

Features

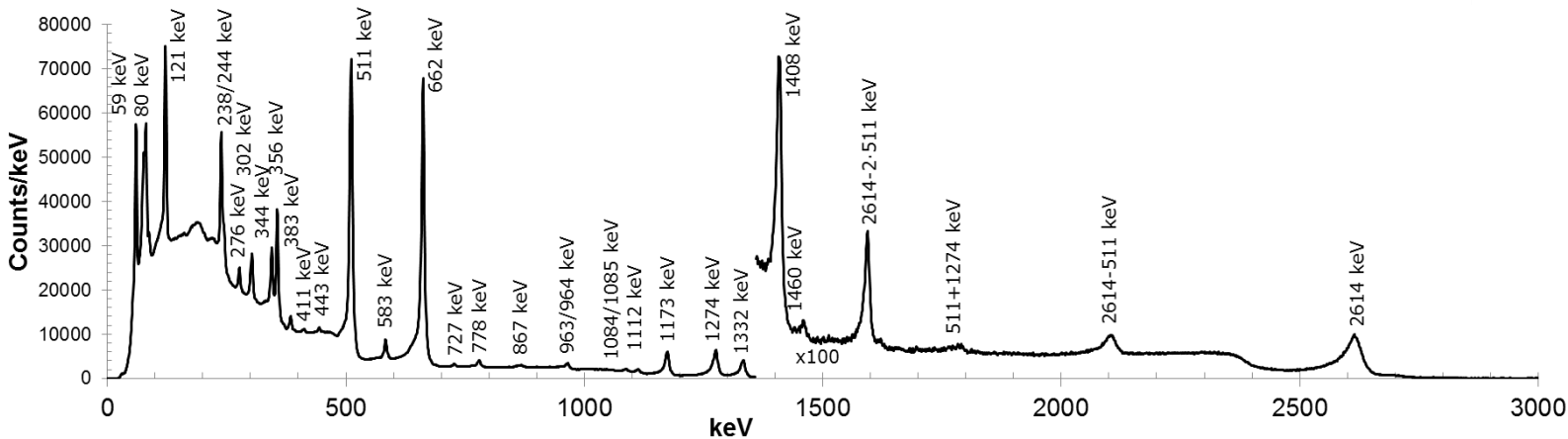
- ✓ Practical high-performance gamma-ray spectrometer
- ✓ Compact and portable
- ✓ Designed to exceed ANSI N42.34
- ✓ Better than 1.0% FWHM energy resolution at 662 keV
- ✓ Real-time 360° isotope-specific directionality
- ✓ Ready to use in only 2 minutes
- ✓ Industry-leading efficiency with over 19 cm³ pixelated CZT
- ✓ No cryogenic cooling required
- ✓ Energy range covers isotopes of interest up to 3 MeV
- ✓ Real-time isotope detection and identification
- ✓ Embedded user interface with one-handed operation
- ✓ Storage case included
- ✓ Removable battery
- ✓ Software updates included
- ✓ Wireless connectivity
- ✓ Network webpage interface for mobile devices

The H3D® A400 is the new standard in radioisotope identification devices (RIIDs). Designed to meet your needs, experience:

- ☐ High energy resolution
- ☐ High efficiency
- ☐ Directionality
- ☐ Compact and ergonomic design

The most advanced semiconductor technology available to achieve spectroscopic performance competitive with cryogenically cooled detectors for:

- ☐ Border security
- ☐ First responders
- ☐ Military and defense
- ☐ Environmental radiation measurements



A400 Specifications

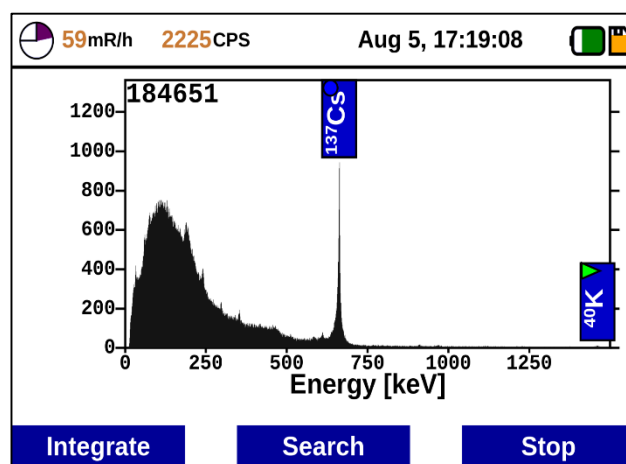
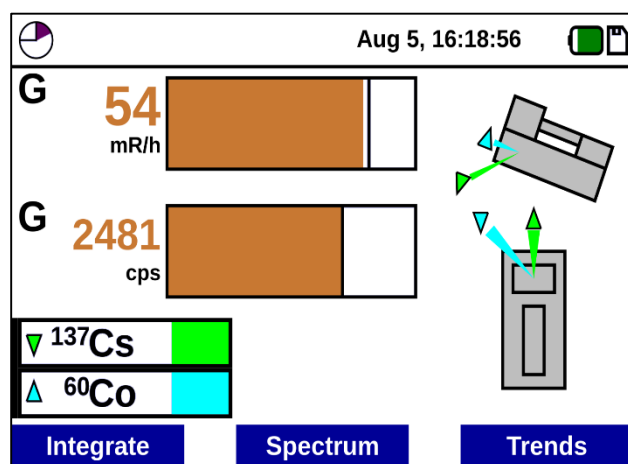
Dimensions:	5.5 in x 11 in x 4 in (14 cm x 28 cm x 10 cm)
Weight:	5.0 lbs. (2.3 kg)
Battery Life:	8 hours at 23° C (73° F)
Power Supply:	100-240 V, 47-63 Hz
Operating Temperature:	-20° C to 50° C (-4° F to 122° F)
Operating Humidity:	Up to 93% at 35° C (95° F)
Ingress Protection:	IP66
System Cooling:	Internal heat sink and fans
Energy Resolution:	≤ 1.0% FWHM at 662 keV (gamma rays)
Sensitivity:	Detects 10-μCi ¹³⁷ Cs at 1 m (~3 μR/hr) in < 22 s (in natural backgrd) Localize 10-μCi ¹³⁷ Cs point source of at 1 m (~3 μR/hr) in < 90 s
Energy Range:	50 keV to 3 MeV (spectroscopy) 100 keV to 3 MeV (directionality)
Gamma-Ray Detector:	>19 cm ³ CZT (CdZnTe) GM-Tube for high dose rate
Neutron Detector:	2.5 in x 0.45 in Ø (6.35 cm x 1.14 cm Ø) 20-atm ³ He Tube (optional)
Neutron Sensitivity:	5.1 cps/nv (thermal)
Count-Rate Limit:	0.5 rem/hr (5 mSv/hr) bare- ¹³⁷ Cs equivalent for spectroscopy 10 rem/hr bare- ¹³⁷ Cs equivalent for dose rate
Isotope Library:	Select from 3573 ENDF isotopes & user defined; unlimited
Startup Time:	<120 s
User Interface:	3.5" embedded screen with 3-button control Internet-browser based interface
Views:	Spectrum, identifications, dose, count-rate history, status information
Communication:	Wifi and Bluetooth
Data Storage:	32 GB internal
Data Stored:	ANSI N42.42 xml file
GPS:	Embedded
Predicted Certifications:	UL, ANSI N42.34
Warranty:	2 years (includes annual recalibration and software updates)
Includes:	Power cables IM2100 Pelican™ Storage Case

About H3D, Inc.

H3D® is commercializing CZT-based 3D radiation-imaging technologies for nuclear power plant, defense & homeland security, and medical applications. A 2011 spinout from the University of Michigan, we have performed sponsored research for the Defense Threat Reduction Agency, Department of Energy NA-22, and National Institutes of Health. We currently ship H100 to nuclear power plants and research labs around the world, and we have several additional product variants in the development pipeline or undergoing customer feedback trials. Our team has over 100 years of combined experience in Compton Imaging, CZT readout, and system integration. We are privately held, market-driven, and committed to providing our customers with the highest performance and most user-friendly instruments possible.

Lower-Efficiency Option (A100)

Reduce CZT volume:
Weight: 4.9 lbs (2.2 kg)
Sensitivity: Detection and localization times increased by 3x
Crystal Volume: >4.5 cm³ CZT



Representative Embedded-Screen Views



H3D®, Inc. • 812 Avis Drive • Ann Arbor, MI 48108 • USA
Tel +1 734-661-6416 • sales@h3dgamma.com • www.h3dgamma.com

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