



Electric Tunable Filter Laser WLTL-200- Version

Tunable Fiber Lasers of WLTL-200-series are built on proprietary design. The lasers are consisting mainly of a gain block and frequency selection engine. Each of the elements is configurable to specific requirements, which leaves abundant options to implement variations of tuning range and optical output power. Wavelength tuning is achieved by a micro motor controlled with a PC through a USB interface. Fast setup, small foot print, fast sweep, wide tuning range and availability over X-, O-, S-, C-, and L-bands enable the lasers being cost-effective sources for R&D and lab purposes of various tests related to wavelength measurements such as DWDM component, fiber Bragg gratings and FGB sensor interrogation.

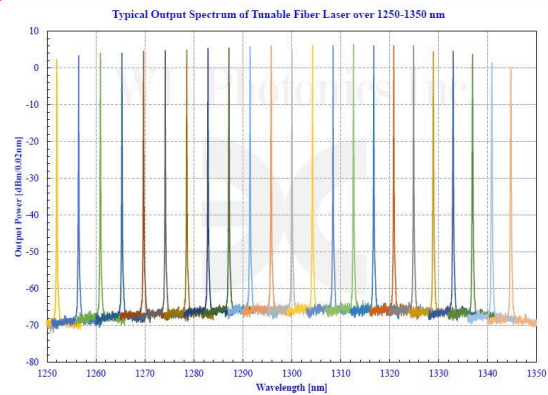
Preliminary

Key Features

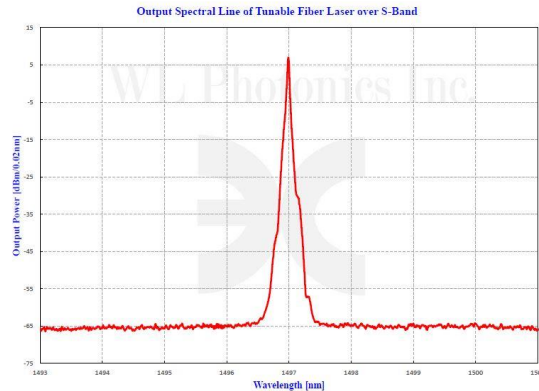
- Continuous wavelength tuning
- Available over X, O, S, C & bands
- Low ASE-noise level
- Rapid tuning speed
- Cost effective OEM solution

Applications

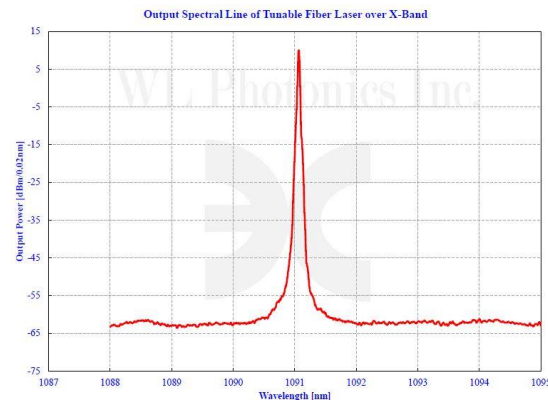
- Fiber optic components test
- FBG fiber sensor interrogation system
- Fiber sensor/sensor array development
- PMD and PDL measurement
- General R&D test and system integration.



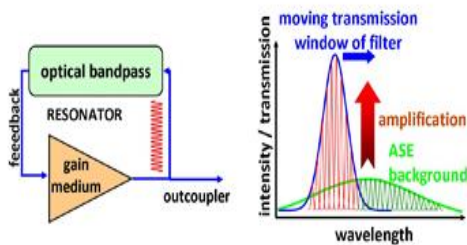
Output Lines of O-Band Tunable Laser



Output Line of S-Band Tunable Laser



Output Line of X-Band Tunable Laser



Operation of Tunable Fiber Laser



Typical Specifications of Manual Tunable Fiber Laser (WLTF-200-version)

Parameter	X-Band	O-Band	S/C/L-Band
Center Wavelength	1060±10nm	1310±20nm	1550±20nm
Tuning Range	85nm	100nm	120nm
Fiber Output Power	~10dBm		
Power Stability	<±0.05dB within 1 hr under room temperature (PM fiber output only)		
Wavelength Resolution	0.01nm		
Wavelength Repeatability	±0.01nm (from Home to Target)		
Max. Tuning Speed	100nm/Sec.		
Spectral Linewidth	<0.05nm		
ASE Suppression	<-70dB		
Output Polarization State	Polarized		
Extinction Ratio	>20dB (PM fiber output only)		
Optical Interface	Receptacle or fiber pigtail for specified connector type		
Fiber Type	HI1060	SMF-28 (or 28e)	
	PM980	PM1300	PM1550
Electric Control Interface	USB standard (I ² C or SPI option on request)		
Power Supply	5V/3A DC		
Operating Temperature	10 to 50°C		
Storage Temperature	-10 to 65°C		
Weight	<0.75kg		
Dimension	Specification-dependent		

Ordering Information

Part Number: WLTL-200-A-B-C/D-E-F

- A. Center wavelength in nanometer: **1060** is for 1060nm (X-band) and **1550** is for 1550nm (C-band).
- B. Fiber type: **SM** is for single mode fiber and **PM** is for polarization maintaining fiber.
- C. Pigtail cable diameter in millimeter: **0.25** is for 250µm OD buffer fiber, **0.9** is for 900µm OD loose tube and **3.0** is for 3.0mm OD cable (only existing for pigtail output).
- D. Pigtail length in meter: **0.5** is for 0.5m long and **1.0** is for 1M long (only existing for pigtail output).
- E. Connector type of either pigtail termination or receptacle adapter, such as **FC/APC**, **FC/UPC**, **SC/APC** or **LU/UPC** and **00** is for no connector.
- F. Electric interface: such as USB, I²C or SPI.

Example 1: WLTL-200-1310-PM-3.0/1.0-FC/APC-USB

Description: Electrically tunable fiber laser of 10mW (CW) typical output power over 1260-1360nm tuning range with 1M long, 3.0mm OD loose cabled Panda PM1300 fiber pigtail terminated with and FC/APC connector on pigtail end. USB control interface.



Example 2: WLTL-200-1060-SM-FC/APC-I²C

Description: Electrically tunable fiber laser of 10mW (CW) typical output power over 1015-1100nm tuning range with receptacle output interface for FC/APC connector. I²C digital output interface.