet. The battery support system provides up to 12 hours of operation without line power. The unit is water resistant.

3 color LED w/speaker

USB CCD camera

3×3" NaI(Tl)
Inside of lead collimator

Key features

- Specific Radionuclide Identification
- Weatherproof design – robustness for outdoor applications
- Bluetooth and Ethernet communication for flexibility
- Integrated local alarm enunciation
- Integrated high resolution video camera
- Automatic system calibration and stabilization

Applications

- Building entrance check point
- Pedestrian radiation security
- Conveyor inspection
- Airport radiation security
- Waste truck radiation monitoring
- Homeland security

Key Specifications

Detector	NaI(Tl) 3X3 inch optional Plastic scintillator	Collimator	Collimated (30mm) 3×3 inch NaI(Tl) (up to 2 per pedestal)
Energy resolution	7% ± 1% @ 662keV(Cs−137)	Energy range	20 − 3,000 keV
Network Communication	Bluetooth or Ethernet	MCA channel	12 bit 4096 channel
Dimension	430(W)×200(D)×1600(H) mm	Weight	90kg(198lb)
Video Camera Resolution	640×480 pixel	Operating Temperature	−15℃(5℉)~50℃(122℉)
Line Power	AC (100 − 240 V)	Rechargeable backup Battery	〉12 hours

1) 1 second measurement

Application example

Package Monitoring

Airport Security

Application SW

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