

Key Features

- Output power up to 30 W
- Bandwidth from 1900 to 2020 nm
- Large dynamic range: >20 dB
- 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
- Option of output collimator

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

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 2020 nm. The **MAESTRO-BT-2000** delivers up to 30 W of saturated power with a 50 dB OSNR over a 20 dB 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) and automatic power control (APC) modes are controlled from either a RS 232 or USB port. OEM package is available.



Turn-Key Rack Mount Benchtop

MAESTRO-BT-2000 Specifications

OPTICAL	Unit	Min	Max	Comments
Optical Bandwidth	nm	1900	2020	Single Mode Operation Wavelength
Input Signal Linewidth	MHz	< 2		
Input Signal Power	mW	1	20	
Output Signal Power	W	5	30	With Pin=0 dBm(1 mW)
Output Power Tunability	%	5 - 100		At Pout = 30 W
Output mode, MFD	μm	10-11		
Polarization Ext. Ratio (PER)	dB	≥ 20		PM Version
Output Beam Quality (M ²)	M ²	1.1		
Signal to Noise Ratio (OSNR)	dB	≥ 45		OSA Res. = 1 nm
Output Power Variation (RMS)	%	+/- 3		After 20 Min. Warm-up
Output Fiber Length	m	> 0.7		Longer Fiber at Request
Input Fiber Length	m	> 0.7		Longer Fiber at Request
Output Isolation	dB	20		Optional, External to the OEM
Connectors		FC/APC		Other Connectors and Collimators Available
ELECTRICAL				
Voltage	V	110-220		@ 60-50 Hz
Warm up Time	min	20		
Power Consumption	W	< 500		25 °C, @Pout max = 30 W
Control Interface		RS-232		
Mode of Operation		ACC		
GENERAL				
Dimensions	inch	19		2U Rackmount Benchtop
Storage Temperature	°C	-10 to 65		
Operating Case Temp.	°C	0 to 60		
Humidity	%	5 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.



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