

# S-EOS™ HYPER SPECTRAL CAMERA



STANDARD PRODUCTS	Spectral Range (nm)	Bandwidth (FWHM) (nm)
S-EOS	1000-2300	4

Thanks to a unique and patented design, S-EOS™ delivers a series of monochromatic images at user-specified wavelengths. This optimized hyperspectral cube allows for spectral analysis of each and every pixel of a full resolution image, meaning no more fastidious x-y scanning of the samples, or limiting exposure time of remote sensing acquisition. Resulting in more than just an increase in efficiency, S-EOS™ provides data on both spectral and spatial content, allowing you to perform new analyses and push the boundaries of your most demanding applications. With a narrow spectral resolution and an operating range of 1 μm to 2.5 μm, our hyperspectral imager is perfectly suited for skin research, mining, material analysis and more. First developed for faint object observation in astronomy, this hyperspectral imaging technology has been expanded for use in a large number of scientific and industrial applications, where it has introduced new possibilities for measurement and analysis.

PERFORMANCE	
Spectral Channels	Continuously tunable
Spectral Range	1000 to 2300 nm
Entrance Slit Size	No slit / Full field of view measured for each wavelength
Spectral Width Sampling	≥ 0.2 nm programmable
Spectral Resolution	4 nm
Spectral Image Rate	15-20 fps
Pixel Size	30 μm
Dynamic Range (digitization)	14 bit
Sensor Frame Rate	Up to 346 fps
Camera Type	FPA
Camera Acquisition (linear or matrix)	Matrix
Lens Mount Standard	C-Mount (option for CS-Mount)
Cooling	Yes
Camera Interface	Camera Link™
Frame Grabber Needed	Yes
Exposure Control	PhySpec™ software controlled
Detector Type	HgCdTe (MCT)

SOFTWARE & DATA PROCESSING	
Operating System	Windows XP SP2, Vista, 7
Acquisition	PhySpec™ Software
Preprocessing	Image stabilization, spatial filtering, statical tools, spectrum extraction, data normalization, spectral calibration
Hyperspectral Data Format	FITS
Single Image Data Format	FITS, PNG, TIFF, JPG
Spectrum Data Format	JPG, PNG, TIFF, CSV, PDV, SGV
Option	C++ SDK plugin interface included

DIMENSIONS, WEIGHT & POWER	
Footprint	305 mm x 610 mm x 270 mm
Weight	20 Kg
Power Consumption	≤ 25 W (including detector)
Power Supply	24 V

PORTABILITY	
Mounting	305 mm x 610 mm optical breadboard; 1/4 imperial threaded
Tripod	Optional

ENVIRONMENTAL CONDITION	
Operation Temperature	10°C to 40°C
Storage Temperature	0°C to 50°C

ACCESSORIES	
Computer	Not included
Reference Panels	Reflectance standard and calibration lamp

# HYPERSPPECTRAL IMAGING & SPECTROSCOPIC INSTRUMENTS

Photon etc is a specialized manufacturer of unique optical instruments. From UV to NIR, our spectroscopic and hyperspectral imaging technologies based on Bragg tunable filters offer the highest performance in the field. Founded in 2002 to offer astronomy the most advanced filtering technology, Photon etc continues to develop innovative instruments for the most demanding applications from material analysis to medical imaging.

Whether you need standard or custom products, our scientists and engineers will work to create an instrument that meets your specifications. Photon etc's main products include Hyperspectral Imaging System, Tunable Laser Source, Laser Line Tunable Filter and Tunable Top Notch Filter.

## DISTRIBUTORS

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