



SuperGamut™ UV-NIR Spectrometer Covering 190-1080nm Wavelength Range

Applications:

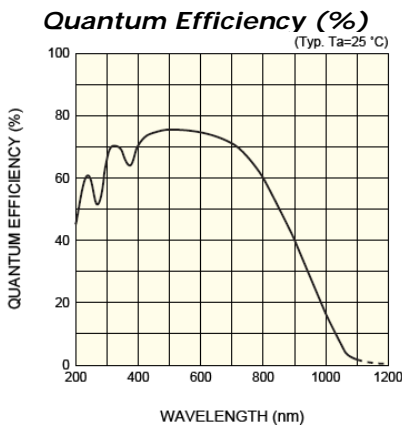
- Biochemical
- Chemical Analysis
- Color / Dyes
- Dissolution
- Environmental
- Multicomponent analysis
- Proteins
- QA/QC of mixtures
- Small volume samples
- Sunscreens

BaySpec's *Super Gamut™* series UV-NIR 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 *Super Gamut™* UV-NIR Series employs a highly efficient concave holographic diffraction grating as the spectral dispersion element and an ultra sensitive CCD array detector as the detection element, thereby providing high-speed parallel processing and continuous spectrum measurements. As an input, the device uses a fiber optic input or slit optics arrangement based on customer preferences. The signal is spectrally dispersed with the holographic grating and the diffracted field is focused onto a CCD array detector. The control electronics read out the processed digital signal to extract required information. Both the raw data and the processed data are available to the host.

Key Features:

- Ruggedized and reliable with no moving parts
- Compact size and high efficiency
- Outstanding optical throughput is achieved with f/3 design
- Real-time spectral data acquisition with fast milli-sec response time
- Factory calibrated for long-life and low-maintenance
- 3 Programmable slit options, or fiber input





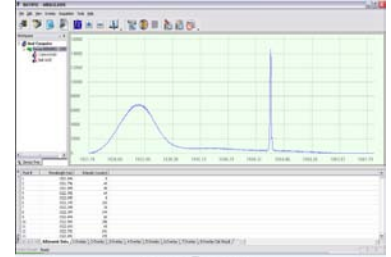
SuperGamut™ UV-NIR Spectrometer

Covering 190-1080nm Wavelength Range

Parameter	Specification
PERFORMANCE	
Wavelength Range	190-1080nm or any fraction of range customer specified
Resolution	~1-20 nm, slit dependent
Signal / Noise	6000:1
Stray light	0.05%
Wavelength Calibration	Factory Calibrated
Integration time	20 ns to 300 seconds
Dimensions	94 x 154 x 50 mm ³
Weight	750g
OPTICS	
f/ number	f/3
Grating	Concave Holographic
Entrance Aperture Slit / Fiber Optic	Exchangeable/Programmable Slit: 50μ, 100μ, or none Fiber optic: SMA, or custom design
DETECTOR SPECS	
Detector array	2048 X 64 Active Pixels
High CCD Node Sensitivity.	6.5μV/e ⁻ Typical
Temperature	Uncooled
Full Well Capacity	200ke ⁻
Detector	TE cooled CCD
A/D converter	16bit
Power	Powered through USB
COMPUTER	
Data Ports	USB 2.0
Trigger modes	Software Controlled
Software	Windows 2000/XP or later

*specifications subject to change

"Spec 2020" Software



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

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

Windows® XP/2000 compliant.

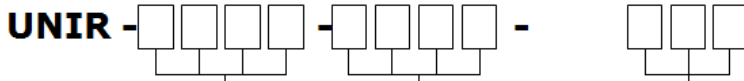


OEM Integration



Fiber Bundle Option

Part Number Selection:



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. :

0800 0800 nm
1080 1080 nm
yyyy customer specify

Code Interface Type

SMA SMA905
025 25 μm
050 50 μm
100 100 μm
200 200 μm

Note: fiber sold separately



Optional Light Source