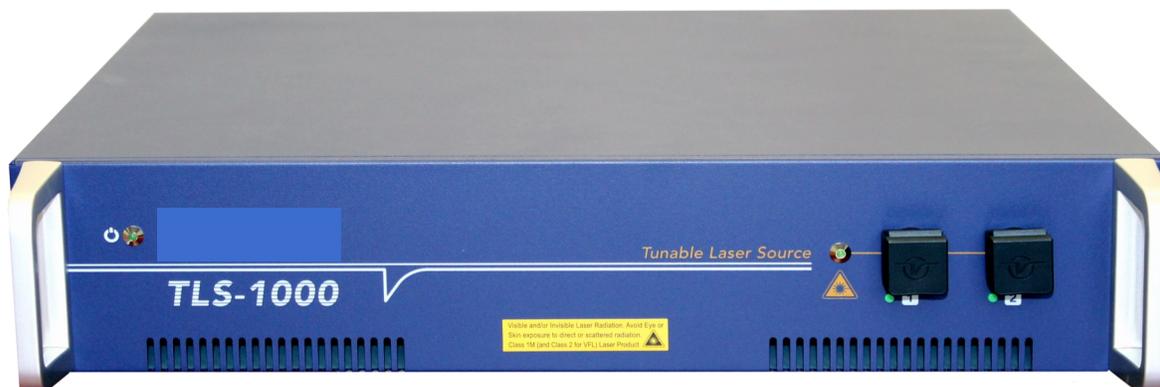
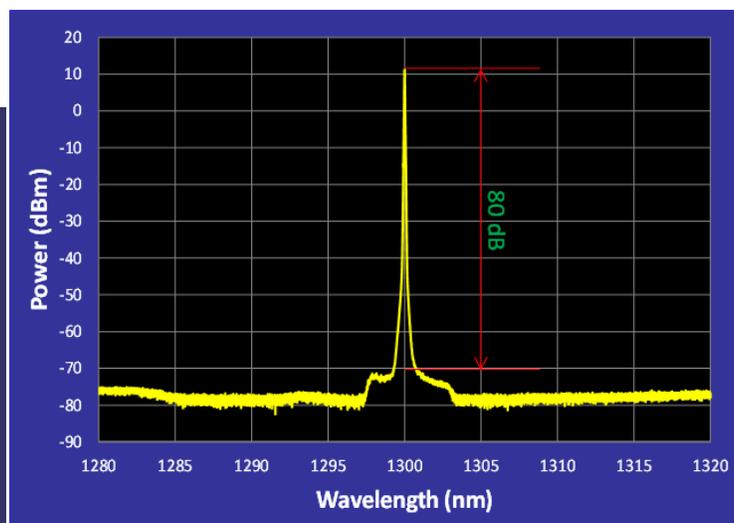
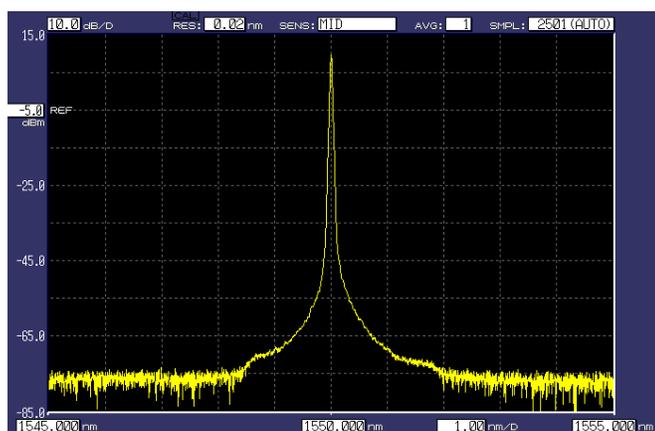


## Tunable Light Sources (Type A)



TLS-1000 tunable lasers are new-generation high performance continuous wave (CW) tunable laser sources for use in various single band or combined band windows, ranging from 1050 nm to 1660 nm. The innovative design employs the state-of-the-art tunable technology and gain continuation in wide wavelength range. With no moving parts, the voltage-controlled wavelength tuning enables rapid wavelength switching over the whole operating wavelength window.

This datasheet describes and defines high coherent CW tunable light sources with applications to test and measurement. They provide fast wavelength tuning, high power output, and high power stability. Tunable laser products support O-band, E-band, S-band, C-band, L-band, and other single-band operation, as well as combined adjacent bands.



## High Coherent O/E/S/C/L-Band Tunable Light Sources

### Key Features

- Power stability: 0.009 dB
- High-speed scan: up to 400 nm/s
- Signal to source ASE ratio: > 70 dB
- High coherent light sources

### Key Applications

- Testing and measurements
- Long-term process monitoring
- Dynamic alignment optimization
- Instrumentation

### Product Specifications and Key Parameters

Parameters		Unit	1300 nm	1400 nm	1500 nm	1550 nm	1600 nm
Wavelength Range <sup>1)</sup>	Lower limit	nm	1250	1350	1450	1520	1580
	Upper limit	nm	1350	1450	1530	1580	1650
Wavelength Tuning Resolution		pm	≤ 10				
Wavelength Stability <sup>1), 2)</sup>		pm	≤ 5				
Linewidth (FWHM)		MHz	< 500				
Minimum Power Output		mW	≥ 10	≥ 8	≥ 5	≥ 10	≥ 10
Signal to Total ASE Ratio <sup>3)</sup>		dB	≥ 60				
Signal to Source ASE Ratio <sup>4)</sup>		dB	≥ 70				
Absolute Wavelength Accuracy <sup>2)</sup>		pm	≤ 20				
Relative Wavelength Accuracy <sup>2)</sup>		pm	± 20				
Wavelength Repeatability <sup>2)</sup>		pm	± 10				
Power Repeatability <sup>2), 5)</sup>		dB	± 0.01				
Power Stability <sup>2), 5)</sup>		dB	± 0.009				
Maximum Sweep Speed		nm/s	400				
Step Tuning Time		ms	50				

#### Notes:

- 1) Wavelength is calibrated as “Peak wavelength”.
- 2) When measured after warm-up time, measurements over 1 hour at 25±1°C.
- 3) ASE is measured within 30 nm wavelength range.
- 4) ASE is measured within 0.1 nm wavelength bandwidth.
- 5) For output power at > 0 dBm.