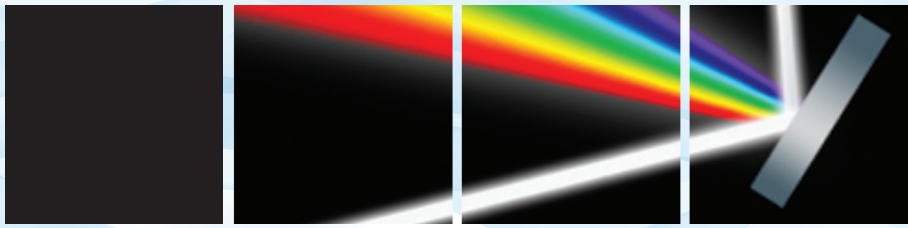
HORIBA Scientific

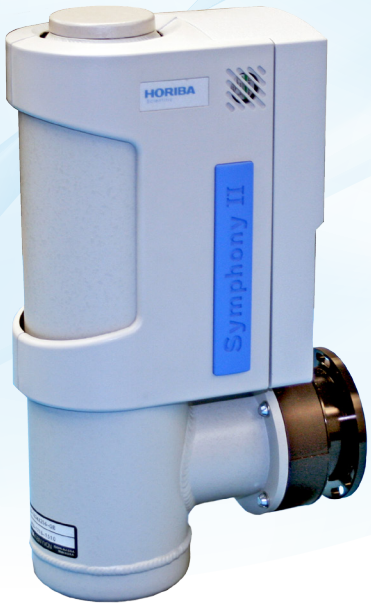
Symphony II FIOE Scientific CCD Camera

Scientific CCD Camera

ELEMENTAL ANALYSIS
FLUORESCENCE
GRATINGS & OEM SPECTROMETERS
OPTICAL COMPONENTS
FORENSICS
PARTICLE CHARACTERIZATION
RAMAN
SPECTROSCOPIC ELLIPSOMETRY
SPR IMAGING

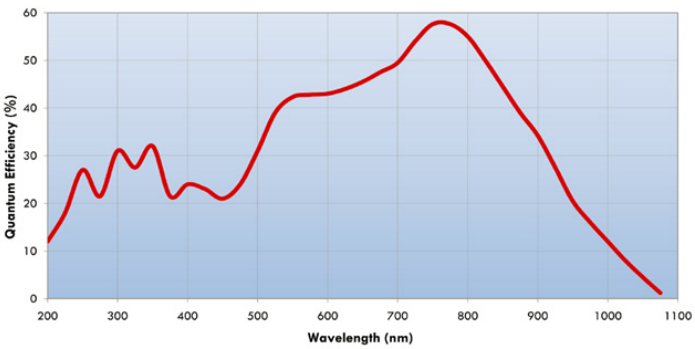
Front Illuminated Open Electrode Sensor, -133°C 1024 x 256 pixels, Part #: SII-1LS-1024X256-OE-PS, SII-3LS-1024X256-OE-PS





The Symphony II FIOE scientific CCD camera is the ideal camera for limited budgets. It has a peak quantum efficiency of 58%, boasts very good resolution and sensitivity and can be used for a variety of spectroscopy.

QE Curve, Symphony II FIOE CCD



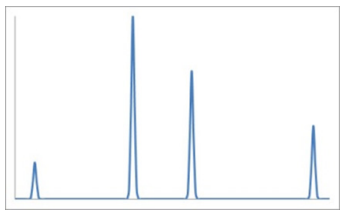
Features and Benefits

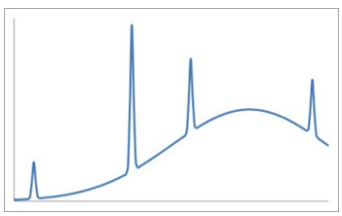
- Best value
- Deep liquid nitrogen cooling
- Ideal for low light level detection without etaloning
- Excellent linearity
- Single channel detector port extends wavelength range
- E2V Scientific Grade 1 CCD
- Lifetime vacuum warranty
- USB 2.0 Interface
- HORIBA SynerJY acquisition and analysis software
- LabVIEW VI's and SDK available

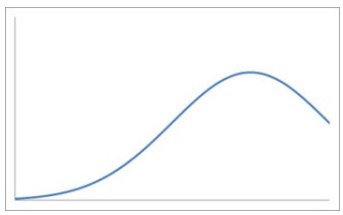
Primary Applications

An excellent low cost choice for fine and broad spectrum analysis such as photoluminescence, it is also well suited for studying fine spectral features on a broad spectral background.

- Fluorescence
- Raman
- Photoluminescence
- Absorption
- Transmission
- Reflectance



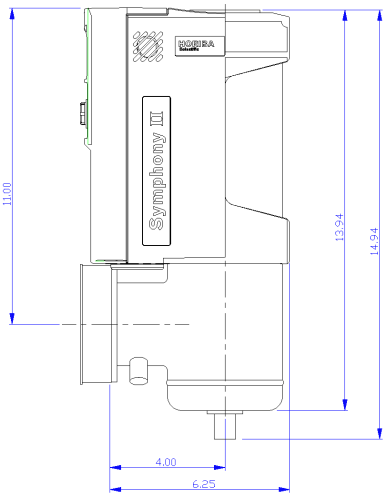


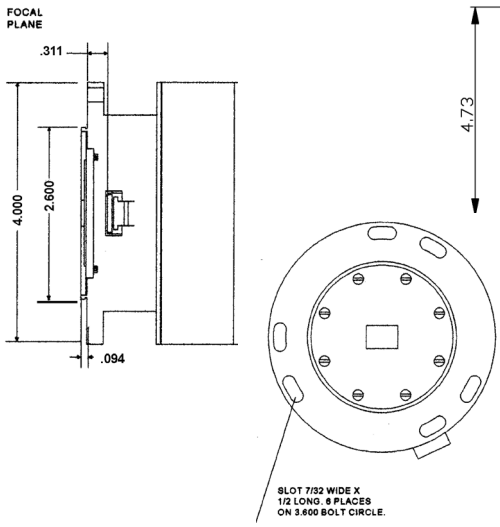


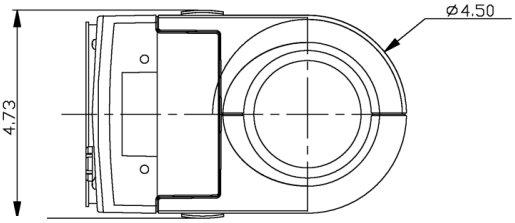
Specifications

CCD format		1024 x 256, front-illuminated open electrode, Scientific Grade 1
Pixel size		26 µm x 26 µm
Image area		26.6 mm x 6.7 mm, 100% fill factor
Cooling system		Liquid nitrogen
Hold Time	**1 LS Model**	24 hours with 1 L Dewar
	3 LS Model	72 hours with 3 L Dewar
Typical readout noise	**20 kHz**	3.4 e- rms
	1 MHz	12 e- rms
Maximum readout noise	**20 kHz**	5 e- rms
	1 MHz	20 e- rms
Minimum pixel well capacity		200 ke-
Typical pixel well capacity		450 ke-
Typical register well capacity		1000 ke-
Typical dark current		0.5 e-/pixel/h
Nonlinearity	**20 kHz**	<0.4%
	1 MHz	<1%
Scan rates		20 kHz and 1 MHz, software-selectable
Software-selectable gains		3 software-selectable gains
Dynamic range		16 bits
Vertical shift rates		36 µs, 9 µs
Maximum spectral rate	**20 kHz**	13 Hz
	1 MHz	278 Hz

Mechanical Dimensions







Optical Building Blocks

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