

## D3S ID Wearable RIID



*detection  
monitoring  
identification*  
**radiation**



The D3S ID provides the power to make the right decisions about nuclear threats in seconds. It is a wearable RIID that is one of the fastest and most accurate isotope ID devices on the market. It's the game-changing device that's revolutionizing in-field isotope identification.

The D3S ID is a powerful combination of two of Kromek's leading technologies; the non-<sup>3</sup>He compact thermal neutron detector and its world leading gamma detector, delivering the performance of a RIID in a small, but powerful device, the size of a PRD.

It's discreet, wearable and a fraction of the price of other much larger RIIDs, meaning it's not only light on your belt, it's light on your budget. The detection algorithm provides substantial enhancements in the detection and identification of low activity shielded threats, masked threats and nuisance isotopes.

Specifically designed for use by anyone, specialists and non-specialists alike, the D3S ID can be used by staff across a wide variety of sectors, including: customs and border patrols, police, first-responders, at airports, event security and environmental monitoring.

It has been extensively tested and characterized in multiple DNDO and DARPA programs.



Discreet  
Wearable  
Lightweight

Built around  
your operational  
needs

### FEATURES

- One of the fastest and most accurate isotope ID devices on the market
- Exceeds RIID standard
- Faster Discreet, wearable, lightweight
- A fraction of the size, fraction of the cost of other RIIDs
- Rapid, visible, audible and tactile alarm settings
- Extensively tested and characterized in multiple DNDO and DARPA programs
- Quick, simple and intuitive to use, no need for specialist training or knowledge

### LIBRARY & PERFORMANCE

- Library far exceeds ANSI and international standards
- 42 isotopes – 22 more than ANSI N42.34 standard
- Discriminates between Medical, NORM, Industrial and SNM classes
- 69 unique signatures which accounts for shielding and mixed configurations
- Identifies X-ray signature to eliminate nuisance alarm within airport environment

# D3S ID

## SPECIFICATION

Detector type	Gamma and Neutron detection
Gamma detector material	CsI(Tl)
Gamma detector volume	1 in3 (16 cm3)
Gamma energy range	30 keV to 3 MeV
Gamma sensitivity for Cs137	5 cps/iR/h (500 cps/iSv/h) Photo peak 1.2 cps/iR/h (120 cps/iSv/h)
Maximum throughput for gamma channel	10,000 cps
Dose rate	2.0 mR/h (20 iSv/h) at 662 keV
Neutron detector material	Non-3He
Neutron detector	9 cps in a 1 neutron per cm2 field
Neutron detector gamma rejection	Better than 10-7, meets ANSI N42.34 section 6.7
Maximum throughput for neutron channel	5,000 cps
Communications	Micro USB, Bluetooth®
Operational battery life	12 hours
Operational temperature range	.20°C to 50°C, meets ANSI N42.32 section 7.1, section 7.2, section 7.5
Device size (excluding phone)	5.2 x 3.1" x 0.9" (132mm x 80mm x 23.5mm)"
Device volume (excluding phone)	248 cm3
Humidity	Up to 93% RH ANSI N42.32 section 7.3
Moisture/dust protection	IP53 as per ANSI N42.32 section 7.4
Weight	0.52 lbs (237 g)
Battery	1450mAh Lithium polymer
Charging	Charging via USB or inductive charging
External LED's	Visual detector status
Device status indicator	External LED

## HARDWARE COMPLIANCE

Vibration	ANSI N42.32 section 9.1
ESD immunity	ANSI N42.32 section 8.1
Radiated emissions	ANSI N42.32 section 8.4
Drop test	ANSI N42.32 section 9.2
Impact (microphonics)	ANSI N42.32 section 9.3
Software	
Graphic user interface	Android Smartphone
Spectra storage	ANSI N42.42 compliant
Spectra sharing	Via email

**kromek**<sup>®</sup>  
detect image identify

