

# AccuRad™ PRD

## Personal Radiation Detector

A discreet yet robust PRD designed for law enforcement, fire rescue, and other emergency responders to detect and interdict nuclear and radioactive materials. It also provides dose measurement and alarming capabilities for event response.

### A first of its kind

- Solid and durable, with an impact-resistant covering.
- Simple to use – no training required.
- Discreet, with a top-screen display for quick-glance reading.
- Long-lasting, easily replaceable batteries allowing more than 900 hours in the field.
- Directionality, helping users zero in on trouble faster.
- Low cost of ownership.

### Made by radiation experts

#### Only get alerts for real threats.

The AccuRad PRD runs on innovative Variable Background Suppression (VBS), allowing operation in varying background environments and will alarm only for a real threat or hazard.

#### Get accurate radiation exposure readings.

The AccuRad PRD provides dose measurement and dose alarms for radiological events, utilising Mirion's long-standing expertise in the radiation safety industry.

#### Analyse incoming information in real time.

The app allows real-time data visualisation and real-time data relays to increase situational awareness across many PRDs and other detectors. Compatible with a variety of platforms, including RadResponder, Sigma and SpirVIEW Mobile™ software.

### By emergency responders for emergency responders

The AccuRad PRD is the first PRD developed in close collaboration with state and federal law enforcement and first responders to fit seamlessly into their routines and address the most critical, in-the-field needs from a radiation detection device.

The AccuRad PRD is built:

#### For the reality of field work: rough treatment, harsh conditions

The AccuRad PRD is solid, durable, with an impact-resistant covering to stand up to the test, time and time again.

#### For discreet, hands-free detection

The AccuRad PRD is low profile and easy to read with the top-screen display. Users no longer need to remove the PRD to take a look.

#### For waterproof protection

For when teams are (literally) putting out fires.

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#### For “set it and forget it” use, with minimal training and maintenance required.

The AccuRad PRD is in-the-field easy – simple to use even in the toughest situations and offers a tutorial library in the smartphone app.

#### For when you can't let a source get away.

Find the location of a radioactive hot spot in a large, busy environment with built-in directionality.

#### For an entire week, month, mission...without a battery change.

The AA batteries in the AccuRad PRD last for 900 hours in the field, and are easily replaceable with commercial batteries.



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TECHNOLOGIES

# Specifications

## Physical Characteristics

<b>Detection</b>	200 g, including clip
<b>Size</b>	108 x 61 x 36 mm without clip
<b>Batteries</b>	Two AA batteries for more than 900 hours of continuous operation Tool-less battery cover

## Environmental Characteristics

<b>Protection Rating</b>	IP67 (dust and 1 m water immersion)
<b>Temperature</b>	-20 °C to 60 °C
<b>Drop</b>	1.5 m on concrete
<b>Construction</b>	Innovative heavy-duty bi-material Replaceable fiber-reinforced clip

## User Interface

<b>Modes of Operation</b>	Dose or count rate Search with trend or radar 0-9 display indicator
<b>Display</b>	Top display enables hands-free visual alarm assessment Languages: English, Spanish
<b>Buttons and Navigation</b>	Intuitive to use even without training Comfortable for one-handed operation
<b>Alarming</b>	Vibration Visual LED Audible sound: 85 dB(A) at 30 cm

## Accessories

<b>Standard</b>	AccuRad PRD, AA alkaline batteries, quick guide, spare clip
	USB C earphones, clip, battery cover
	Radiation safety training modules for law enforcement, fire rescue and other responders
	SpirVIEW Mobile command centre software

## Radiological Performance

<b>Detectors</b>	CsI(Tl) scintillation detector with temperature compensated SiPM for interdiction missions Silicon diode for integrated dose and high dose rate to ensure proper health and safety
<b>Detection Performance</b>	Alarms at 50 $\mu$ rem/h (0.5 $\mu$ Sv/h) within two seconds VBS: Authenticates true alarms in variable backgrounds Energy range: 25 keV to 3 MeV; detects all radionuclides of concern
<b>Dose Rate</b>	Range: up to 1000 rem/h (10 Sv/h) with measurement history Accuracy: $\pm$ 20%
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## Application Enabled Features

	Remote display, access to history and logs
<b>Reachback/streaming</b>	E-mail, SMS, SpirVIEW Mobile software, RadResponder, ANSI N42.42 files
	Learning section with how-to videos and documentation

## Connectivity

<b>Bluetooth®</b>	Bluetooth® Low Energy with Near Field Communications (NFC) pairing to smartphone
<b>USB</b>	USB type C for earphones and maintenance

## Standards

	Designed to meet or exceed ANSI N42.32
	Designed to meet or exceed IEC 62401:2017 (PRD)

Specifications are subject to change without notice.  
For the most up-to-date specifications, please visit [www.mirion.com](http://www.mirion.com)



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Version 1.0 March 2020