



Photon Control

The SPM-001 is Photon Control's high resolution benchtop spectrometer. It uses a proprietary optical design to achieve up to 0.12nm resolution (SPM-001-M). Our spectrometers are the only ones equipped with an internal DSP chip. There is no need for an external computer to process data. It also boasts powerful software based off Labview which can be easily integrated into existing software using one of our development kits.

This spectrometer works very well with the SPL family of light sources and other spectrometer accessories available at Photon Control. Contact us for more details.

Highlights:

- center wavelength can be factory configured to specific values to meet almost any need
- inboard DSP saves on having to process data externally
- software interface includes data logging and beam profiling and can be user integrated using Software Development Kits for Labview, Visual C++ and Visual Basic
- Convenient USB interface

SPM-001 SPECTROMETER



PRODUCT MODEL	SPM-001-M	SPM-001-N
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PERFORMANCE SPECIFICATIONS

Spectral range (nm)*	740-860	680-920
* Center wavelength can be factory configured to a number of different values between 600 and 100nm depending on your application. Ask our engineering representatives how we can help you meet your spectral needs.		
Resolution (FWHM) (nm)	<0.12	<0.24
Fiber Input	FC	FC
Focal Length (mm)	150	150
A/D Resolution	12-bits	12-bits
CCD Pixels	3648	3648
Integration Time Range	10 microseconds to 65 seconds	10 microseconds to 65 seconds
Triggering	Hardware trigger	Hardware trigger
Maximum Refresh Rate (Hz)	20	20

OPERATING SPECIFICATIONS

Temperature (°C)	-10 to +55	-10 to +55
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ELECTRICAL SPECIFICATIONS

Interface	USB 2.0 compatible *	USB 2.0 compatible *
*Full Speed USB Connection at 12 Mbps		
Power Requirements	10-30 VDC, 300 mA Max. @ 12 VDC or USB powered	10-30 VDC, 300 mA Max. @ 12 VDC or USB powered

PHYSICAL SPECIFICATIONS

Dimensions (mm)	196 x 89 x 52	196 x 89 x 52
Weight (g)	545	545
Slits	10 um	10 um

Note: All spectrometers are shipped with an optical fiber patchcord, USB cable, user manual and external power adapter.

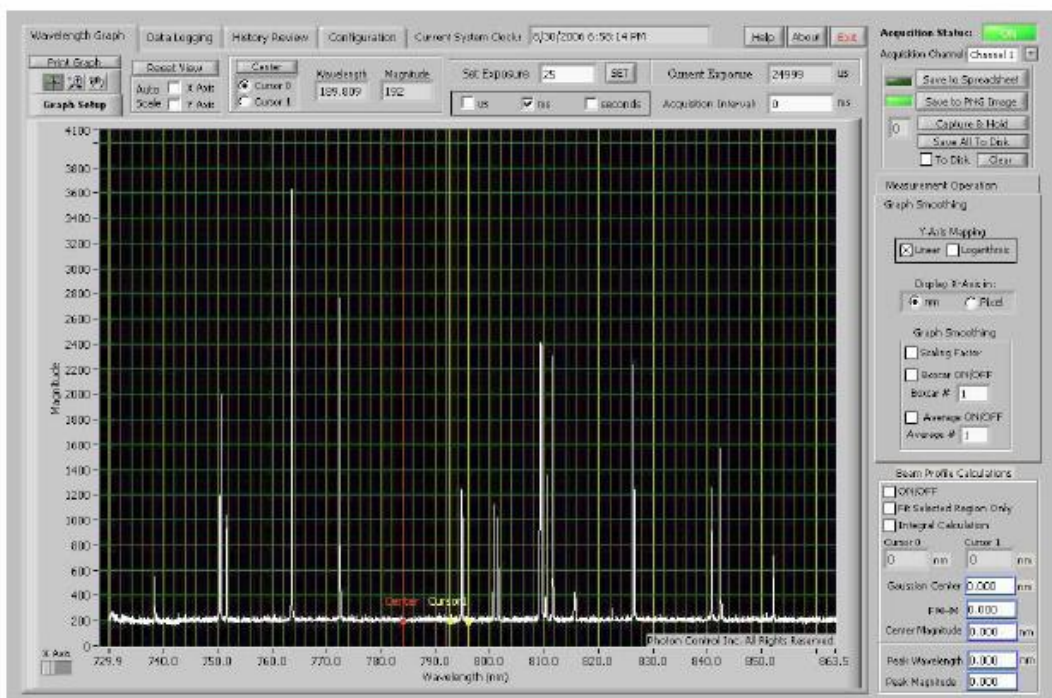
PRODUCT APPLICATIONS

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| <ul style="list-style-type: none"> • Visible spectrum/ colour monitoring • UV, Visible, NIR (Near Infrared) • Biophotonics • Transmission • Reflection • Absorption • Transmission • Ultra-fast lasers and laser tuning | <ul style="list-style-type: none"> • Fluorescence • Molar Concentration • Optical Inspection • Chemical Analysis • Laser/ Light Source Monitoring • Scattering |
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Features

- Convenient spectrum display controls such as zoom, pan and cursors
- Linear and logarithmic scaling
- Dark background subtraction
- Transmittance and Reflectance measurement
- Boxcar and time based pixel averaging
- Beam profile calculators such as Gaussian center and FWHM (Full Width Half Maximum)
- Extensive data logging control
- History review panel with the ability to view an entire logging session and zoom in on a particular spectrum
- Post experiment analysis available on history review panel
- Convenient snapshot to spreadsheet and png file controls
- Capture and hold function
- Access up to 5 spectrometers at a time

Photon Control Spectrometer User Interface Main Panel



Software Development Kits (Windows)

- LabView
- Visual C++ and Visual Basic

Interface Software platforms

- Windows 2000/XP

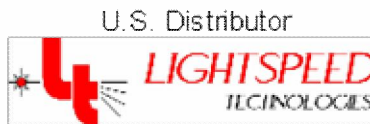
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