SuperGamut™ UV-SWIR Spectrometer

Covering anywhere from 190nm to 2500nm Wavelength Range

BaySpec's ***SuperGamut™*** series UV-SWIR spectrometers are designed to meet real-world challenges for best-in-class performance, long-term reliability, and compact size. Benefiting from experience manufacturing high-volume spectral monitoring devices for the telecommunications industry, BaySpec's spectral devices utilize low-cost field proven components. For the first time in instrumentation history an affordable, accurate and ruggedized spectral device is a reality.

The ***SuperGamut™*** UV-SWIR Series employs highly efficient Volume Phase Gratings (VPG®) as the spectral dispersion element, thereby providing high-speed parallel processing and continuous spectrum measurements. With multiple spectal engines included, The ***SuperGamut™*** UV-SWIR Series provide high resolution spectral data through a wide spectral range of 190 to 2500nm while maintaining an outstanding signal-to-noise ratio.

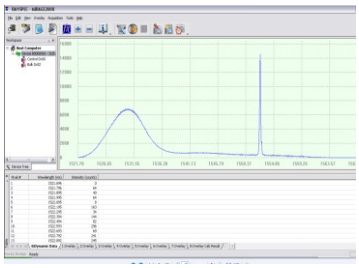
Applications:

- Biochemical
- Chemical Analysis
- Color / Dyes
- Dissolution
- Environmental
- Multicomponent analysis
- Proteins
- QA/QC of mixtures
- Small volume samples
- Sunscreens

Key Features:

- Ruggedized and reliable with no moving parts
- Compact size and high efficiency
- Wide spectral range of 190nm to 2500nm
- Outstanding optical throughput is achieved with f/2 design
- Real-time spectral data acquisition with fast milli-sec response time
- Factory calibrated for long-life and low-maintenance

"Spec 2020" Software



BaySpec's *"Spec 2020"* software included, a Windows-based package with flexible data acquisition, processing and output functionality

BaySpec SDK, a software development kit for new applications development and integration into to your host software systems.

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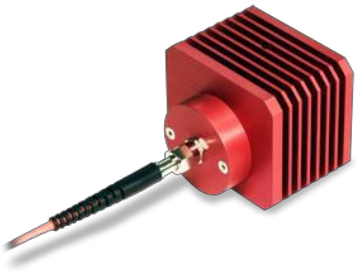
Parameter	Specification		
PERFORMANCE			
Wavelength Range	190-1100nm	900nm-1700nm	1680-2500nm
Resolution	~1-20 nm, slit dependent	~5-20 nm, slit dependent	~6-20 nm, slit dependent
Stray Light	0.05%	0.05%	0.05%
Wavelength Calibration	Factory Calibrated	Factory Calibrated	Factory Calibrated
Integration Time	5 ms to 60 seconds	20 µs to 30 seconds	20 µs to 400ms
Dimensions	800 (L) x 600 (W) x 200 (H) mm^3		
Weight	8 kg		
OPTICS			
f/ Number	f/2		
Grating	Holographic Grating		
Entrance Aperture Slit / Fiber Optic	Slit: 10µm, 25µm, 50µm, 100µm, or none Fiber optic: SMA, or custom design		
DETECTOR SPECS			
Detector Array	2048 X 64 Active Pixels	256 Pixels	256 Pixels
Quantum Efficiency @λpk Min.	75%	70%	70%
Response Non-uniformity	±3% typical, ±10% max	±10%	±10%
Readout Noise	10 Counts RMS typical	10 Counts RMS typical	65 Counts RMS typical
A/D Converter	16bit	16bit	16bit
Power	Powered through USB	Powered through USB	Powered through USB
COMPUTER			
Data Ports	USB 2.0		
Trigger Modes	Software Controlled		
Software	Windows 7/8 (32-bit and 64-bit).		

*specifications subject to change

Fiber Bundle Option



Optional Light Source

Part Number Selection:

UVIS - □□□□ - □□□□ - □□□ - □□□

Code	Starting λ
Please specify the starting wavelength i.e. :	
0190	190 nm
0230	230 nm
xxxx	customer specify

Code	Ending λ
Please specify the ending wavelength i.e. :	
0600	0600 nm
0800	0800 nm
yyyy	customer specify

Code	Slit Size
025	25 µm
050	50 µm
100	100 µm
200	200 µm

Code	Interface Type
SMA905	SMA
FC	FC

Note: fiber sold separately