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**SpectruMM:GS256B**  
 Acton Research  
 1024 x 250 imaging array  
 24 x 24-µm pixels

The SpectruMM:GS256B is a high-performance digital camera system featuring a back-illuminated Hamamatsu spectroscopic-format CCD. The 1024 x 250 imaging array is ideal for general-purpose spectroscopy. Back-illumination and thermoelectric cooling to -30°C gives the SpectruMM:GS256B the sensitivity and low noise necessary for Raman or weak-fluorescence applications. Its 6-mm height and full 24-mm spectral coverage delivers multistriple capability as well. The GS256B 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

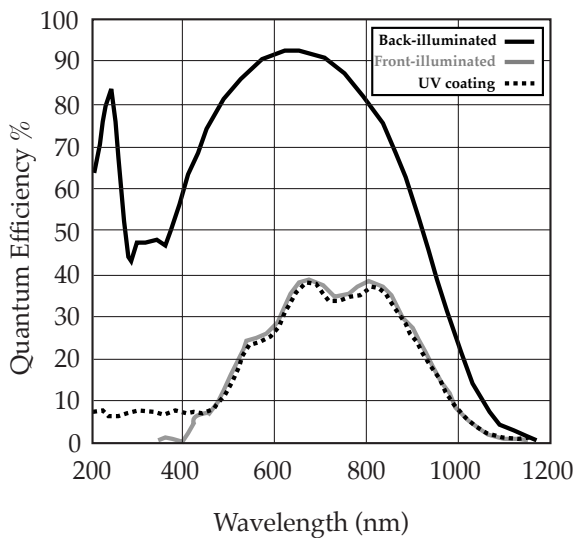
Hamamatsu CCD sensor	Industry-standard performance
1024 x 250 imaging array	Ideal format for general-purpose spectroscopy
24 x 24-µm pixels	Provides excellent resolution and full well capacity
Back-illuminated CCD	Offers higher sensitivity and quantum efficiency
Low-noise CCD	Ideal for low-light measurements





# D A T A S H E E T

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

CCD image sensor	Hamamatsu; scientific grade; MPP; back-illuminated
CCD format	1024 x 250 imaging pixels; 24 x 24- $\mu$ m pixels; 100% fill factor; 24.58 x 6.14-mm imaging area
Spectrometric well capacity	550,000 e <sup>-</sup>
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	<10 e <sup>-</sup> /p/s @ -30°C

Note: Specifications are typical and subject to change.

# Roper Scientific / Acton Research

## Product Literature

## Data sheets

### Brochures

*SpectraPro monochromators*

*Spectrum Acquisition Systems*

*Spectroscopy accessories*

*Guide to system configuration*



**ROPER SCIENTIFIC™**  
ACTON RESEARCH

*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*