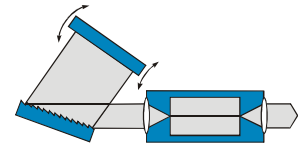
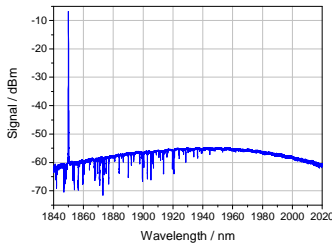


# Lion Series: TEC-500-1950-020



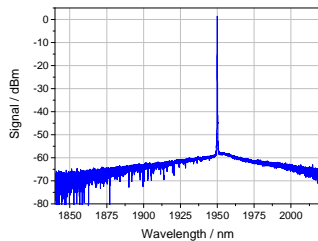
## Description:

The TEC-500-1950-020 is an External Cavity Diode Laser in Littman Configuration. It is designed for applications which require high mode-hop free tuning range, high output power as well as low linewidth like for telecommunication.



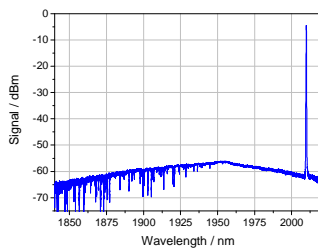
### Wavelength Lower Border of the Tuning Range

Wavelength: < 1850nm  
Power: 10mW



### Wavelength Gain Maximum

Wavelength: 1950nm  
Power: 20mW



### Wavelength Upper Border of the Tuning Range

Wavelength: > 2010nm  
Power: 10mW

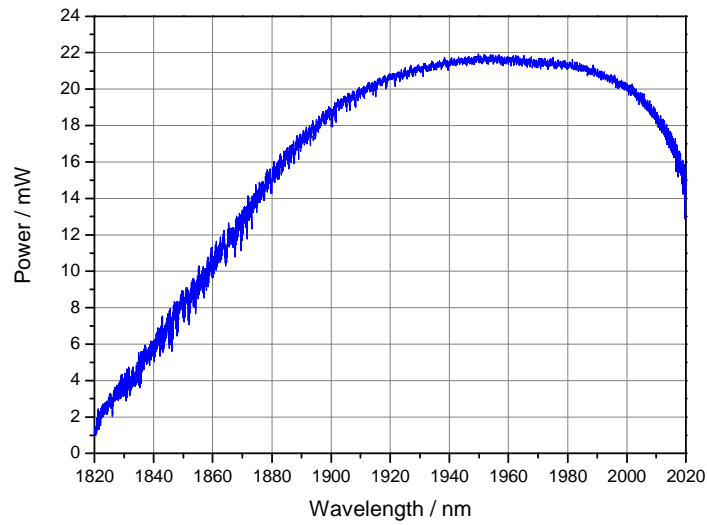
<b>Specification:</b>	output power	>10mW, typ. >20mW at gain maximum
	beam profile	almost round
	polarization	linearly, typ. > 100:1
	linewidth (1ms)	< 100kHz
	linewidth (1s)	< 1MHz (typ.)
	side mode suppression	> 40dB, typ. > 45dB
	coarse tuning range	> 150nm
	piezo fine tuning rate	> 0.4GHz/V
	piezo fine tuning range @ 27V (100V)	> 10GHz (40GHz)
	mechanic cavity resonance	> 1.7 kHz
	thermal stability	< 100 MHz/°C

Document: <http://docs.sacher-laser.com/s5-1950-rm.pdf>

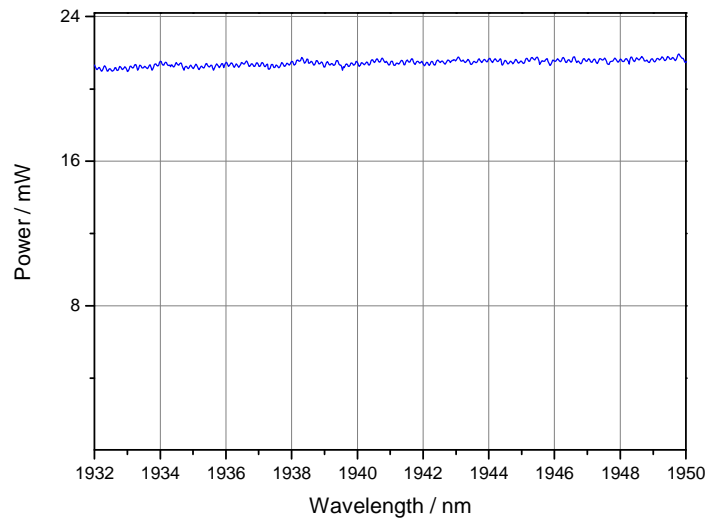
Note: Specification are subject to change without further notice.



**Mode-Hop Free Tuning:**



**Mode Hop-Free Fine Tuning:**



10s of Nanometers of mode-hop free tuning due to patented cavity design,  
 c/f <http://docs.sacher-laser.com/pivotpoint.pdf>, page 12 .. 15

Document: <http://docs.sacher-laser.com/s5-1950-rm.pdf>  
 Note: Specification are subject to change without further notice.

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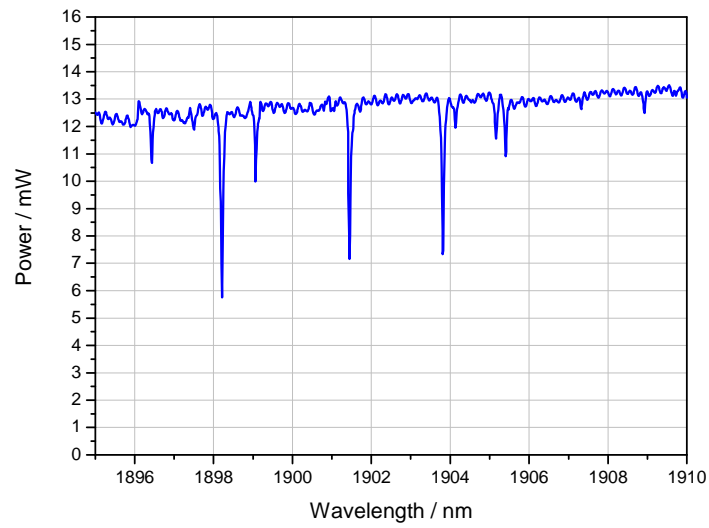
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**Water Vapor Absorption:**



**Wavelength Tuning Curve with Water Vapor Absorption**

Document: <http://docs.sacher-laser.com/s5-1950-rm.pdf>

Note: Specification are subject to change without further notice.

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