

HES – Spectrometer



IS- Instruments HES spectrometers are ideal for low light applications including Raman and Fluorescent spectroscopy. These devices are compact and offer a hundred fold increase in etendue / throughput over conventional Czerny turner systems. They require no slit to achieve high resolution performance and ideal for integration into larger systems

Key Features

- Up to 100 times improvement in etendue / throughput
- Requires no slit
- Fibre coupled
- High spectral resolution option available ($< 4 \text{ cm}^{-1}$)
- Both cooled and uncooled detector options
- UV – NIR options

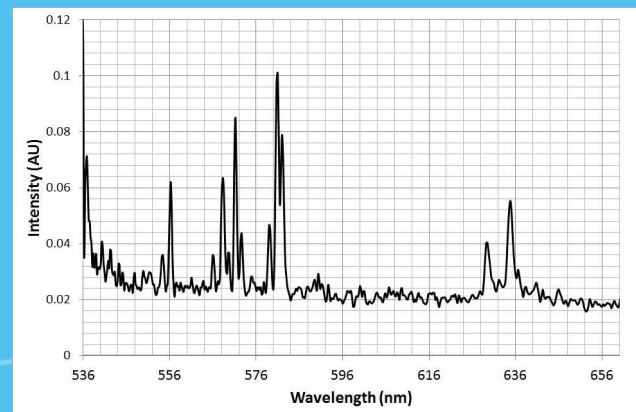


Fig 1 HES acquired Raman spectra of Paracetamol

Applications

- Raman and fluorescent spectroscopy
- Ideal for spatially offset and Transmission Raman measurements
- Fig 1 shows a Raman spectra of a Paracetamol tablet acquired with HES in transmission*
- Absorption and reflectance spectroscopy

Typical configuration

Wavelength range	800 – 1020 nm	
Resolution	4.7 cm^{-1}	
Fibre aperture	1 mm	
Fibre Na	0.22	
Detector Dark counts	Cooled	$\geq 0.0002 \text{ e/pix/sec}$
	Uncooled	$\geq 0.3 \text{ e/pix/sec}$