

The standard for UV spectroscopy

Symphony[®] II 1024 × 256 Cryogenic Front-Illuminated UV-Sensitive CCD Detector

The HORIBA Scientific Front-Illuminated UV-Sensitive 1024 × 256 CCD is ideal for low-noise acquisitions required in a wide variety of spectroscopic applications. Its 26 μm × 26 μm pixel size offers a high full well capacity, a large dynamic range and an excellent signal-to-noise ratio. The height of this chip makes it the best choice for multitracking measurements or full 6.7 mm binning in the UV to near-IR spectral regions for an increased signal-to-noise ratio.

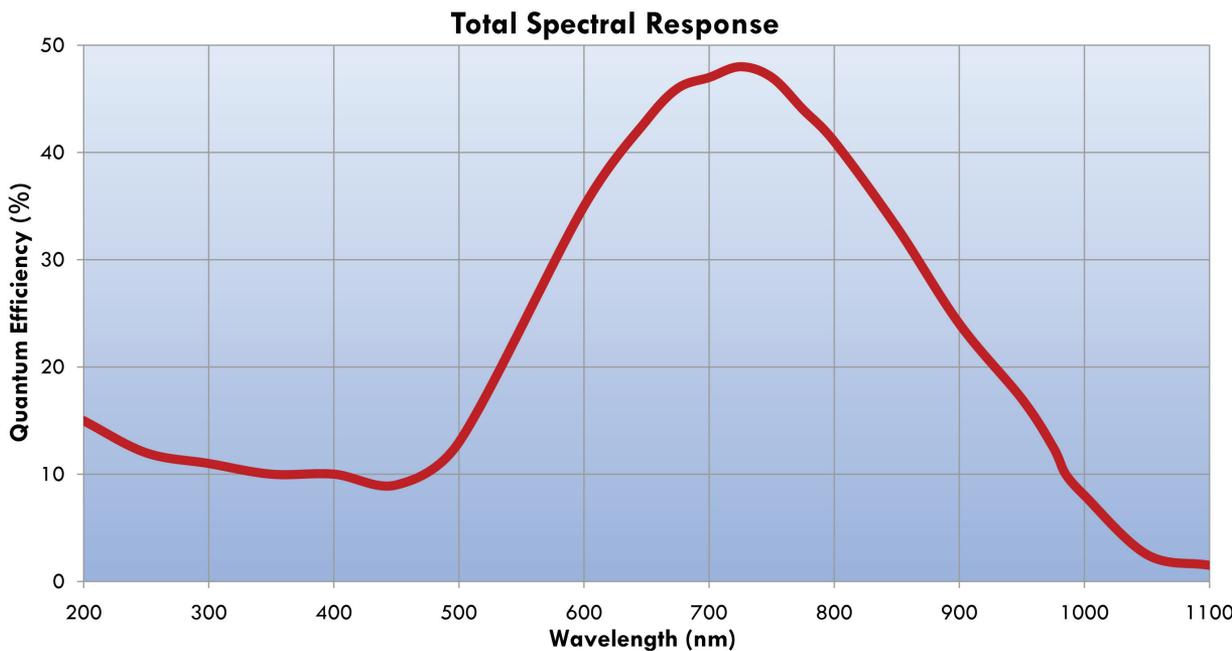


Feature	Spectroscopy Benefits
Scientific Grade 1 CCD	Ideally suited for low light level detection in a variety of spectroscopic applications
UV-enhanced Coating	UV response down to 200 nm
Liquid-nitrogen Cooling	Extremely low dark signal for extended integration times required with low signals
Excellent Linearity	Increased accuracy of data over the full dynamic range
Software-selectable Scan Rates	Optimize an experiment for the best combination of speed and sensitivity
USB 2.0 Interface	Standard connection to PC notebooks and desktops with 100% data integrity
HORIBA Scientific's SynerJY [®] Software	Complete control of a Symphony II CCD and HORIBA Scientific Spectrograph system with full analysis capabilities
Auxiliary Signal Input	Unique ability to add measurements from single-channel detectors without additional electronics.
LabVIEW [™] VIs and SDK Available	Flexible software to integrate a Symphony II CCD into existing apparatus or as an OEM component



CCD Format	1024 × 256, front-illuminated, UV-enhanced, Scientific Grade 1			
Pixel Size	26 μm × 26 μm			
Image Area	26.6 mm × 6.7 mm, 100% fill factor			
Cooling System	Liquid nitrogen			
Hold Time	1LS Model	24 hours with 1 L Dewar		
	3LS Model	72 hours with 3 L Dewar		
		Minimum	Typical	Maximum
Readout Noise	20 kHz		3.4 e ⁻ rms	5 e ⁻ rms
	1 MHz		15 e ⁻ rms	20 e ⁻ rms
Pixel Well Capacity	350 ke ⁻		500 ke ⁻	
Register Well Capacity			1000 ke ⁻	
Dark Current			0.3 e ⁻ /pixel/h	
Nonlinearity			< 0.4% at 20 kHz	
			< 1% at 1 MHz	
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	20 kHz	13 Hz		
Spectral Rate	1 MHz	278 Hz		

*Specifications subject to change without notice.



HORIBA

Scientific

ELEMENTAL ANALYSIS

FLUORESCENCE

GRATINGS &
OEM SPECTROMETERS

OPTICAL COMPONENTS

PARTICLE CHARACTERIZATION

RAMAN

SPECTROSCOPIC ELLIPSOMETRY

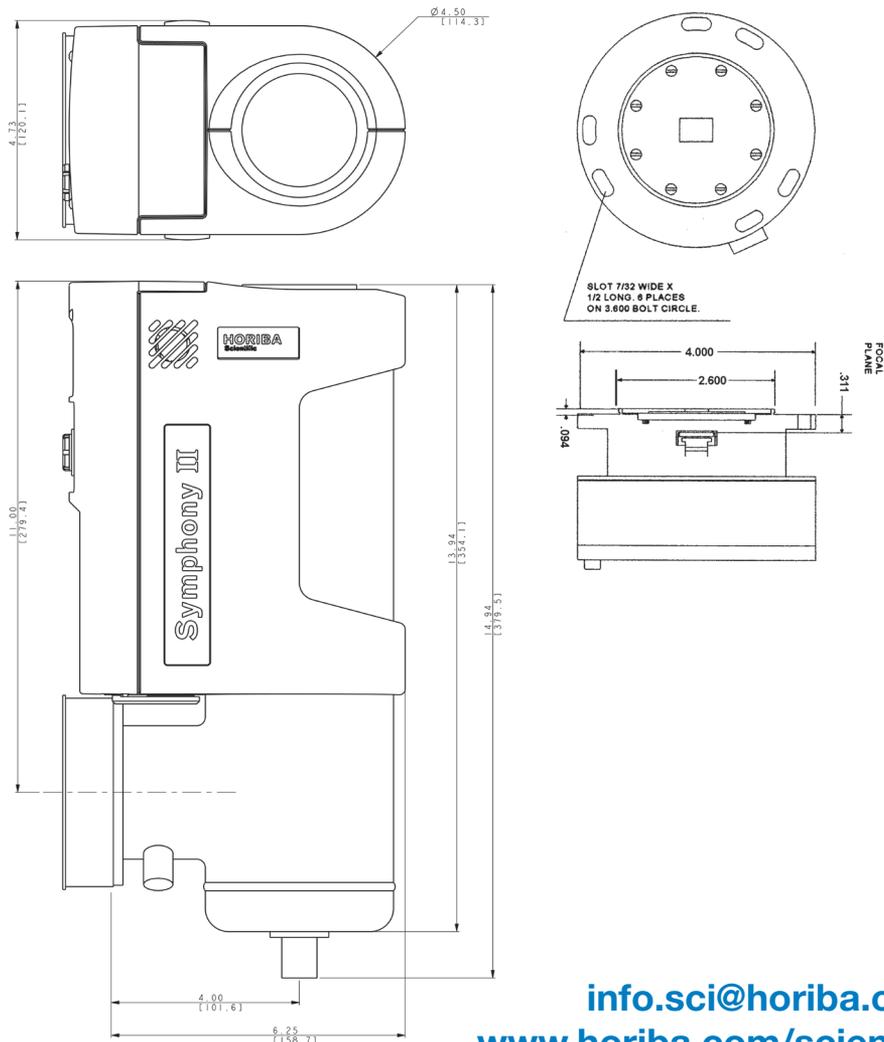
SPR IMAGING

Ordering Information:

SII-1LS-256-FU Liquid Nitrogen Cooled CCD System with 1 Liter Side-Looking Dewar

Our CCD packages include a CCD shutter for clean CCD charge transfer and background subtraction. To transfer liquid nitrogen to the CCD Dewar, we recommend our appropriately-sized funnel, part # G3200111328.

Mechanical Dimensions



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