

Key Features

- Output power 50mW to 5W
- Single frequency operation
- Linewidth <0.05nm
- Tunable 1900 to 2050nm
- Single mode, $M^2 \approx 1$
- Benchtop or OEM unit
- USB interface
- Operation Temp: 10 to 40°C
- Standard or All-PM version
- Efficient cooling system

Applications

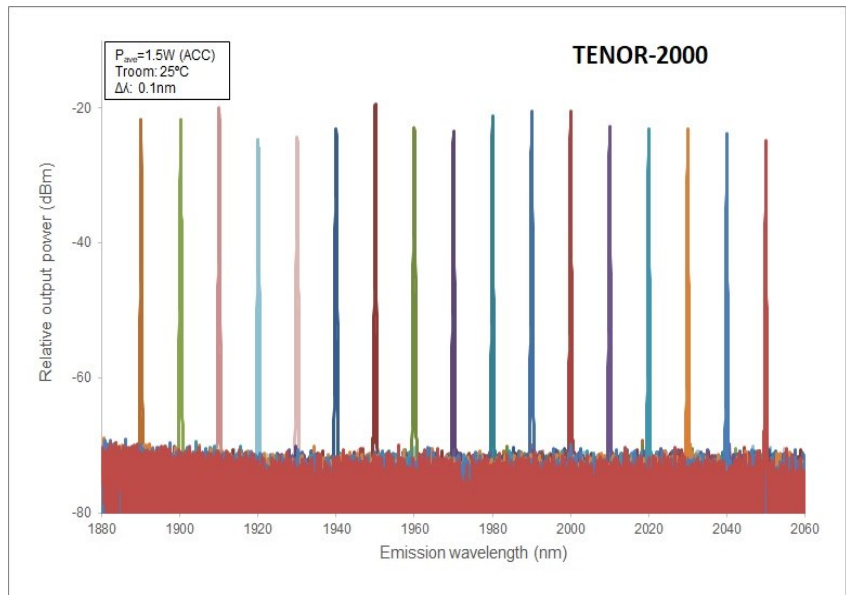
- Laser pumping
- High Energy Physics
- Testing and Measurement
- Plastic processing
- Medical
- Interferometry & spectroscopy

2μm Amplifiers & Laser Products

- ◆ MISTRAL-Amp 5W- 2051nm
- ◆ SCIROCCO-Amp 5W-1950nm
- ◆ MAESTRO-Amp 20W-2000nm
- ◆ MAGNI Laser NL 10W-1950nm
- ◆ VULCAN Laser 10W-1950nm
- ◆ ASTROLIGHT Laser 5W 1950nm

The CYBEL TENOR-BT-2000 is a wavelength tunable PM fiber laser with a broadband tuning range from 1900 to 2050nm and output power greater than 1W. The signal wavelength has a spectral width of 0.05nm over a continuous 150nm tunable wavelength range with an optical signal to noise ratio (OSNR) > 50dB. The isolated output power is delivered via a single mode PM fiber with polarization extinction ratio (PER) >20dB. The amplifier output power is scalable to more than 5W of single transverse mode

The TENOR-BT-2000 model comes in a 19 inch benchtop unit designed with either a manual control of the wavelength tuning or via a USB computer interface. This tunable laser is available in other custom wavelength range in the 2μm window.



Wavelength Sweep Across the Band

TENOR-BT-2000 PM λ Tunable Laser

OPTICAL	Unit	Value	Comment
Wavelength tuning range	nm	1900-2050	Other tuning wavelength bands available
Average output power	W	1	lower (50mW) or higher (5W) power available
Output signal spectra width	nm	<0.05	
Polarization ext. ratio	dB	≥ 20	PM version
Signal to noise ratio (OSNR)	dB	50	For Pout>100mW
Beam quality (M ²)	M ²	<1.1	
Output power stability	%	3	1950nm at 1W for 1 hour
Output fiber length	m	1	SM or PM 1950-Armored cable, Optional
Connector		FC/APC	Other connector available
Optical output tap	m	1	Optional
ELECTRICAL			
Voltage	V	110-220	
Warm-up time	min	20	
Supply power consumption	W	100	@Pout max=1W 25°C
Control interface		USB	
Control mode		ACC	Fiber tap option available
GENERAL			
Dimensions	inch	19	2U Rack mountable
Control Storage temperature	°C	-20 to 65	
Operating case temperature	°C	10 to 40	
Operating relative humidity	%	5 to 95	Non-condensing

CUSTOMIZATION

The **TENOR-BT-2000** is a laser platform that can be customized to match Customers' specific requirements. Please contact Cybel.

COMPLIANCE with Regulatory Requirements: These benchtop products are Class 4 lasers as designated by the Center for Device and Radiology Health (CDRH). As such they are intended only in integration into other equipment and do not comply with CDRH requirement. It is the customer responsibility for CDRH certification of the full system that incorporates this industrial laser.



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