SilverBullet™ UV-Vis Spectrometer

A compact, high-speed UV-Vis spectrometer for OEM, embedded, and analytical integration

The SilverBullet™ spectrometer delivers high-speed UV–Vis spectral analysis in an ultra-compact form factor. Featuring a concave mirror Czerny–Turner optical design and a 1024-pixel CMOS sensor, it provides strong sensitivity, fast acquisition, and low power consumption. Designed for OEM and embedded integration, the SB Series supports USB-powered operation, external I/O, and flexible configuration for a wide range of analytical applications.



APPLICATIONS

- UV-Vis spectroscopy and optical analysis
- Water quality and color analysis
- Process and quality control monitoring
- LED and light source characterization
- Material identification and composition analysis
- OEM and embedded system integration

KEY PERFORMANCE

Wavelength Range: 180 – 1100 nm (model dependent)

Optical Resolution: 3 – 15 nm

Signal-to-Noise Ratio: 350

Dynamic Range: 5200

Integration Time: 6 µs – 65 s

Stray Light: 0.3 %

Thermal Stability: <0.04 nm / °C

Interface: USB 2.0, programmable digital I/O

SilverBullet ™ Specifications

	SB2134/ SB3134/ SB4134	SB2130/ SB3130/ SB4130
Wavelength Range	180 nm – 850 nm (FUVA) 200 nm – 850 nm (DUV2B) 300 nm – 1100 nm (VNIR7B)	
Sensor Type	CMOS	
Pixels	1024	
SNR	350	
Dynamic Range	5200	
Stray Light	0.3%	
Thermal Stability	<0.04 nm / °C	
Dark Noise (avg)	12.5	
A/D Converter	16 - bits	
Integration Time	6 µs – 65 s	
Operating Temperature	0°C to +50°C	
Grating	Multiple grating options (model dependent)	
Dimensions	40 (L) × 36.3 (W) × 25.1 (H) mm	49 (L) × 48 (W) × 28.5 (H) mm