

High resolution optical bench spectrometer that uses a proprietary optical design to achieve a higher resolution than other spectrometers of the same size.

Overview:

The SPM-001-NIR1700S/NIR2500W optical bench is available with a 140 mm focal length for high resolution applications. Our spectrometers are the only ones equipped with an internal DSP chip capable of handling complex signal processing tasks. It also boasts powerful software based on LabVIEW that can be easily integrated into existing software using one of our development kits.

Applications:

- Mineral Identification
- Process Automation Technology (PAT)
- Petrochemical Analysis
- Laser Characterization and Tuning
- Thin Film Thickness Measurement
- Moisture Measurement in Wood Fiber
- Reflectance, Transmission, Absorption
- Cellulose Analysis
- Soil Analysis
- Pharmaceutical Industry
- Chemical Analysis
- Alcohol Content Analysis

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. Ask about bundling your calibration source with some of our other spectral products like spectrometers and fiber patch cords.



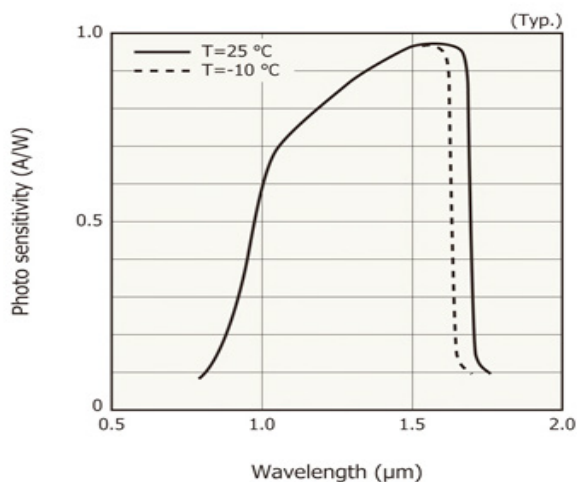
Features

- High resolution optical bench
- 512-pixel linear array
- 16-bit A/D converter
- Spectral range of 900-2500 nm
- Includes feature rich SpecSoft display and analysis software for data logging
- Compatible with the SPL family of light sources, accessories, software development kits and SpecSoft Pro from Photon Control
- Powerful LabVIEW- based software

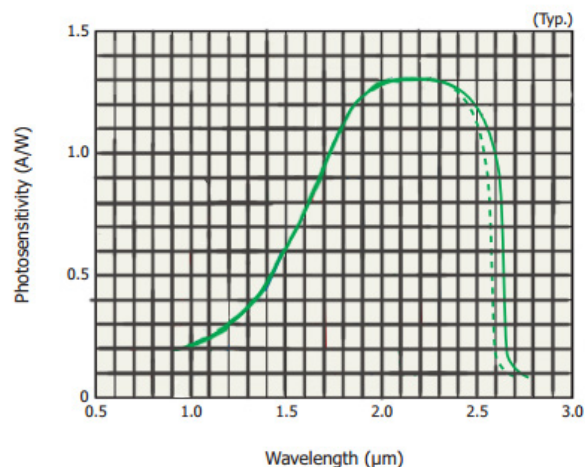
Common SPM-001-NIR-1700S/2500W Specifications

Detector	TE cooled InGaAs
Pixels	512
A/D Converter (bits)	16
Exposure Time Range	10 μ sec to 10 sec
Temperature Range ($^{\circ}$ C)	+10 to 40
Focal Length (mm)	140
Triggering	Hardware Trigger
Maximum Refresh Rate (Hz)	50
Interface	USB 2.0 High Speed
Power Requirements	10-14 VDC
Dimensions (mm)	244 x 90 x 53
Weight (g)	1400
Grating Type	Ruled or holographic flat reflective

SPM-001-NIR1700S Detector Response



SPM-001-NIR2500W Detector Response



Model Specific Configurations: Spectral Range, Resolution, Diffraction Grating, and Filter

SPM-001-NIR:	Spectral Range (nm)	Blaze Wavelength (nm)
-1700S	900-1700	1050
-2500W	900-2500	Choice

Product Options and Accessories

CWA-SMA-100-V-2	Fiber Optic Patch Cord - SMA 905 connector - 100 micrometer core - VIS/NIR - 2m
CWA-SMA-200-V-2	Fiber Optic Patch Cord - SMA 905 connector - 200 micrometer core - VIS/NIR - 2m
CWA-SMA-400-V-2	Fiber Optic Patch Cord - SMA 905 connector - 400 micrometer core - VIS/NIR - 2m
CWA-SMA-600-V-2	Fiber Optic Patch Cord - SMA 905 connector - 600 micrometer core - VIS/NIR - 2m

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.