

NEW Tunable Laser
TSL-350

The TSL-350 is a low-priced competitive model of our best-selling model TSL-550, with mode-hop free, single mode oscillation over its full range, continuous wavelength sweep function, analog control function and variable power function by feedback control. It is an ideal choice for a wide range of applications such as optical component evaluation, optical communication test and R&D. The TSL-350 tunable laser can be controlled either through the front panel or by using a GPIB interface, allowing full remote control and measurement automation. It is available in both the O-band with a tuning range 1260-1350 nm and the C&L-bands with a tuning range of 1510-1620 nm.



Features

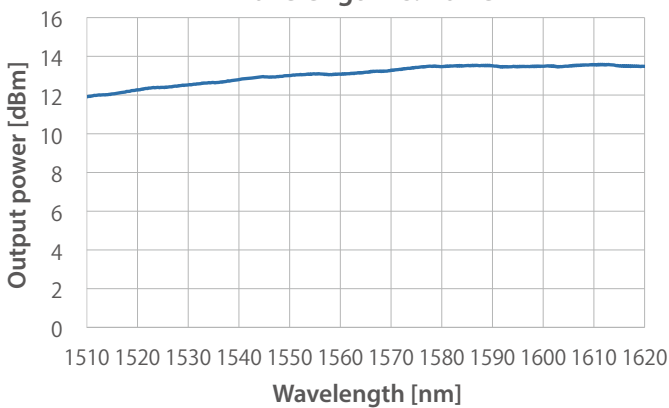
- ▶ Tuning range: 1260-1350 nm or 1510-1620 nm
- ▶ +13 dBm peak output power
- ▶ Mode-hop-free wavelength sweeps
- ▶ Fine tuning available

Applications

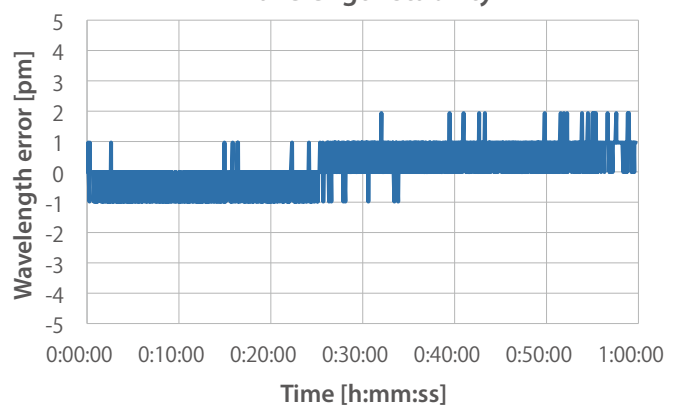
- ▶ Optical component characterization
- ▶ Fiber optic transmission testing
- ▶ Interferometry
- ▶ Optical spectroscopy
- ▶ Optical amplifier testing

Measurement Data

Wavelength vs. Power



Wavelength stability



SANTEC TUNABLE LASERS

Specifications

Category	Parameter	Unit	Performance	
Wavelength characteristics	Wavelength tuning range	nm	1260-1350 / 1510-1620	
	Wavelength resolution	pm	5 (< 1 pm with fine tuning)	
	Absolute accuracy *1	Operating temperature	pm	±100
		25±1°C (typ.)	pm	±30
	Repeatability *1		pm	±10
	Stability (typ.) *2		pm	±5
Optical power characteristics	Output power	Peak (typ.)	dBm	> 13
		Full tuning range	dBm	> 10
	Power repeatability *1,3		dB	±0.01
	Power stability *2,3		dB	±0.01
	Power flatness vs. wavelength *1,3		dB	±0.2
	Relative intensity noise (RIN) (typ.) *4		dB/Hz	-145 (1 MHz to 3 GHz)
	Spectrum	Linewidth (typ.)	Coherence ctrl. Off	MHz
Coherence ctrl. On			MHz	40
SMSR (typ.)			dB	> 45
Signal to total source spontaneous emission ratio *5			dB	> 35
Signal to source spontaneous emission ratio *6			dB/nm	> 45
Interface	Optical output connector	-		FC or SC, SPC or APC
	Optical fiber	-		SMF
	Communication	-		GP-IB (IEEE 488.2), USB, RS-232C
	Power monitor	-	V	0 to 3
Environmental conditions and others	Operating	Temperature	°C	15 to 35
		Humidity	%	< 80 (non-condensing)
	Power supply	-		AC 100-240 V(±10%), 50/60 Hz
	Power consumption		VA	100
	Dimensions (W) x (D) x (H)		mm	210 x 440 x 110
Weight		kg	6.5	

* All specifications are quoted after 1 hour warm-up period. Specifications apply for wavelengths not equal to any water absorption line.

*1: At static condition or "Step" sweep mode. *2: For period of 1 hour. Within ± 0.5 °C. *3: At "Auto" power mode. *4: At maximum output power.

*5: Ratio of signal power to total spontaneous emission power within ±15 nm of the signal wavelength (typical value).

*6: Ratio of signal power to maximum spontaneous emission power in a 1 nm band within a ±3 nm band around the signal wavelength (typical value).

Laser safety information



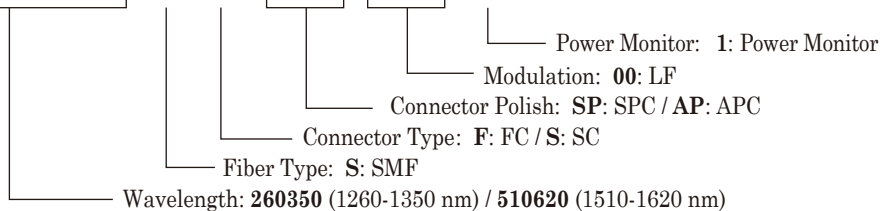
This product is classified class 1M laser product according to IEC 60825-1 (2007).

This product complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50 dated June 24, 2007.

Ordering code

TSL-350-E- - - - - -

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www.santec.com E-Mail : info@santec.com



SANTEC CORPORATION

5823 Ohkusa-Nenjozaka, Komaki, Aichi 485-0802, Japan Tel. +81-568-79-3536 Fax +81-568-79-1718

SANTEC U.S.A. CORPORATION

433 Hackensack Ave., Hackensack, NJ 07601 U.S.A. Toll Free +1-800-726-8321 (santec-1) Tel. +1-201-488-5505 Fax +1-201-488-7702

SANTEC EUROPE LIMITED

Grand Union Studios, 332 Ladbroke Grove, London W10 5AD, U.K. Tel. +44-20-3176-1550

SANTEC (SHANGHAI) Co., Ltd.

11F Room E, Hua Du Bldg., No.838 Zhangyang Road, Pudong District, Shanghai 200122 China Tel: +86-21-58361261, +86-21-58361262 Fax: +86-21-58361263