When first responders arrive on a scene of an accident, natural disaster, or terrorist attack, identifying the radiological risk is a critical step in the first minutes of characterizing a scene.

The Mirion UltraRadiac-Plus device is the STANDARD in personal radiation monitors for firefighters, law enforcement, HAZMAT teams, paramedics, and others. The URAD-Plus unit is small, lightweight, and extremely rugged for demanding radiological and extremely hazardous environments.

**OVERVIEW**

**KEY FEATURES**

- Easy to operate by personnel in firefighting or “HAZMAT” protective gear
- Extremely rugged, metal housing
- Accurate dose measurements with high dose rate protection
- Large, easy-to-read back-lit LCD display
- Audible, visual and vibrating alarms
- Unique “stay time” display shows time remaining for the highest level of individual health and safety
- Configuration by push button or integrated software
- Uses standard AAA batteries; optional rechargeable batteries
RADIOLOGICAL CHARACTERISTICS

Measurement Range:
- Dose rate: 1.0 μR/h to 200 R/h (0.01 μSv/h to 2 Sv/h)
- Cumulative Dose: 0.1 μR to 999 R (0.001 μSv to 999 Sv)

Accuracy:
- Within ±30% of 100 μR/h (1 μSv/h) to 200 R/h (2.0 Sv/h)

Detector:
- Energy compensated GM detector

Energy Range:
- ±40% from 60 keV to 1.5 MeV

Response Time:
- Achieves 90% of final reading in one second; subject to step change from 1 mR/hr (10 μSv/h) to 55 mR/h (550 μSv/h); updates display every second

Dose Read Out:
- Non-volatile memory will not be erased when read
- Re-zero by push button

Alarms:
- Alarm threshold configurable for dose and dose rate
- Alarm configurable for audible, visual and vibration
- Audible alarm: >85 dB at 30 cm

POWER

Alarms:
- Four AAA (1.5V) alkaline batteries
- Optional rechargeable NiMH batteries with DC charger to URAD-Plus power connector (check applicable model)

Battery Life:
- 150 hrs (~1 month) continuous monitoring; 1,500 hrs during inactive (sleep) mode
- Low battery indication – 10 hrs of battery life remaining

PHYSICAL CHARACTERISTICS

Dimensions: H: 3.94 x W: 2.62 x D: 1.24 in. (100 x 66 x 31 mm)
Weight: 8.9 oz (252 g) without pouch
Volume: 12.8 in.^3 (210 cc)

Case Material: Die cast aluminum in yellow or black

Display:
- LCD: Readable at 3 ft (1 m); with backlight
- Measurement Units: Rem & Sieverts

ENVIRONMENTAL CHARACTERISTICS

- Operating Temperature: –22 °F to 141 °F (–30 °C to 61 °C).
- Storage/Transport Temperature: –40 °F to 158 °F (–40 °C to +70 °C)
- Humidity: RH 40% to 93% at 95 °F (35 °C)
- Water Immersion (including salt water): 3 ft (1m) for at least 2 hr
- Sand and dust (in wind) resistant
- Fungus resistant
- Vibration and shock resistant
- Altitude: 40,000 ft (12,000 m)
- EMI and RFI resistant

QUALIFICATION TESTING
- Type-tested to meet ANSI-N42.33-2006 requirements
- Derived from military grade AN/UDR-14 / RGU-100 pocket radiac - MIL-STD-810G

OPERATING CHARACTERISTICS

Initialization and Setup:
- Operational in less than 5 seconds; diagnostics and alarms in less than 1 minute; continuous diagnostics for power, circuitry and detector

Data Logging
- Up to 999 data points, downloadable via optical infrared IR cable

MODELS

Legend: R: Rem, S: Sievert, Y: Yellow, B: Black, NC: No Charging Port

Standard Power Version
(Sea AAA Alkaline)
- URAD-PLUS-S/Y/NC
- URAD-PLUS-S/B/NC
- URAD-PLUS-R/Y/NC
- URAD-PLUS-R/B/NC

Rechargeable NiMH Version
(Sea AAA or Alkaline)
- URAD-PLUS-S/Y
- URAD-PLUS-S/B
- URAD-PLUS-R/Y
- URAD-PLUS-R/B

AVAILABLE OPTIONS

- URAD-PLUS-DCCHARG – DC charger with cigarette lighter connector
- URAD-PLUS-MOUNT– Vehicle mount for URAD-Plus (compatible with optional DC charger)
- IRUSB - IR to USB interface Cable
- EXT-IR - IR to serial (RS-232) interface cable
- FC2B - Portable Field Calibration Verification Unit