

RDS BASE UNIT

NSN 6665-01-671-4539

A new level of ruggedness and reliability - the Radiological Detection System (RDS) is the world's most robust military-grade emergency detection kit available. Designed to withstand a nuclear blast and continue to display accurate radiation readings, RDS will not let you down.

The RDS consists of a Base Unit and multiple probes (Beta-Photon, Alpha-Beta, Alpha-Beta-Gamma Pancake, Sensitive Gamma, Neutron, and FIDLER) for detecting and characterizing the various types of radiation. Designed to eliminate interoperability challenges, conveniently select the appropriate radiation readings to give you the correct information to make the right call every time.

With advanced Smart Probe technology, you can confidently hot-swap probes from one Base Unit to the other without skipping a beat. With no dependency on a specific Base Unit, each probe retains its own calibration data.

The RDS Base Unit is intended for high reliability, mission-critical applications. It is durable, easy to use, and built to last.



FEATURES

- Military-grade reliability
- Common Base Unit interface for 6 individual probes
- Hot-swapping Smart Probe technology allows any RDS probe to be used with any Base Unit
- Consistent LCD Interface for all probes
- 45 Hours of data storage
- Ergonomic design
- Stealth mode
- Operates on 4 AA-size batteries
- Complies with ANSI N42.17 using Cs-137 as reference source
- Survey data downloads, calibration, and firmware upgrades via Rad-Extender

SPECIFICATIONS

Radiological

Units of Measurement	Count Rate - cpm, cps. Dose/Exposure Rate - mrad/hr, μ Gy/hr, mrem/hr, μ Sv/hr, mR/hr Total Dose/Exposure - rad, Gy, rem, Sv, R
Detection	Gamma/x-ray radiation - 0.1 μ Gy/hr - 100 Gy/hr Photon detection - 60 keV - 3 MeV Beta detection - 200 keV - 3 MeV Neutron & Alpha detection with external probe
Data	Records detection readings, date/time, location. 45+ hours of data storage
Detectors	Low dose and high dose Geiger-Mueller tubes
Dose Measurement Range	0.01 μ Sv to 10 Sv (1 μ rem to 1000 rem)

Operational

Operation	8 buttons for easy menu access and navigation
Display	High contrast, impact resistant LCD screen, visible in direct sunlight
Alarms	Audible and visual
Audio	3mm audio jack for headset operation

Electrical

Power	4AA batteries or AC Power Supply
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Mechanical

Dimensions	8.3" x 3.45" x 2.2" (21.1 x 8.8 x 5.7 cm)
Housing	Anodized cast aluminum
Weight	1.66 lb. including 4AA batteries (.75 kg)

Environmental

Operating Temp.	-22° to 122.7°F (-30° to 50°C)
Storage Temp.	-58° to 140°F (-50° to 60°C)
Relative Humidity	3% to 100%
Ingress Protection	IP67
Salt Fog	Resistant (MIL-STD 810G, Method 509.5)
Explosive Atmosphere	Intrinsically safe
Immersion	Water & salt water 1 meter deep - 30 min.

Standards Compliance

CE	CE Compliant, EMC (2014/30/EU), Low Voltage (2014/30/EU)
FCC	FCC Part 15, Sub-part B, Class B
ANSI	ANSI N42.17 ANSI N42.34
MIL-STD	MIL-STD 461F, MIL-STD 1686C, & MIL-STD 810G

Ordering Information

V038429	Base Unit
V038863	FIDLER Probe
V040005	Alpha-Beta Probe
V038313	Sensitive Gamma Probe
V038820	ABG Pancake Probe
V038276	Beta-Photon Probe
V039097	Neutron Probe
V041227	Telescoping Probe Handle
V038669	Base Unit to Probe Cable
V062817	Rad-Extender

