

SPM-001 SPECTROMETERS

A convenient high resolution bench-top spectrometer with a center wavelength configurable to your specific needs.

Overview:

The SPM-001 measures in the ultraviolet, visible, and near-infrared wavelengths and features a proprietary optical design to achieve up to 0.12 nm resolution (SPM-001-M). It also runs on powerful user software based on LabVIEW or easily integrated into existing software using one of our software development kits.



*Applications:

*Some applications require additional software that is not included.

- Visible Spectrum/ Color Monitoring
- Biophotonics
- Transmission
- Laser/ Light Source Monitoring
- Absorption
- Ultra-fast Lasers and Laser Tuning
- Fluorescence
- Molar Concentration
- Optical Inspection
- Chemical Analysis
- Reflection
- Scattering

Contact us

Photon Control is a leader in precision measurement solutions, specializing in customization and OEM manufacturing. Visit www.photon-control.com for more information, or contact us at info@photon-control.com with your measurement requirements for engineering guidance and a quote.

Features

- Center wavelength can be factory configured to specific values to meet almost any need
- Includes feature rich
 SpecSoft display and
 analysis software for data
 logging
- Convenient USB interface
- Compatible with the SPL family of light sources, accessories, software development kits and SpecSoft Pro from Photon Control





Technical Specifications

SPM-001:	-M	-N
Spectral Range (nm)	190-1100	190-1100
Most Common Ranges	740-860*	680-920*
Resolution (center/outer) (nm) *	0.12 / 0.18	0.24 / 0.30
Standard Slit (um)	10	10
Fiber Input	FC	FC
Detector Type	CCD	CCD
Pixels	3648	3648
A/D Converter (bits)	12	12
Exposure Time Range	10 μs to 65 s	10 μs to 65 s
Dimensions (mm)	196 x 86 x 53	196 x 86 x 53
Temperature Range (°C)	-10 to 55	-10 to 55
Triggering	Hardware trigger	Hardware trigger
Maximum Refresh Rate (Hz)	20	20
Interface	USB 2.0	USB 2.0
Power Requirements	10-30 VDC, 300 mA Max @ 12 VDC or USB powered	10-30 VDC, 300 mA Max @ 12 VDC or USB powered
	30°C maximum to maintain minimum dectector temperature	
	1. Slit sizes of 10, 25, 50 and 100um are available 2.SMA or FC fiber input available on all models	

^{*}Center wavelength can be factory configured within the 120 nm range for the SPM-001-M and the 240 nm range for the SPM-001-N up to 1100 nm.

Note: All spectrometers are shipped with a fiber optic patch cord, USB cable, user manual, external power adapter and SpecSoft display and analysis software. Software Development Kits and SpecSoft Pro are available at additional costs.