

RAD IQ™ HH 200



Hand-Held RIID (Radiological Isotope Identification Device)



“Field Intelligence Redefined Rugged, Connected, Reliable.”

The RAD IQ™ HH200 is a rugged, second-generation handheld RIID that blends proven detection capabilities with advanced connectivity and field-ready intelligence.

Designed to meet ANSI N42.34 standards, it offers high-sensitivity isotope identification powered by a detector size of up to 3 inches—larger than most devices in its class.



What truly sets the HH200 apart is its patented smartphone-based touch-screen interface, offering an intuitive user experience familiar to today's professionals.

With one-touch reach-back support, operators can instantly transmit data for expert analysis. Integrated high-resolution camera and GPS enable rich, geotagged event documentation, while Wi-Fi and IoT SIM connectivity ensure seamless communication in connected environments.

Applications

- Homeland Security
- Emergency Responder
- Safeguard and nuclear security
- Radiological Area Mapping
- Geological Radiation Survey

Key Features

- ANSI N42.34 compatible
- PDA based hand-held RIID (patented)
- One click reach back service
- Auto Stabilization
- Multimedia support

❖ Key Features

Multimedia Event Logging

Attach photos, audio memos, text notes, or video clips directly to events for rich, contextual report.



Tag Favorite event

Photos

Audio Memo

Video

Text Memo

One-touch Reachback
Send events to a command Center

Multi-media tools
Store text/audio memos, photos and video onto an event

Information

Event	#10	Time	14:9:47.6	Alarm duration	10 sec
Date	2016-7-19	User	Administrator	Location	NYC

Detected Nuclide

Nuclide	Nuclide	Dose rate	Confidence Level
Cs ¹³⁷		52 µSv/h	98%

Comment
Radiation alert: Cs¹³⁷ has been detected, along with a suspicious black van positioned in the second row.

Remove Event

One-Click Reach-Back

With integrated GPS, multimedia support and WiFi communication, the HH200 enables seamless data transfer to RadResponder or command centers — delivering complete, actionable reports with a single click.



Touch Screen Interface

A wide, high-visibility display ensures easy readability, while full-touch control lets users manipulate spectra with simple fingertip gestures.



Tripod-Compatibility

Easily mountable on a tripod for semi-fixed deployment, enabling unattended or extended-duration radiation monitoring



RadResponder

Integration with FEMA's free network for logging, transmitting, storing, analyzing, and presenting environmental radiation monitoring data.



Command center

Event data can be transferred to a command center via Wi-Fi network protocol.

❖ Description of Device

The RAD IQ™ HH200 is purpose-built to be both versatile and user-friendly, equipped with a range of distinctive features and components.



1	Gamma Detector	2	Optional Neutron detector	3	High-res camera CMOS 13MP
4	LED Flash Light	5	5" Touch Screen Display	6	Water Proof Speaker

Flexible Detector Configuration

The HH200 supports up to a 3x3" NaI(Tl) detector and offers optional high-resolution CeBr₃ or LaBr₃ detectors in 2x2" or 1.5x1.5"



2inch



3inch



Hi-Res



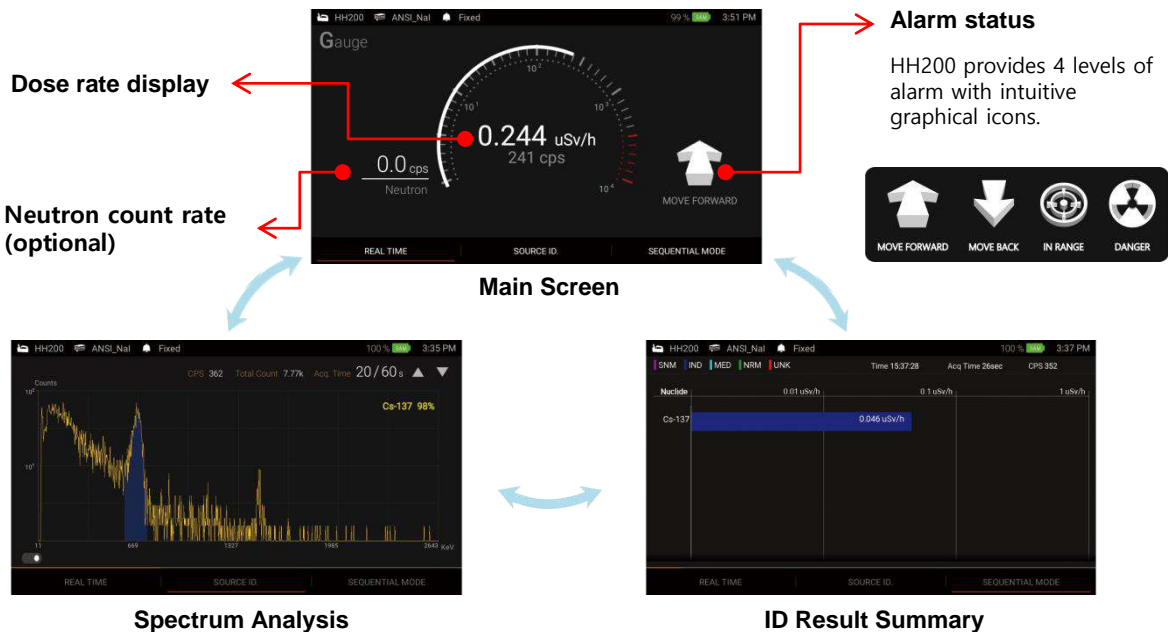
Ergonomic Shoulder Strap

Reduces user fatigue during extended field operations.

❖ Application software: PeakAbout®

Smartphone-Based Application Software

Offers unmatched convenience and functionality over traditional designs, with seamless data transfer to reach-back centers upon survey completion.



❖ Specifications

DETECTORS			
Gamma	Up to 3x inch NaI(Tl), or CeBr ₃ , LaBr ₃ (1.5 or 2 inch)		
Gamma (Hi-dose)	Gain Compensated Geiger-Muller detector		
Neutron (option)	He-3, or Solid-state Neutron detector (Domino)		
PERFORMANCE			
Energy Range	20 keV – 3 MeV		
Linearization	Real-time linearization by firmware		
Dose rate range (ID mode)	0 ~ 100 μSv/h		
Dose rate range (Count mode)	0-10 mR/h (NaI), 10 mR/h-10 R/h (GM tube)		
Sensitivity	> 1500 cps / μSv/h @Cs-137		
Stabilization	Sourceless automatic real-time stabilization		
Identification	ANSI N42.34 compatible		
MCA channel	16 bit 2048 ch.		
Library categories	SNM, IND, MED, NORM		
Typical resolution	NaI(Tl) < 8%, CeBr ₃ < 5%, LaBr ₃ < 4%		
BATTERY			
Type	Rechargeable Li-ion		
Operation time	12h in sleep mode, Max run time 8h		
Backup battery	Plug-in power from an USB battery pack		
PHYSICAL			
Dimension	192 x 356 x 214 (mm)	Weight	4.3kg (9.5 lb) w/ 3x3 inch NaI(Tl) 3.2kg (7 lb) w/ 2x2 inch NaI(Tl)
ENVIRONMENTAL			
Operating Temperature	-20°C(-4°F)~50°C(122°F)	Protection Rating	IP65
Relative Humidity	10 to 80%, non condensing	Testing Condition	IEC 62706, EN 61326
DISPLAY		INPUT/OUTPUT	
Type	Touch screen LCD	USB	micro USB 3.0
Size	5 inch	Bluetooth	Class 4.0
Resolution	480 x 320, configurable up to 1920x1080	WLAN	802.11n Wireless LAN
MISCELLANEOUS		SOFTWARE	
GPS	22tracking, 66channels, 1-10Hz	Reach-back	ANSI N42.42 or CSV event data
CCD Camera	CMOS 13MP	Application SW	PeakAbout (application SW) PeakID (PC version SW)
Speaker	84 dB, water-proof		
ACCESSORIES			
Case	Pelican style carrying case	Charger	USB charger / Vehicle Battery charger
Strap	Shoulder Strap	Connection cable	mini USB cable

