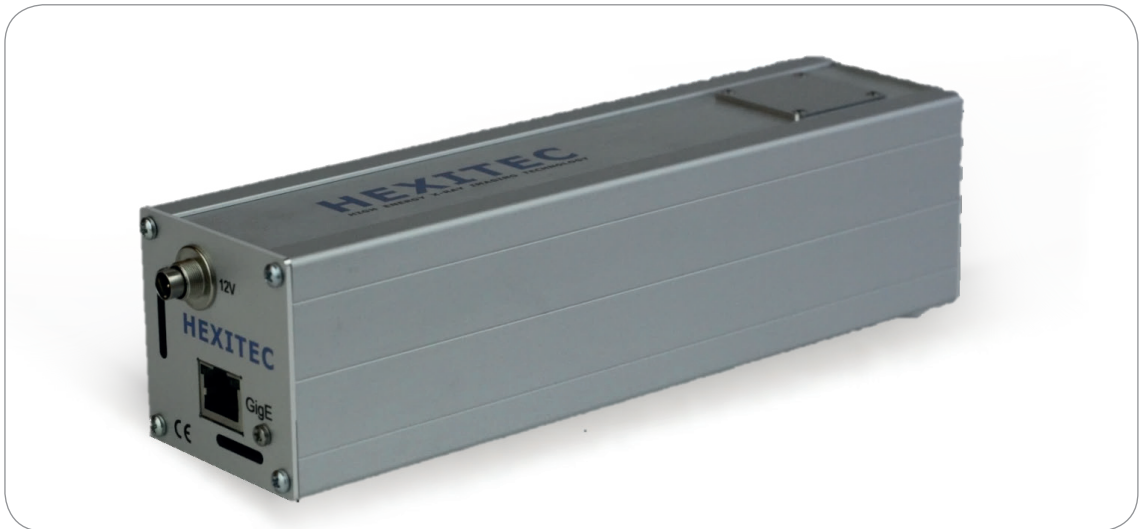


HEXITEC

HIGH ENERGY X-RAY IMAGING TECHNOLOGY



A fully spectroscopic hard X-ray imaging detector

The HEXITEC detector measures the energy and position of every incident photon in the 4-200keV range. Each one of the 80x80 pixels provides a full energy spectrum with an average energy resolution of 800eV FWHM at 60keV.

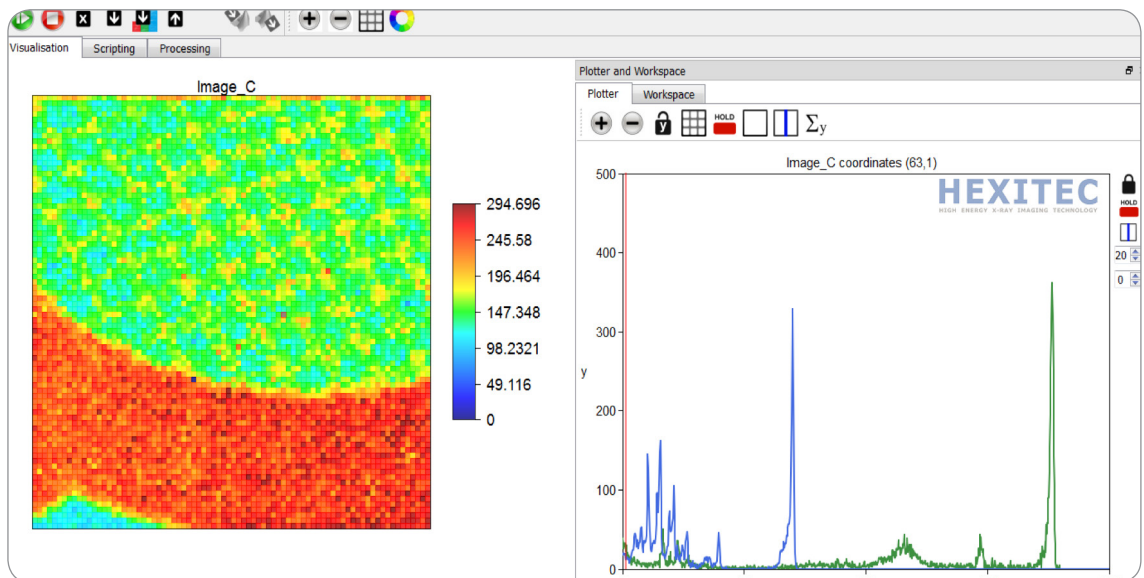
The HEXITEC 8080 is a self-contained, module that only requires a mains power supply and connection to a PC or Laptop. It can be supplied with a user friendly GUI to operate the detector and provide calibrated spectra per pixel or industry standard Gig-E-Vision APIs for users to integrate into their own systems.

Features	
Energy Range	4-200keV
Energy Resolution per Pixel	800eV average at 60keV
Frame Rate	9 kHz
Data Rate	5M photons/second
Standard Detector Material	1mm thick CdTe
Dimensions	21x5x5cm
Weight	700g
Interface	Gig E Vision
Pixel Size	250µm x250µm
Number of Pixels	80x80 = 6400

The unique high energy dispersive X-ray imaging capability of the HEXITEC detector has been demonstrated in a number of applications including:

KEY features & benefits

- Energy dispersive diffraction imaging¹
- X-ray fluorescence imaging²
- K-edge enhanced imaging²
- Multiple radio-isotope³



HEXITEC Software

The HEXITEC modules can be supplied with CZT of different thicknesses.



HEXITEC CdTe detector inside the HEXITEC

References:

1. O'Flynn et al., *Crime Science* 2013, 2:4.
2. Jacques et al, *Analyst*, 2013, 138, 755
3. Scuffham et al,
[doi:10.1088/1748-0221/7/08/P08027](https://doi.org/10.1088/1748-0221/7/08/P08027)