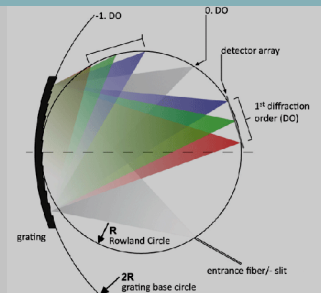
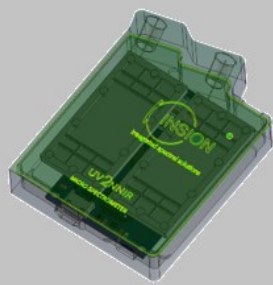




THE SPECTRAL SENSING COMPANY

UV2NNIR wide range micro spectrometer

Monolithic micro spectrometer for spectral sensing applications

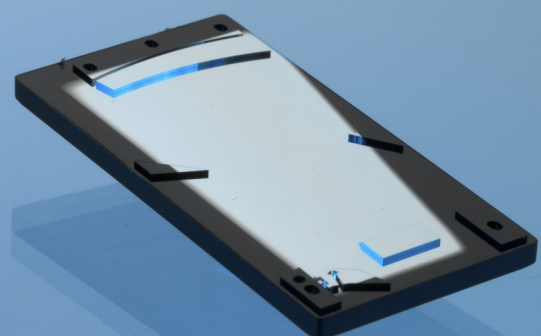


Product features:

- » no moving parts
- » excellent mechanical, optical and thermal stability
- » unsurpassed price-performance ratio
- » small dimensions, light weight
- » easy and flexible handling

Excellent optical performance characteristics and inter instrument agreement due to a microinjection molded hollow cavity waveguide design. The use of a state-of-the-art photo detector facilitates the precise measurement in the wide range for hand held devices as well as for in-line process sensors.

Typical applications range from instrumental analysis, biological and clinical systems to colorimeters, food inspection systems and fluorescence measuring devices.





Spectral range	200 – 350 nm and 350 - 850 nm
Spectral range (accessible)	200 – 1050 nm
Spectral resolution	5 nm _{FWHM} // 1 (UV); 2(VIS) nm _{Pixel}
Spectral accuracy	2 nm (typ. 1nm)
Spectral Repeatability	0,1 nm
Reproducibility	≤ 0.1 nm
Straylight Attenuation	> 17dB with GG495 at 470 nm (30 dB using SC30)
Sensitivity	> 5 E 15 cts*nm / Ws @ 650 nm
Wavelength stability	< 0.05 nm/K
Dark noise	< 10 cts (16 bit ADC)
Integration time	2 - 40,000 ms
Detector array	S-CMOS 2048 pixels
Humidity	0% - 90% noncondensing
Electronics	16 bit; connector: USB
Fiber connector	fiber length 370 +0/-20 mm; SMA 905
Operating temperature	0°C to 40°C
Storage temperature	-40°C to 60°C

Versions:	UV2NNIR /M	NIUV2NNIR /H
Dimensions (LxWxH)	69,3 x 55 x 9.1mm / 2.73" x 2.17" x 0.36" in *	69.3 x 55 x 13.6 mm / 2.73" x 2.17" x 0.54" in
Weight	Processing*	48 g / 0.1 lb
Fiber length	450 mm; ± 25 mm / 17.7" ± 1 in	-
Optical interface	Fiber 300/330 J.m; NA = 0.22; low OH- / SMA 905**	SMA 905 socket
Triggering	-	16 bit ADC,TTL signal (e.g. to control lamps, shutter, flash lights), synchronized with measurement, adjustable delay, TTL user bit, LV-TTL lamp or shutter control output
Interfaces	-	USB Full Speed, UART
Connectors	DIL 22	USB 2.0 (micro B socket)
Accessories	Product Manual	Test Report, Product Manual, SPECview spectroscopy software, SPECcon Interface DLL(Native C++)
Power requirements	5V	Via USB or external 5V
Power consumption	25 mW	1.5 W (typ.)

* subject to change ongoing, product development

** Customizing on request

All data are subject to change without prior notice