

Features

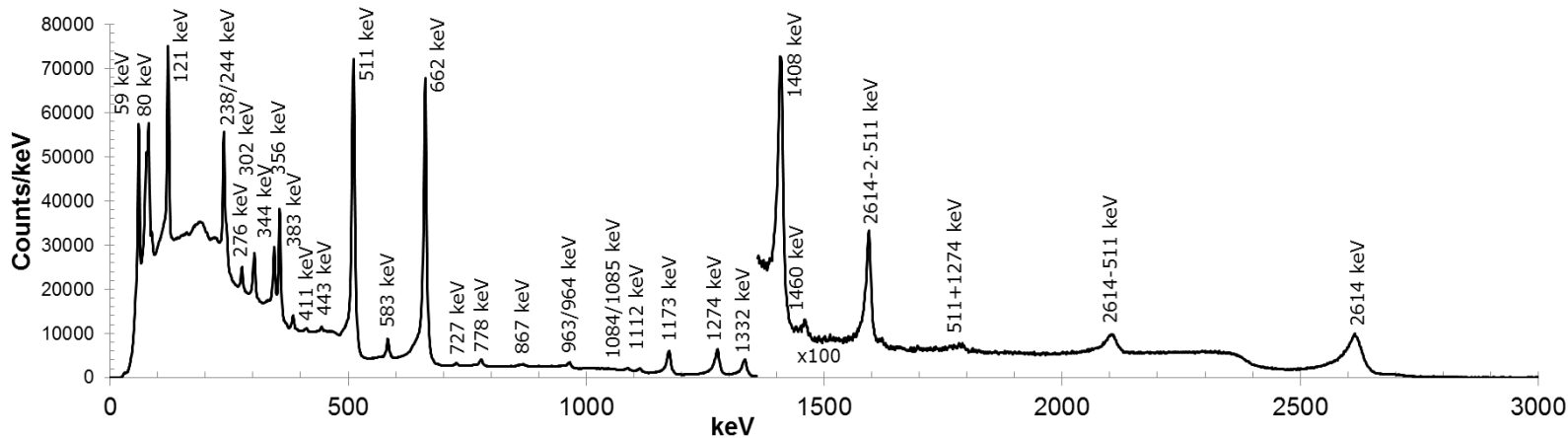
- ✓ Practical high-performance gamma-ray spectrometer
- ✓ Compact and portable
- ✓ Designed to exceed ANSI N42.34
- ✓ Better than 1.0% FWHM energy resolution at 662 keV
- ✓ Real-time 360° isotope-specific directionality
- ✓ Ready to use in only 2 minutes
- ✓ Industry-leading efficiency with over 19 cm³ 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 lbs (2.3 kg)
Battery Life:	9 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:	IP67
System Cooling:	Internal heat sink and fans
Energy Resolution:	≤ 1.0% FWHM at 662 keV (gamma rays)
Sensitivity:	Detects 10- μ Ci ^{137}Cs at 1 m (~ 3 $\mu\text{R/hr}$) in < 22 s (in natural backgrd) Localize 10- μ Ci ^{137}Cs point source at 1 m (~ 3 $\mu\text{R/hr}$) in < 90 s to $\pm 3^\circ$
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
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
Startup Time:	<2 minutes at 23° C (73° F) <6 minutes at -20° C or 50° C (-4° F or 122° F)
Isotope Library:	Select from 3573 ENDF isotopes & user defined; unlimited
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.

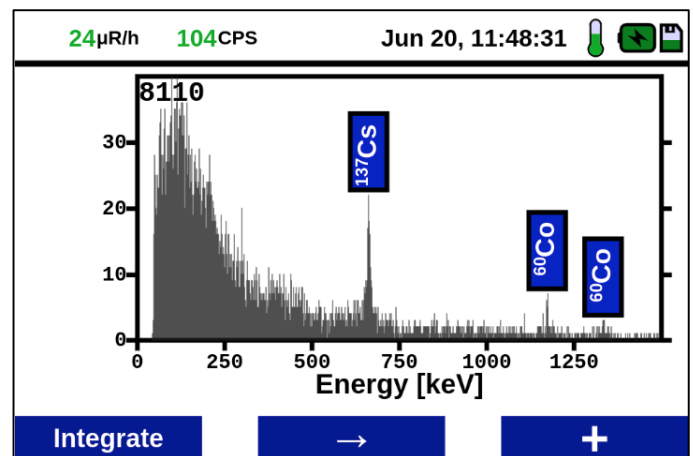
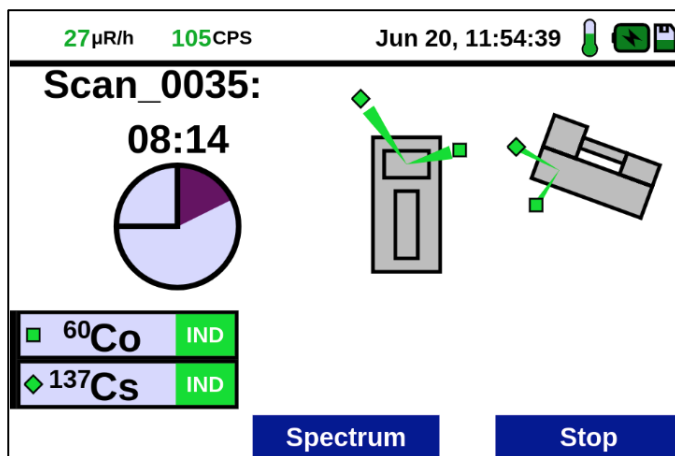
H3D® is commercializing CZT-based 3D radiation-imaging technologies for nuclear power plant, defense & homeland security, and medical applications. A 2011 spinout from the University of Michigan, we have performed sponsored research for the Defense Threat Reduction Agency, Department of Energy NA-22, and National Institutes of Health. 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.

Neutron-Detector Option (A401)

Add 2.5 in x 0.45 in \varnothing (6.35 cm x 1.14 cm \varnothing) 20-atm ^3He Tube
Neutron Sensitivity: 5.1 cps/nv (thermal)

Lower-Efficiency Option (A100)

Reduce CZT volume:
Weight: 4.9 lbs (2.2 kg)
Sensitivity: Detection and localization times increased by 4x
Crystal Volume: >4.5 cm³ CZT



Representative Embedded-Screen Views



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