

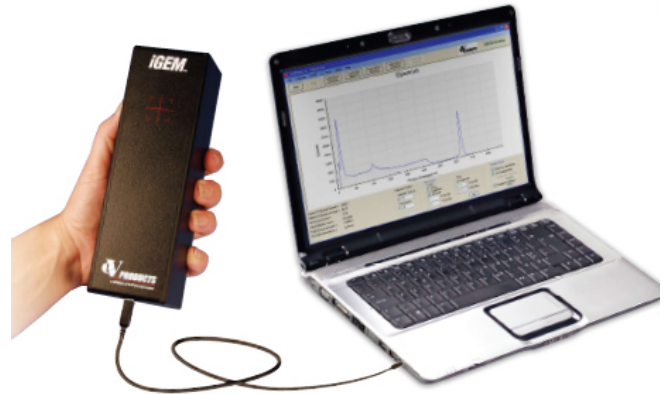


iGEM™ Spectroscopy System

Fully Integrated eV-CZT® Detector/MCA system

The iGEM™ Spectroscopy System is an ideal demonstration system for the iGEM Sensor Module and for laboratory users to quickly perform spectroscopy. Designed to accommodate eV-CZT® CPG, the iGEM System requires only one USB cable to control and power the entire device. iSpectrum™ software, a convenient user interface and control software for fast and accurate spectral measurements, is included.

The iGEM Spectroscopy System is a high resolution CZT based system allowing for room temperature measurements. No NIM bin or separate MCA is required. It is simple to use with one cable operation. It is also highly portable.



Applications

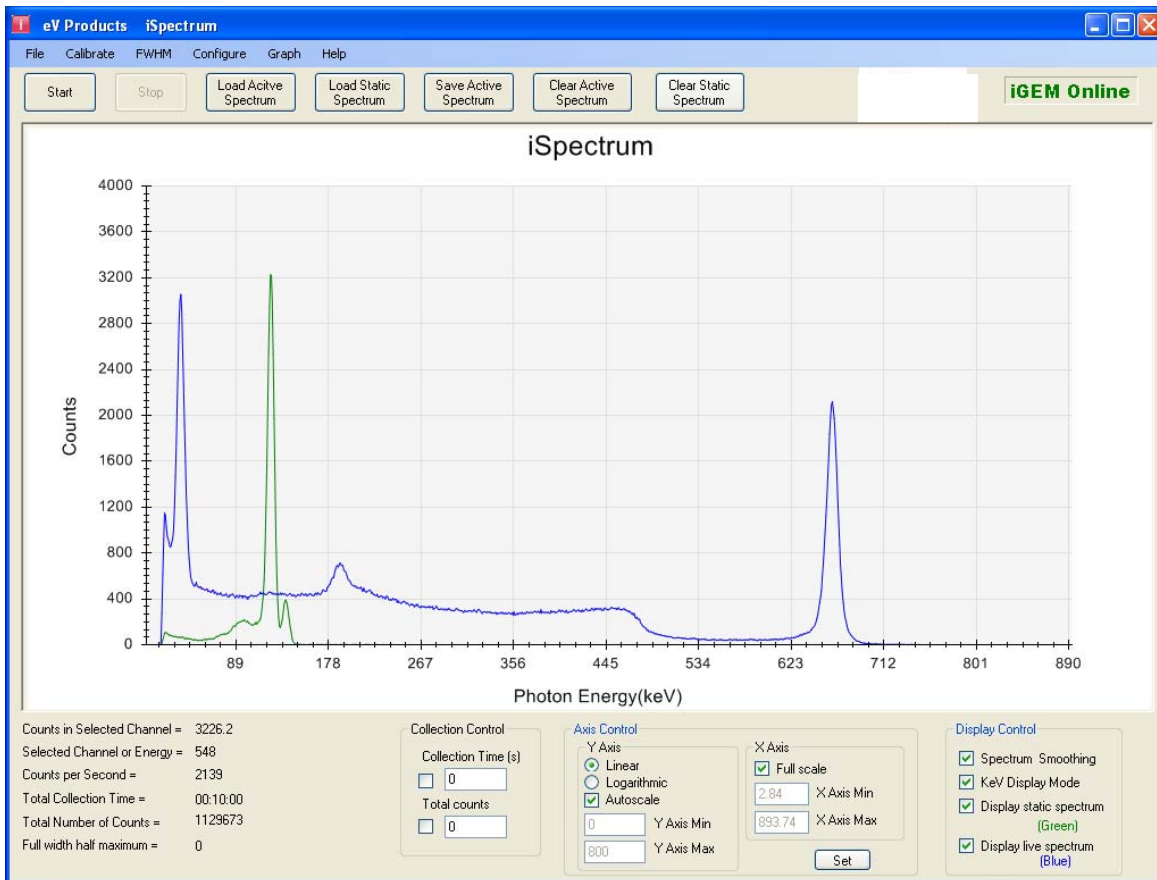
- Gamma Ray Spectroscopy
- X-ray Spectroscopy
- Isotope Identification
- Health Physics
- Classroom

Features

- Low Power
- High Resolution
- Low Power eVASIC™
- On-board 12 Bit MCA
- On-board Microprocessor
- USB 2.0 Communication
- Internal HV Supply

Software Features

- Collect and Store Spectrum
- Display Spectrum
- Compare Current with Static Spectrum
- Program Spectrum Collection in Time and Total Number of Counts
- Linear or Logarithmic Graph Display Options
- Calculate FWHM (keV and ADC channels)
- Spectrum Smoothing Function



Specifications

- Housing Dimensions:
 - 183mm x 60mm x 55mm
- Measurement Capabilities
 - Energy Range: 30keV to 3MeV
- Operating Temperature
 - Range: +10° to +35° C Standard
 - Reduced Energy Resolution outside of this temperature range**
- Weight:
 - 275 Grams
- Power: Full System <2.5W
- Input Requirements
 - USB 2.0 Full Bus Power (0.5A)
- Output Requirements:
 - USM 2.0
- Up to 25,000 counts per second
- Includes eVASIC™ (low power preamp/shaper integrated circuit), 12Bit A/D (MCA), Microprocessor



iSPECTRUM™