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

Customized Mid-IR Spectrometer: choose any intervall 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-III$_{2-3}$:	2 – 3 µm	/	1 nm	/	15 nm
LSA IR-III$_{4-6}$:	4 – 6 µm	/	2 nm	/	20 nm
LSA IR-III$_{2-11}$:	2 – 11 µm	/	5 nm	/	30 nm

- **Pulsed / cw laser measurements**
- **Sensitivity: 10 µJ / 0.2 mW**
- **Linewidth measurement accuracy: 15% (≥ 10 GHz)**

Ångstrom

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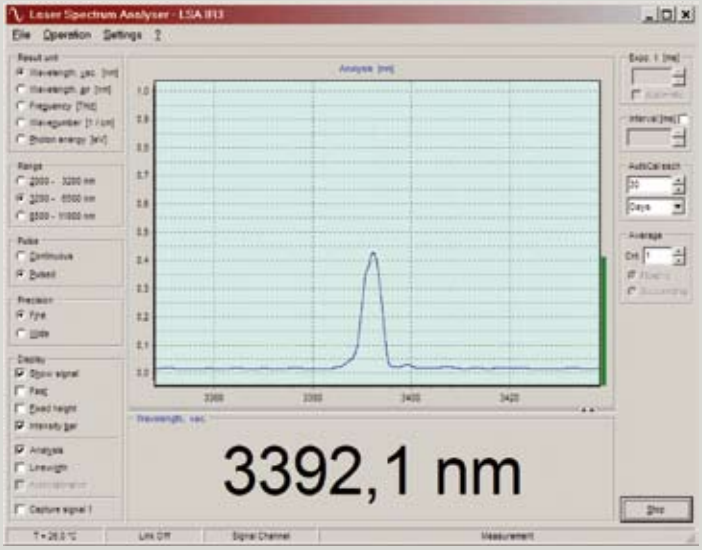
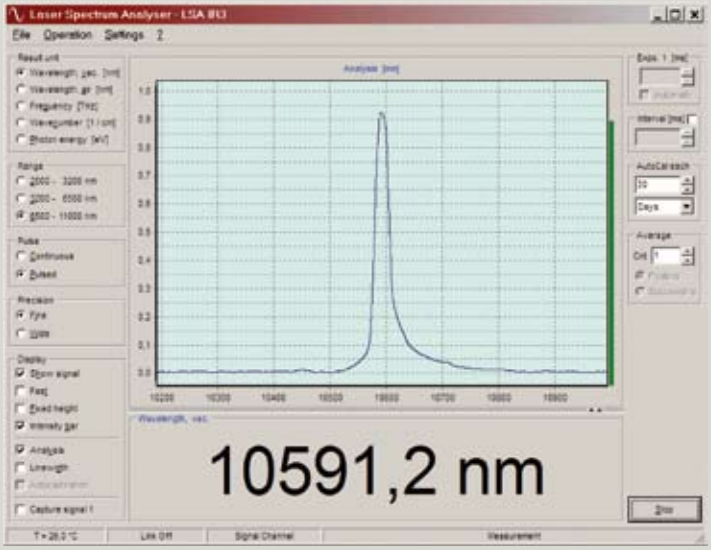
Technical Data LSA IR-III		Unit	Type 2 – 3	Type 4 – 6	Type 2 – 11
Measurement range		µm	2 – 3	4 – 6	2 – 11
Absolute accuracy [1]		nm	1	2	5
Relative accuracy			1.25×10^{-4}	3×10^{-4}	5×10^{-4}
Wavelength deviation sensitivity			0.7×10^{-4}	1.5×10^{-4}	2.5×10^{-4}
Spectral Resolution		nm	15	20	30
Linewidth 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			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 × 180 × 77		
Weight		kg	3.0		
Interface			High-speed USB 2.0 connection		
Power supply			External power supply included		

1) According 3σ criteria 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 CO_2 laser measured with the Laser Spectrum Analyser





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