RadHalo RDP and FM
Dose Rate Monitors

detection
monitoring
identification
radiation

KEY FEATURES

Rapid Dose Rate Response – Advanced algorithms leverage a Large NaI and multiple Geiger-Mueller detectors to provide both high sensitivity and accuracy from low level radiation monitoring to dangerous dose rate levels

Immediate Accurate Identification – Powerful identification algorithm leverages Thermo Fisher Scientific's long history of developing proven field capable gamma spectroscopy products

Rugged Design – Designed to operate across all temperatures and weather. the Portable RDP can stand up to the toughest abuse including drops up to 1 meter onto concrete

Operates anywhere autonomously – Large capacity 60hr battery, provisions for solar panel and multiple methods for reachback and remote control

Secure Transmissions – powerful 1024 bit encryption and tamper sensors ensure data security and tamper resistance

Detector Fusion Capable – Leverage multiple RadHalo units to achieve directional capability and create virtual detectors for additional data analysis options

Sensitive and Accurate Dose Rate monitors that Identify Radiation Quickly and Accurately, in any environment

The Thermo Scientific™ RadHalo RDP and FM detect and identify gamma and neutron radiation as well as provide accurate dose rate capability. With multiple configurations available RadHalo can adapt to any situation and budget from special event monitoring to rapid response for a nuclear power accident.

RadHalo's powerful processor runs simultaneous high accuracy dose rate and identification algorithms for high confidence measurements, whether you are monitoring radiation levels in a normal or emergency situation or whether you are using RadHalo to adjudicate a radiological alarm at a sporting event. RadHalo can be configured to monitor and provide dose rate and count rate values and if an alarm occurs, it provides an automatic identification which is ideal for a security function. It can also be configured to provide a dose rate and spectrum automatically at defined Intervals, ideally suited for radiation area monitoring.

Secure, encrypted data transmissions leverage multiple communications methods. RadHalo monitors the communication channels and automatically switches to other transmission methods if the primary transmission method is unavailable. Control and manage alarms and settings for RadHalo from your mobile device, Thermo Scientific ViewPoint command and control SW, or your own command and control SW by leveraging the ANSI N42.42 2012 compliant communication transmissions. Whether the situation calls for permanent monitoring of an area or a quick setup for radiological monitoring, there is a RadHalo model to fit nearly any situation or scenario.

RadHalo RDP and FM

RadHalo RDP – Four Options Available

RadHalo RDP is designed for portability, rapid deployment, and autonomous operation. It is ideal for monitoring special events and radiological emergencies. Long 60 hr battery can be charged via AC mains or solar panel. Multiple wireless transmission methods insure instrument communications in nearly any scenario. Monitor and control unit remotely from PC or mobile device.

RadHalo FM – Twelve Options Available

RadHalo FM is designed for permanent and constant area monitoring. Able to withstand nearly all environmental conditions and emergency conditions. Battery backup and multiple reachback methods insure full operation even in emergency situations. Simple layout allows field service support and onsite calibrations. Antenna and satellite extension kits for long distance communication capability especially when RadHalo has no view of the sky.

TECHNICAL SPECIFICATIONS

Feature	RadHalo RDP	RadHalo FM
Spectroscopic Detector 3x3" NaI	0.05ìSv/hr to 0.1mSv/hr (5ìRem/hr – 10mRem/hr)	
Dual Range GM Tube	0.05mSv to 10Sv/hr (5mRem/hr to 1000Rem/hr)	
Gamma Detection Sensitivity	Identifies Co57 @ 6.6nSv/h moving at 30.5cm/s (1 ft/s) from 100cm (3.3ft) away	
Dose Rate Accuracy	+/- 20% at 661keV (Cs137)	
Neutron Detector (Optional)	CLYC	
Neutron Detection Sensitivity	Detects 1.3 neutrons/s*cm2 moving at 30.5cm/s (1 ft/s) from 100cm (3.3ft) away	
Environmental Resistance	IP66	IP66
Library	49 radioisotopes including all in ANSI N42.34-2006 standard, with version 1.0.0	
Data	Ability to store > 10000 ANSI N42.42 (2012) compliant spectra. Data transmissions 1024 bit encryption	
Rugged Resistance for high wind loads	1m drop onto concrete	Not rated for drops – mounts rated
Temperature Range	-30C to 55C	
Control and Reachback Communications	WiFi, 2.4GHz, optional Cellular optional Satellite	WiFi, LAN, optional 2.4GHz, Optional Cellular, Optional Satellite
Antenna Options	Mounted short range stubbies	Optional 10km directional Yagi or omni-directional
Battery	Lithium Titanate 60 hrs with 3 hr recharge	
Size (fully featured system)	35 lbs (14" DIA base x 28" tall)	50 lbs (24 x 24 x 8")
Control of Peripheral Equipment	None	GPIO, USB
Mounting Options	Freestanding or with tripod	Pole or fence mount
Security	Tamper and tip sensors	Tamper sensors
Transportation	Handle, removable shoulder strap	None

All RadHalo model kits contain: 1. RIIDView PC spectra viewer, 2. AC power supply, 3. Quick Start Guide, 4. Android/Apple mobile device application Accessory kits: 1. Solar Panel kit, 2. Base radio to receive transmissions, 3. radio repeater for increased transmission distance, 4. RDP tripod mount, 5. FM pole/fence/wall mount kit. 6. FM antenna extension kit.

HTDS
Hi-Tech Detection Systems