

SPECTRE *an ultra-broadband spectrometer*

SPECTRE is an innovative spectrometer, capable of measuring ultra-broadband spectra, from the VIS to the MID-IR spectral region. It is based on a novel technology that combines fast acquisition times and high spectral resolution with extremely broad spectral coverage.

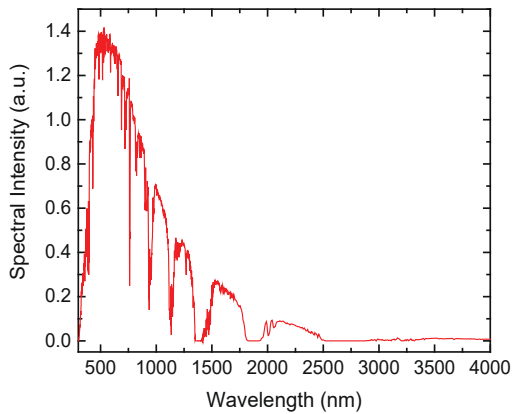
Key Features

- For coherent and incoherent light sources
- Variable resolution and scan time
- Insensitive to misalignment
- Wide spectral coverage
- No focusing required
- Compact and low-cost
- Fast data processing
- No cooling required
- High sensitivity

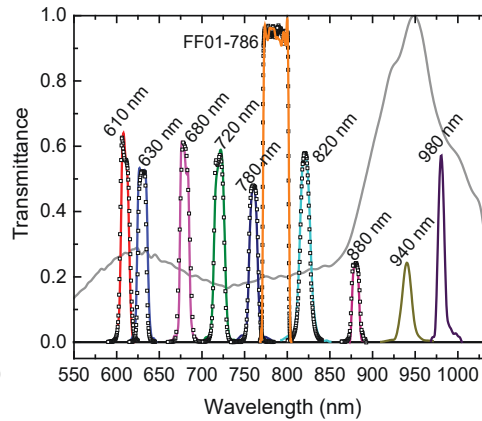
Applications

- Light sources characterization
- Material science
- Biology
- Agriculture and Food
- Pharmaceuticals
- Petrochemicals
- Art Conservation
- Forensics

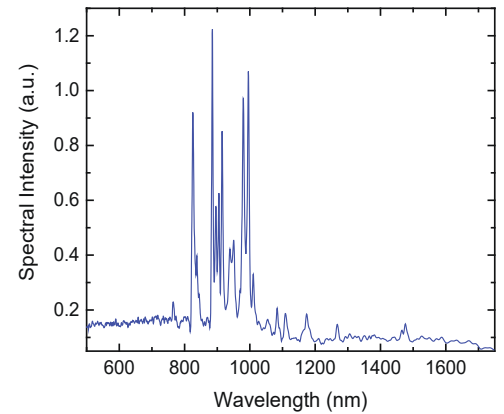




Emission spectrum of the sun



Transmission of different bandpass filters (coloured curves) and white light spectrum from a kHz pulsed laser.



Emission spectrum of a Xenon lamp (L2273 from Hamamatsu)

Technical Specifications

	VIS-NIR	VIS-SWIR	VIS-MIDIR
Spectral Range	450-1700 nm	450-3000 nm	500-4200 nm
Spectral Resolution (at 633 nm)	1 nm (HR mode) 12 nm (LR mode)		1.4 nm (HR mode) 17 nm (LR mode)
Measurement Time	1.5 s/spectrum (HR mode) <170 ms/spectrum (LR mode)		
SNR*	> 1:30'000		
A/D converter	16 bit		
Software Interface	Windows 7 or later		
Communication Interface	USB 2.0		
Dimensions	31 x 16 x 8.5 cm		
Weight	2 kg		

*ratio between dark signal and peak intensity produced by a He-Ne laser

