

Wavelength Selectable Laser

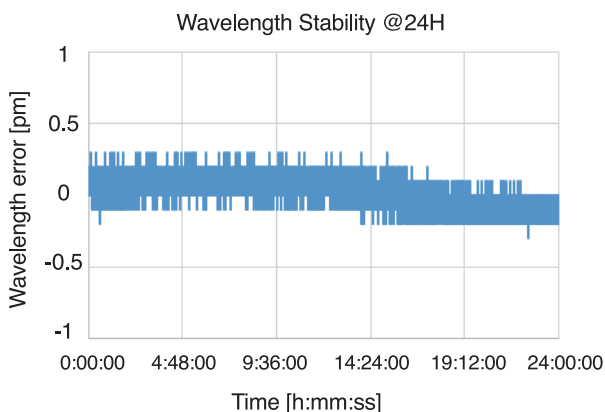
NEW WSL-110

The WSL-110 is a compact and cost effective tunable laser source. Designed for use in fiber optic transmission testing, the WSL-110 can also be used for DWDM component evaluation and Coherent communications testing. C-band or L-band lasers are available, each covering a 38nm tuning range. The WSL-110 features Gridless tuning, allowing any wavelength to be accessed. An integrated wavelength locker ensures high wavelength accuracy and stability. This laser can be controlled either through the front panel or by using a GPIB interface, allowing full remote control and measurement automation.

Features

- ▶ C-band or L-band tuning with high resolution
- ▶ Settable to any wavelength
- ▶ Fine tuning available with 1 MHz resolution
- ▶ Narrow linewidth < 100 kHz
- ▶ High output power > +15 dBm
- ▶ Integrated wavelength locker
- ▶ One or two ports per unit

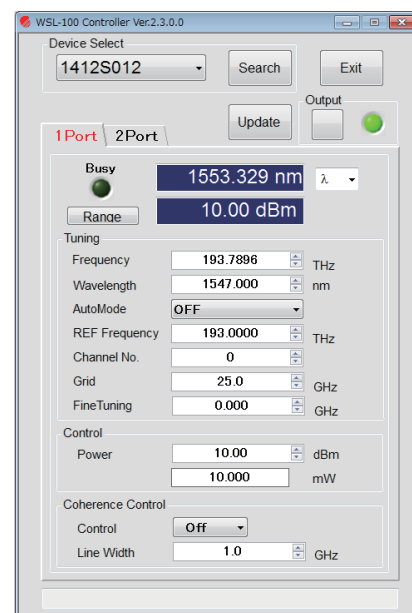
Measurement data



Applications

- ▶ Fiber optic transmission testing
- ▶ DWDM component testing
- ▶ Coherent communications / Local oscillator
- ▶ Optical amplifier testing

Graphical user interface



Specifications

Parameter	Unit	Gridless tuning	
		C-band	L-band
Wavelength Range	nm	1527.60 - 1565.50	1568.77 - 1608.76
Frequency Range	THz	191.50 - 196.25	186.35 - 191.1
Channel Spacing	GHz	25 (Any frequency is available.)	
Frequency resolution	MHz	100 (0.8 pm at 1550 nm)	
Frequency Accuracy to ITU grid	GHz	< ±2.5 / ±1.0 (typ.)	
	pm	< ±20 / ±8 (typ.)	
Frequency Repeatability to ITU grid *1	GHz	±0.25 (typ.)	
	pm	±2 (typ.)	
Frequency Stability to ITU grid @1hour *1	GHz	±0.25 (typ.)	
	pm	±2 (typ.)	
Fine tune resolution	MHz	1 (typ.)	
Fine tune range	GHz	±6	
Output power tuning range	dBm	9.5 to 15.5	8.5 to 14.5
Power Variation *2	dB	±0.2 (typ.)	
Power Stability @1hour *1, *2	dB	±0.01 (typ.)	
Linewidth	kHz	100 (typ.)	
Side mode suppression ratio (SMSR)	dB	> 40 / 55 (typ.)	
Relative intensity noise *3	dB/Hz	-145 (typ.)	
Polarization extinction ratio *4	dB	20 (typ.)	
Optical output connector	-	FC/APC or SC/APC	
Interface	-	GP-IB, USB	
Operating Temperature	°C	15 to 35	
Operating Humidity	%	< 80	
Voltage	V	AC 100 - 240 V (±10 %)	
Frequency	Hz	50 / 60	
Dimensions (Width x Depth x Height)	mm	210 x 300 x 80	
Weight	kg	3	

*All specifications are quoted after 1 hour warm-up period.

*1: At constant temperature ± 0.5 °C.

*2: Measured by fiber with angled polished connector.

*3: 10 MHz to 3 GHz

*4: SLOW axis, angle accuracy < 10 deg

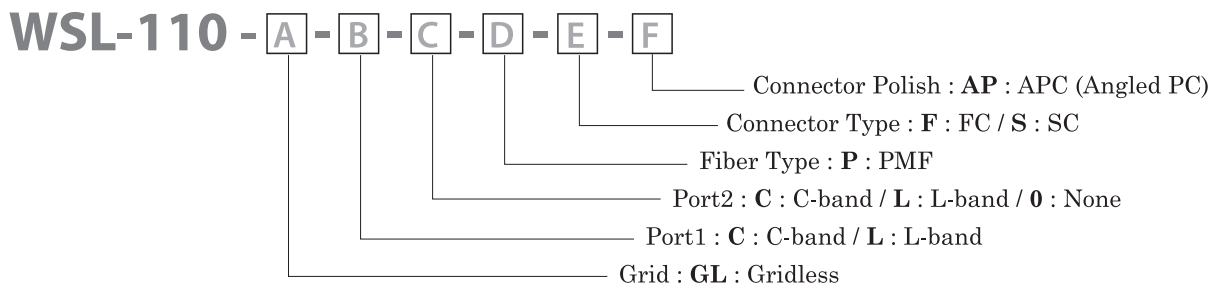
Laser safety information



This product is classified class 1M laser product according to IEC 60825-1 (2014).

This product complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 56 dated May 8, 2019.

Ordering Code



www.santec.com

2023© SANTEC CORPORATION Santec reserves the right to make changes in equipment design, components or specifications without notice.



SANTEC CORPORATION

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

SANTEC USA CORPORATION

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

SANTEC EUROPE LIMITED

99 Park Drive, Milton Park, Abingdon Oxfordshire, OX14 4RY, UK Tel. +44-20-3176-1550

SANTEC (SHANGHAI) Co., Ltd.

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