



D A T A S H E E T

S P E C T R U M M S E R I E S



SpectruMM:GS256
Acton Research
1024 x 252 imaging array
24 x 24-µm pixels

The SpectruMM:GS256 is a high-performance digital camera system featuring a Hamamatsu spectroscopic-format CCD. The 1024 x 252 imaging array is ideal for general-purpose spectroscopy applications. Its 6-mm height and full 24-mm spectral coverage delivers multistripe capability as well. Dark current is drastically reduced by thermoelectrically cooling the CCD to -30°C. The GS256 sensor is available in the SpectruMM GS series system.

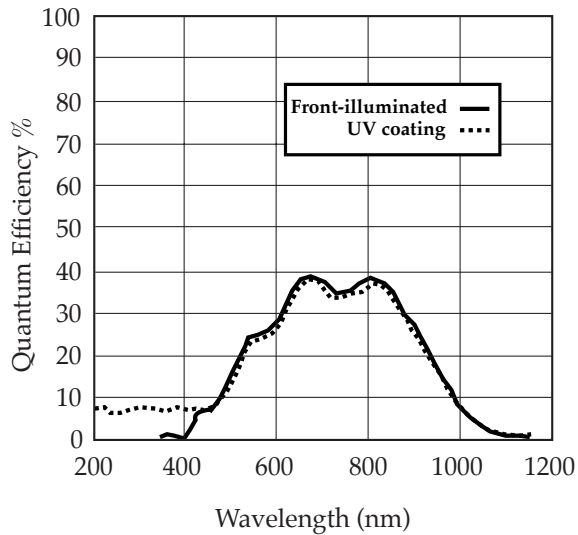
F E A T U R E S		B E N E F I T S	
Hamamatsu CCD sensor		Industry-standard performance	
1024 x 252 imaging array		Ideal format for general-purpose spectroscopy	
24 x 24-µm pixels		Provides excellent resolution and full well capacity	
Lumogen UV-enhancement coating		Extends performance down to the vacuum-UV	
Front-illuminated CCD		Offers affordable, high-quality performance No etaloning	
Low-noise CCD		Ideal for low-light measurements	





D A T A S H E E T

M E T S Y S S M M U R T C E P S



S P E C I F I C A T I O N S

CCD image sensor	Hamamatsu; scientific grade; MPP with lumogen UV-enhancement coating
CCD format	1024 x 252 imaging pixels; 24 x 24- μ m pixels; 100% fill factor; 24.58 x 6.14-mm imaging area
Spectrometric well capacity	550,000 e ⁻
System read noise	<2 ADC counts @ 100 kHz; <5 ADC counts @ 1 MHz
Nonuniformity	\pm 10% over entire CCD (excluding blemishes)
Dynamic range	16 bits @ 100 kHz; 12 bits @ 1 MHz
Scan rate	100 kHz or 1 MHz
Spectral rate	50 Hz full-vertical binning @ 100 kHz; 135 Hz full-vertical binning @ 1 MHz
Dark current	<5 e ⁻ /p/s @ -30°C

Note: Specifications are typical and subject to change.



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Product Literature

Data sheets

Brochures

SpectraPro monochromators

Spectrum Acquisition Systems

Spectroscopy accessories

Guide to system configuration



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Gratings

CCD Chips

GS 1024 x 128 Front

GS 1024 x 128 Back

GS 1024 x 256 Front

GS 1024 x 256 Back

S 1340 x 100 Front

S 1340 x 100 Back

S 1340 x 100 Red

S 1340 x 100 Back Red

S 1340 x 400 Front

S 1340 x 400 Back

S 1340 x 400 Red

S 1340 x 400 Back Red

S 1024 x 256 Front

S 1024 x 256 Open Elect.

S 1024 x 256 Back