

NEW

Full-band High Performance Tunable Laser System

Full-band TSL

The Full-band TSL is a full-band, high performance tunable laser system that covers the ultra-wide tuning range of 1260 to 1680nm (O-band to U-band). The system combines up to four Santec tunable lasers (TSL-550 and TSL-710) with an optical switch module (OSU-100) and control software. The complete Full-band TSL has excellent cost performance, high wavelength accuracy and fast sweeping for use in both R&D and production environments. The Full-band TSL can be easily controlled via GPIB and USB on PC using the custom GUI.

The Full-band TSL may be configured with Santec's Swept Test system hardware to provide WDL and PDL measurements over the entire tuning range from 1260 to 1680nm.



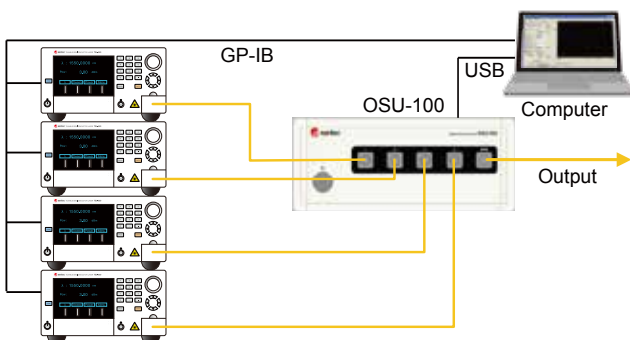
Features

- ▶ Wide wavelength range 1260-1680nm
- ▶ Mode-hop-free wavelength sweeps
- ▶ 100nm/s sweep speed
- ▶ Easy and automatic operation by exclusive

Applications

- ▶ Optical component characterization
- ▶ Fiber optic transmission testing
- ▶ Photonic material characterization
- ▶ Optical spectroscopy

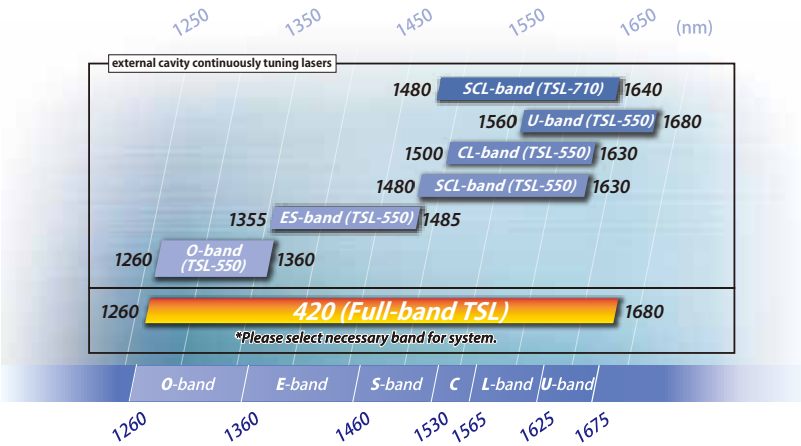
Typical configuration



Control software



Wavelength range



Specifications

Category	Parameter	Unit	Performance
Tunable Laser	All Specifications	-	Please refer to the TSL-550 or TSL-710 catalog for full specifications.
Optical Switch OSU-100	Wavelength Tuning Range	nm	1260-1680
	Maximum Tuning Range	nm	420
	Insertion Loss ^{*1}	dB	<3 (typ. 1.5)
	Insertion Loss Stability ^{*2} (typ.)	dB	±0.01
	Repeatability (typ.)	dB	±0.01
	Crosstalk (typ.)	dB	-55
	Maximum Input Power (Optical)	mW	300
	Return Loss (typ.)	dB	>50
	Lifetime (typ.)	cycle	> 100,000,000
	Switching Time (typ.)	ms	5
	Optical Fiber	-	PMF ^{*3}
	Optical Output Connector	-	FC / APC or SC / APC
	Communication	-	USB (USB 2.0 High Speed)
	Operating Temperature	degC	15 to 35
	Operating Humidity	%	< 80 (non-condensing)
	Power Supply	-	AC 100-240V±10%, 50 / 60Hz
	Dimensions (W x H x D)	mm	210 x 88 x 350
	Weight	kg	3.1

*All specifications are quoted after 1 hour warm-up period.
*1: From 1260-1630nm
*2: For period of 1 hour. Within ± 0.5°C.
*3: Polarization extinction ratio 17 dB (typical), Polarization axis in alignment with connector key

Ordering Code

Tunable Laser Please use the ordering code found on the TSL-550 / 710 catalog when selecting the desired laser specifications.

Optical Switch **OSU-100** - - -
A B C
Connector Polish : **AP** : APC (Angled PC)
Connector Type : **F** : FC / **S** : SC
Fiber : **P** : PMF

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