

### Key Features

- Output power up to 20W
- Bandwidth from 1900 to 2020nm
- Large dynamic range: >20dB
- Single mode beam quality:  $M^2 \approx 1$
- Turnkey Benchtop
- Standard or All-PM design
- High polarization extinction ratio
- RS 232 or USB interface
- Operation Temp: 10 to 40°C
- Output collimator option

### Applications

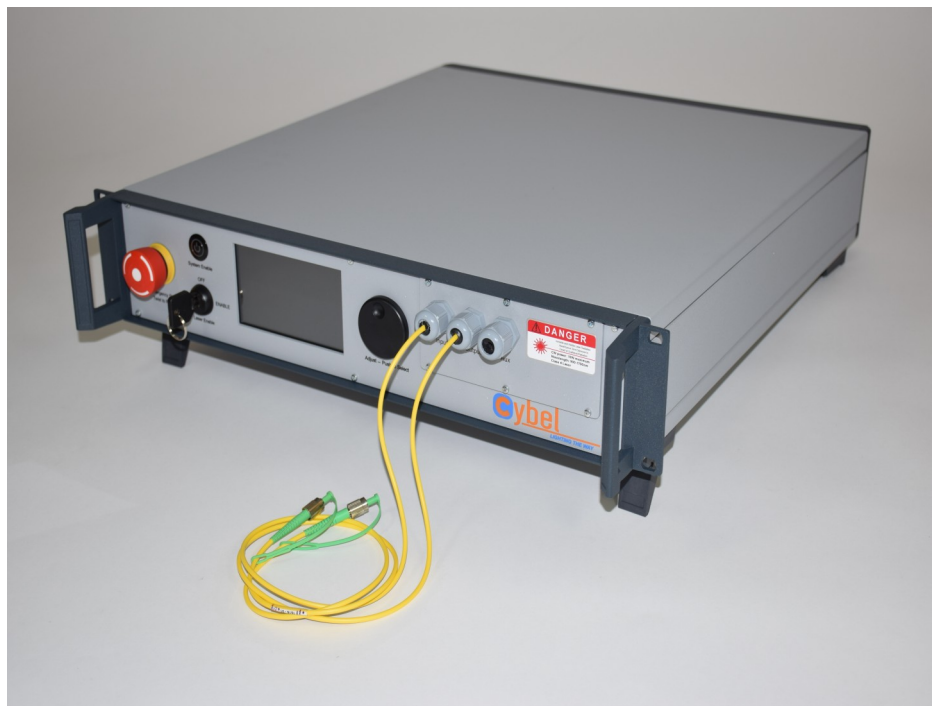
- LIDAR
- Gas Sensing
- Test and Measurement
- Mid IR generation
- Spectroscopy

### Cybel Thulium & Holmium Amplifiers & laser products

- ◆ MISTRAL-1W- 2051
- ◆ MISTRAL-20W-2051
- ◆ SCIROCCO-1W-1950
- ◆ MAESTRO-20W-2000
- ◆ MAGNI-NL-10W-1950
- ◆ ASTROLIGHT- 5W-1950
- ◆ HELIOS-5W-2100

The CYBEL MAESTRO-BT-2000 is a line of high power thulium-doped fiber amplifiers (TDFA) designed for amplification over a broad wavelength bandwidth from 1900 to 2020nm. The MAESTRO-BT-2000 delivers up to 20W of saturated power with a 50dB OSNR over a 20dB input dynamic range. This amplifier can be customized for a specific wavelength and a large range of applications.

The MAESTRO-BT-2000 is a high efficiency and maintenance free fiber amplifier. This TDFA comes as a turn key benchtop instrument. in either a standard or an all polarization maintaining (PM) fiber, and provides the user with stable and reliable performance. Output power and monitoring of key operating parameters such as automatic current control (ACC) modes are controlled from either a RS 232 or USB port. OEM package is available.



# MAESTRO-BT-2000 Specifications

OPTICAL	Unit	Value	Comment
Wavelength	nm	1900 to 2020	Other wavelengths available
Input signal power	dBm	-20	@2000nm
Input signal linewidth	MHz	<3	
Output power	W	5 to 20	High output power available
ASE output power	mW	20	@Pout=1W, Pin=3mW
Polarization ext. ratio	dB	≥ 17	PM version
Beam quality (M <sup>2</sup> )		<1.1	
Output isolator		Optional	
In/out fiber length	m	1	Armored cable, Optional
In/out fiber		Single mode, low bend loss	FC/APC connector
Monitor fiber length	m	1, Optional	Armored cable, Optional
<b>ELECTRICAL</b>			
Voltage	V	110-220	19" benchtop unit
Warm-up time	min	20	
Supply power consumption	W	500	@Pout max=20W
Control interface		USB	
Control mode		ACC	Automatic shut off with LOS (loss of signal or low preset input power level)
<b>ENVIRONMENTAL</b>			
Dimensions	inch	19	2U Rack-Mount Benchtop-OEM available
Storage temperature	°C	-20 to 65	
Operating temperature	°C	10 to 40	
Operating relative humidity	%	0 to 95	Non-condensing

## CUSTOMIZATION

The MAESTRO-BT-2000 is an amplifier 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.



1195 Pennsylvania Ave  
Bethlehem, PA 18018  
Phone: 610-691-7012

Sales: [contact@cybel-llc.com](mailto:contact@cybel-llc.com)

Website: [www.cybel-llc.com](http://www.cybel-llc.com)