

INTRODUCING THE D-VISION SPECTROMETER:
SINGLE-SENSOR BROADBAND COVERAGE FROM 500nm TO 1700 nm

昊量光电

d·vision



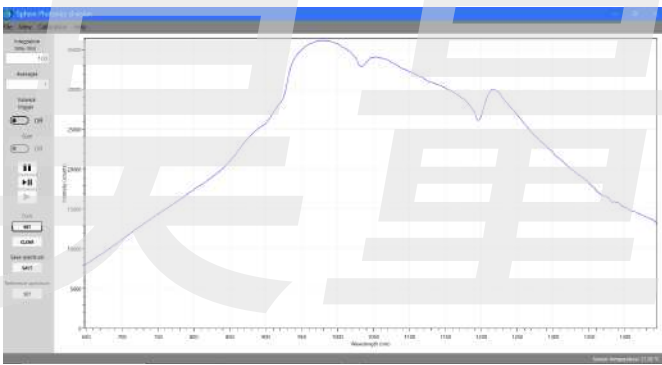
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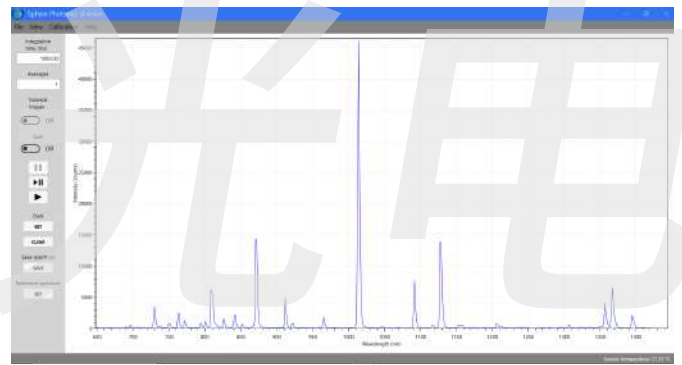
THE NEW SINGLE-SENSOR SPECTROMETER WITH A BANDWIDTH FROM 500nm TO 1700nm

The d-vision spectrometer can cover a broad bandwidth around 1050 nm in a single acquisition, without the need to stitch together spectra from two different sensors. The d-vision does it all with only a single ambient temperature sensor. Thanks to our technology and engineering, we are able to provide you a broadband VIS-NIR spectrometer with a reduced size and price. What more could you wish?

The d-vision covers a bandwidth from 500 up to 1700 nm, with resolutions ranging from 5 nm to 0.5 nm depending on the choice of grating. The d-vision software is easy-to-use, intuitive and has all the features to make your measurements a simple and enjoyable task.



Spectral Response of d-vision model 650nm – 1450nm



Spectrspectrum of Hg lamp

TECHNICAL SPECIFICATIONS

	d-vision	Typical Range Selection		
Wavelength range	500 - 1700nm (grating dependent)	Wavelength range	Spectral Bandwidth	Resolution
Detector	512 px	500 - 1700 nm	1200 nm	5 nm
Slit	15µm ^(a)	700 - 1700 nm	1000 nm	4 nm
Integration Time	10µsec - 5sec	700 - 1400 nm	700 nm	3 nm
AD converter	16-bit	950 - 1700 nm	750 nm	3 nm
Interface	USB 2.0	850 - 1200 nm	350 nm	1.5 nm
dimensions (WxLxH)	107mm x 75mm x 42mm	960 - 1080 nm	120 nm	0.5 nm

(a) Other slit dimensions on request



Talk to us for a different wavelength range.

TECHNICAL SPECIFICATIONS

	d·vision VIS-SWIR	d·vision SWIR
Wavelength Range	500 - 1700 nm	950 - 1700 nm
Resolution	1.5 - 4.5 nm	0.5 - 3 nm
Wavelength Accuracy	0.15 - 0.5 nm	0.05 - 0.3 nm
Thermal Wavelength Drift	0.02 - 0.06 nm/°C	0.006 - 0.04 nm/°C
Stray Light	6%	6%
Mode: Low Gain		
Signal to Noise Ratio	9000	5000
Dynamic Range	14000	9000
Dark Noise	5 counts	7 counts
Integration Time	10 μs - 5 s	10 μs - 500 ms
Mode: High Gain		
Signal to Noise Ratio	3000	1500
Dynamic Range	5000	3000
Dark Noise	12 counts	19 counts
Integration Time	10 μs - 4 s	10 μs - 4 s
Numerical Aperture	0,12	0,12
Input Fiber Connector	SMA 905	SMA 905
Slit Width	15 μm *	15 μm *
Grating	200 - 600 lines/mm	300 - 1200 lines/mm
Input Filter	Available upon request	Available upon request
Order Sorting Filter	Available, applied in select spectrometer configurations	Available, applied in select spectrometer configurations
Pixel Number	512	512
Defective Pixels	< 1%, typically 0%	< 1%, typically 0%
Photo response non-uniformity	±3 % typical, ±5 % maximum	±5 % typical, ±10 % maximum
Pixel Linearity Error	< ±3%	< ±3%
Calibration Applied	Wavelength	Wavelength
A/D Converter	16-bit, 5MS/s	16-bit, 5MS/s
Scan Rate	Single Acquisition to 160 Hz	Single Acquisition to 160 Hz
I/O	TTL Trigger Input, LV-TTL Shutter/Lamp Output, 2x GPIO	TTL Trigger Input, LV-TTL Shutter/Lamp Output, 2x GPIO
Power Consumption	5V, 250 mA	5V, 250 mA
Connection	USB 2.0 Type A, Male, pigtailed, 40 cm	USB 2.0 Type A, Male, pigtailed, 40 cm
PC Operating System	Windows 10 and above	Windows 10 and above
Ambient Operating Temperature (non-condensing)	0 to 40°C	0 to 40°C
Storage Temperature (non-condensing)	-10 to 60 °C	-10 to 60 °C
Dimensions	107 mm x 75 mm x 43 mm	107 mm x 75 mm x 43 mm
Weight	430 g	430 g

* Standard slit width. Other slit widths available upon request.

