

Features

- ✓ Records exact interaction positions and energies from high-energy high-flux gamma rays
- ✓ Better than 1.1% FWHM energy resolution at 662 keV
- ✓ No cryogenic cooling required
- ✓ Compact
- ✓ Operates in high dose rates
- ✓ Precise event time stamps for event correlation
- ✓ Fully user-defined coincidence module
- ✓ 16 independent readout CPUs to maximize event throughput
- ✓ Highly efficient with over 3.9 lbs (1.7 kg) of CdZnTe
- ✓ Two planes of position-sensitive detectors for maximum Compton-imaging efficiency
- ✓ Energy range to over 6 MeV
- ✓ Real-time spectrum view
- ✓ Multi-threaded file transfer over Ethernet
- ✓ Start up in only 2 minutes
- ✓ Software updates included
- ✓ Annual recalibration and software updates included

The H3D[®] J6400 is designed to Compton image high-energy, high-flux gamma rays produced during proton-therapy treatment. Designed for high performance, the compact J6400 has

- High energy resolution
- High timing resolution
- High efficiency
- High count-rate throughput

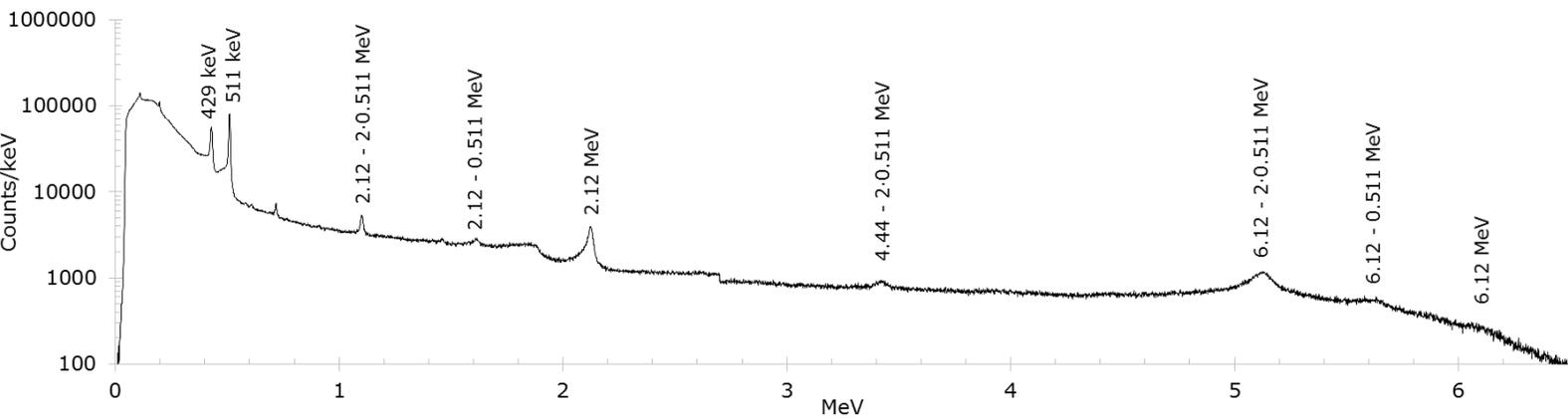
In a user-friendly package, the J6400 requires only a single power and Ethernet cable and includes PC interface software to download data.

The J6400 can also be used in applications such as

- Security monitoring
- Laboratory measurements
- Fundamental science measurements



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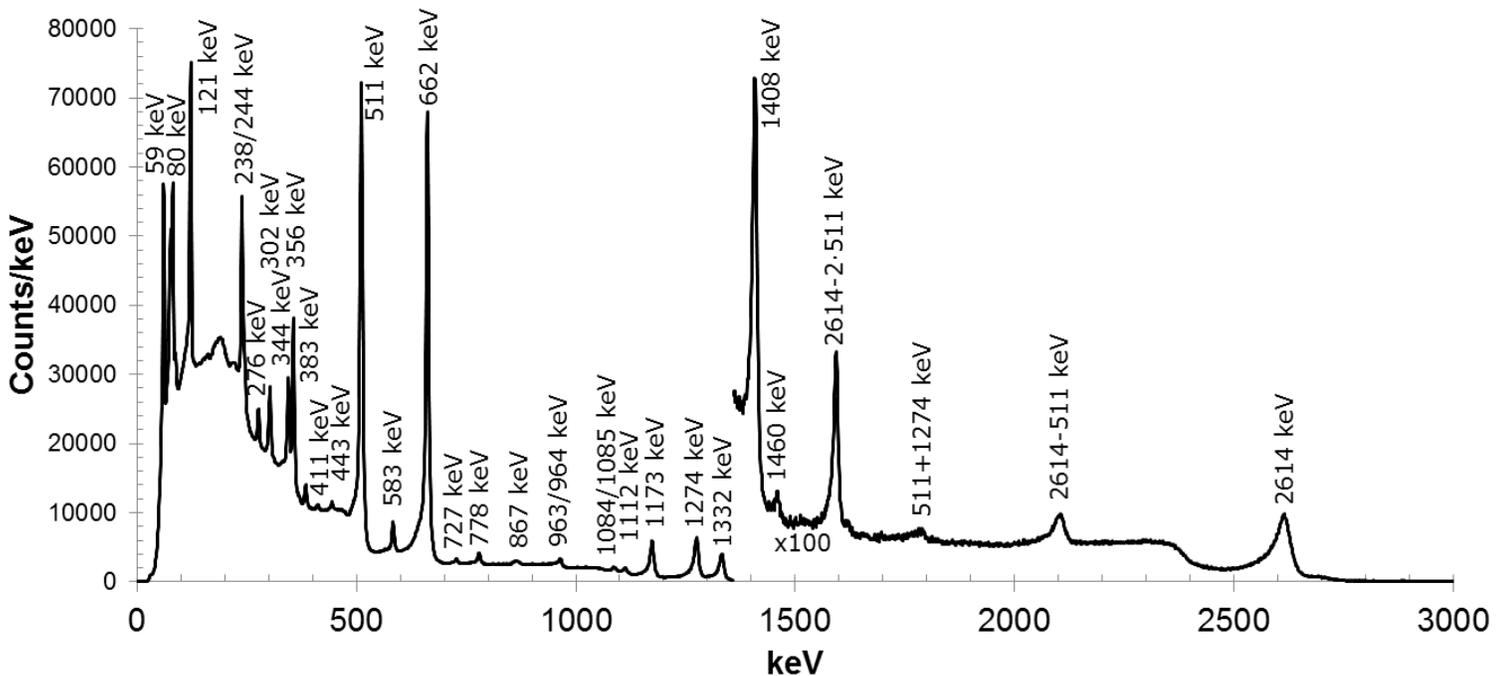


About H3D, Inc.

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.

J6400 Specifications

Dimensions:	15.7 in x 5.3 in x 18.9 in (40 cm x 13 cm x 48 cm)
Weight:	36 lbs (16.3 kg)
Power Supply:	100-240 V, 50-60 Hz
Power Consumption:	100 W at 23° C (73° F)
Startup & Operating Temp.:	10° C to 35° C (50° F to 95° F)
Storage Temperature:	-20° C to 60° C (-4° F to 140° F)
System Cooling:	Peltier cooler and external fan
Energy Resolution:	≤1.1% FWHM at 662 keV
Sensitivity:	Detects ¹³⁷ Cs producing ~3 μR/hr (10 μCi at 1 m) in <3 s
Energy Range:	50 keV to 3 MeV per detector pixel
Crystal Volume:	310 cm ³ CZT (CdZnTe) (smaller and larger volumes available)
Detector Pixels:	7744
Spatial Resolution:	< 1 mm (at 240 kcps) < 2 mm (at 480 kcps)
Timing Resolution:	<100 ns
Coincidence:	FPGA-level master-slave architecture
Coincidence settings:	User defined
Readout Architecture:	16 independent chains, each with CPU, FPGA, 4 ASICs/Crystals
Startup Time:	2 min
Communication Mode:	Ethernet RJ45 port; TCP/IP
Interface Software:	PC-based graphical user interface
Software Capabilities:	Control; real-time spectral view; list-mode data download
Data Storage:	16 removable USB drives (16 GB each) included with system
Warranty:	2 years (includes annual recalibration and software updates)
Includes:	Power cables; mounting brackets



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