



NEW: Mid-IR Laser Spectrum Analyser – LSA IR-III

Customized Mid-IR Spectrometer:
choose any interval in the range of 2 – 11 μm
with maximal achievable accuracy!

Analyse single-line, multi-line or broadband spectra of any pulsed or cw Mid-IR light sources.

■ **Typical combinations of range / accuracy / spectral resolution:**

LSA IR-III₂₋₃: 2 – 3 μm / 1 nm / 15 nm

LSA IR-III₂₋₆: 2 – 6 μm / 2 nm / 20 nm

LSA IR-III₂₋₁₁: 2 – 11 μm / 5 nm / 30 nm

■ **Pulsed /cw laser measurements**

■ **Sensitivity: 10 μJ /0.2 mW**

■ **Linewidth measurement accuracy: 15% (≥ 10 GHz)**



Ångström



HighFinesse
Laser and Electronic Systems

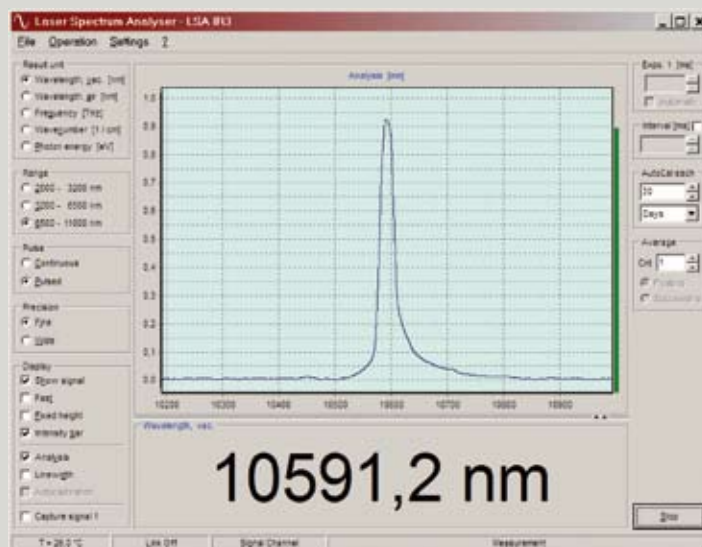
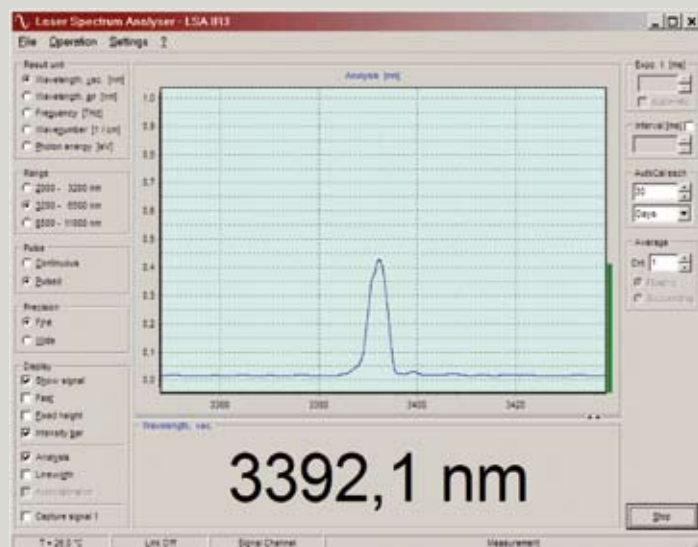
Technical Data LSA IR-III		Unit	Type 2 – 3	Type 2 – 6	Type 2 – 11
Measurement range		nm	1400 – 3000	1400 – 6000	1400 – 11000
Absolute accuracy ¹⁾		nm	1	2	5
Relative accuracy			1.25×10^{-4}	3×10^{-4}	5×10^{-4}
Wavelength deviation sensitivity/Measurement resolution			0.7×10^{-4}	1.5×10^{-4}	2.5×10^{-4}
Spectral Resolution		nm	15	20	30
Linewidth measurement accuracy			15%		
Maximal linewidth		THz	1 (up to 15 ²⁾)		
Measurement speed (depending on PC hardware and settings)	Wavelength & linewidth calculation	Hz	200		
	Analysis		15		
Required input power	Pulsed	µJ	10		
	cw	mW	0.2		
Diffraction Grating	FSR	THz	~ 2.7		
Coupling fiber			PIR-450/500 or CIR-450/500		
Calibration			SLR-1532 or 3.39 µm HeNe calibration laser (not included)		
Calibration period			15 days		
Warm-up time			No warm-up time needed		
Dimensions L x W x H		mm	325 x 180 x 77		
Weight		kg	3.0		
Interface			High-speed USB 2.0 connection		
Power supply			External power supply included		

1) According to 3σ criterion

2) Broad line versions. For further information please contact us

Sample measurements of the Laser Spectrum Analyser

Spectra of a non stabilized 3.4 µm HeNe and a CO₂ laser measured with the Laser Spectrum Analyser



HighFinesse
Laser and Electronic Systems

HighFinesse GmbH
Auf der Morgenstelle 14 D
72076 Tübingen/Germany

Tel +49 (0) 7071-96 85 15
Fax +49 (0) 7071-96 85 17
Email info@highfinesse.com

Additional information
and distributors:
www.highfinesse.com