



## Electric Tunable Fiber Laser WLTL-100-Version

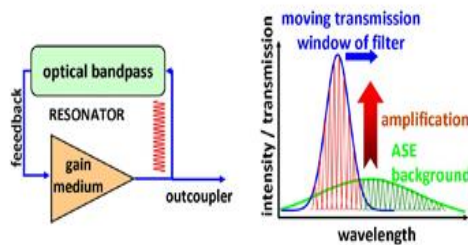
Tunable Fiber Lasers of WLTL-100-series are built on proprietary design. The lasers are consisting mainly of a gain block and frequency selection engine. Each of the elements is configurable to specific requirements, which leaves abundant options to implement variations of tuning range and optical output power. Wavelength tuning is achieved by adjusting manually a differential micrometer head. Plug & play, wide tuning range and availability over X-, O-, S-, C-, and L-bands enable the lasers being cost-effective sources for the lab purposes of testing CWDM and DWDM components, AWG & PLC components, optical amplifiers and fiber Bragg gratings.

### Key Features

- Continuous wavelength tuning
- Up to 150nm tuning range
- Available over X-, O-, S-, C- & L-bands
- Low ASE-noise level
- Cost effective solution

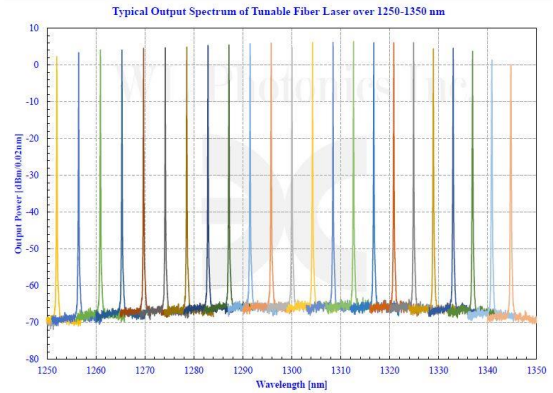
### Applications

- Fiber optic components test
- Fiber Bragg grating test
- Fiber sensor test
- PMD and PDL measurement
- General R&D test
- Seed option for high power fiber laser.

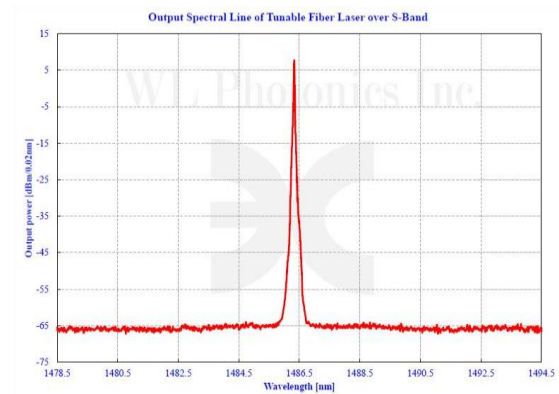


Operation of Tunable Fiber Laser

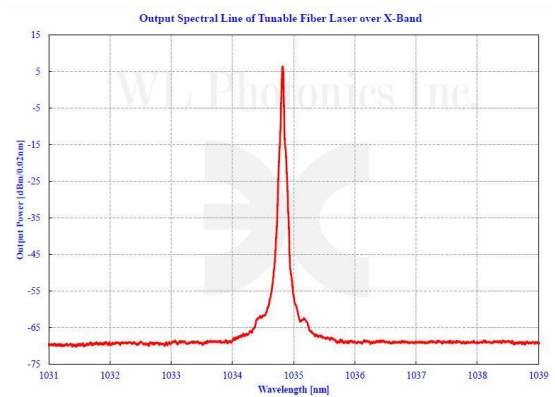
**Preliminary**



Output Lines of O-Band Tunable Laser



Output Line of S-Band Tunable Laser



Output Line of X-Band Tunable Laser



## Typical Specifications of Manual Tunable Fiber Laser (WLTF-100-version)

Parameter	X-Band	O-Band	S/C/L-Band
Center Wavelength	1060±10nm	1310±20nm	1550±20nm
Tuning Range	100nm	120nm	140nm
Fiber Output Power	~10dBm		
Power Stability	<±0.05dB within 1 hr under room temperature (PM fiber output only)		
Wavelength Resolution	0.01nm		
Wavelength Repeatability	±0.02nm		
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
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-100-**ABCDE

- 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.

**Example: WLTL-100-1310-SM-3.0/1.0-FC/APC**

Description: Manually tunable fiber laser of 10mW (CW) typical output power over 1250-1370nm tuning range with 1M long, 3.0mm OD loose cabled SMF-28 single mode fiber pigtail terminated with FC/APC connector on pigtail end.