

AEO Spectrometer

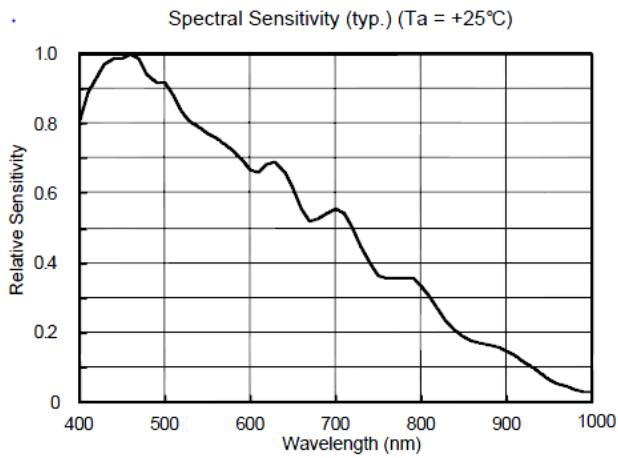
OEM Module



Key performance Features	Application
<ul style="list-style-type: none"> • Excellent data acquisition stability • High-sensitivity linear CCD sensor • Array with 2048 active pixels • (14 x 200 μm each) wide dynamic range • High Speed USB 2.0 (480 Mbit/s) • External trigger capability 	<ul style="list-style-type: none"> ❖ science, research, education as well as OEM applications ❖ Lasers, optics, photonics, spectroscopy ❖ Measurements: light, fluorescence, ❖ Agricultural Measurements and Monitoring ❖ Biotechnology Applications ❖ Food & Beverage Quality Control ❖ Medical Diagnostics ❖ Metallurgical Analysis ❖ Polymer Analysis ❖ Protein & Nucleic Acid Analysis

Specifications		
Optical parameters	Typical	Note
Wavelength spectrum range:	350 nm - 1100 nm 200 nm - 1100 nm with UV	The UV option must be ordered explicitly.
Optical detector:	2048 lines silicon linear CCD array	
Optical resolution:	1.5-2.3 nm FWHM	
Electrical Parameters	Typical	Note
Integration Time	5ms ~ 10 seconds	
Input Power	USB supply	Absolute Maximum Ratings: VCC 5.5 V
Signal-to-noise ratio:	300:1 (full signal)	
A/D resolution:	16 bits	
Dark noise:	50 RMS counts	
Dynamic range:	1300:1 for a single shot	
Trigger Signal	TTL 5V/3.3V	
Interfaces to PC USB	High Speed USB 2.0 (480 Mbit/s) Option : USB 2.0, Full Speed, 12 Mbps	option must be ordered explicitly
Interfaces to PC USB virtual com port	Maximum speed up to 256000 bits/s	easy programming for user option
Mechanical Parameters	Typical	Note
Dimensions (L x W x H) :	95 x 65 x 32 mm	

Weight	185 g	Metal Aluminum
Fiber optic connector:	SMA 905	
Operation temperature	-10 °C ~ +50 °C	
Storage temperature:	-10 °C ~ +70 °C	



CCD Optical Spectrum