

# 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  $\mu$ s – 65 s

**Stray Light:** 0.3 %

**Thermal Stability:** <0.04 nm / °C

**Interface:** USB 2.0, programmable digital I/O

# GoldenBullet™ Specifications

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