

MAESTRO-2000 20W-Broadband CW Thulium Fiber Amplifier

Key Features

- Output power up 20W
- Bandwidth from 1900 to 2020nm
- Compact OEM unit
- Large dynamic range: >20dB
- Single mode beam quality: M² ≃ 1
- Standard or All-PM design
- High polarization extinction ratio
- Operation Temp: 10 to 50°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
- ◆ ASTROLIGTH- 5W-1950
- ◆ HELIOS-5W-2100

The CYBEL MAESTRO-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-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-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.



MAESTRO 2000



1195 Pennsylvania Ave. Bethlehem, PA 18018 Phone: 610-691-7012 Sales: contact@cybel-llc.com

Website: www.cybel-llc.com

MAESTRO-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	20	
ASE output power	mW	20	@Pout=1W, Pin=3mW
Polarization ext. ratio	dB	≥ 17	PM version
Beam quality (M²)		<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
ELECTRICAL			
Voltage	V		
Warm-up time	min	20	
Supply power consumption	W	500	@Pout max=20W
Control interface		RS 232	
Control mode		ACC-APC	Automatic shut off with LOS (loss of signal
			or low preset input power level
ENVIRONMENTAL			
Dimensions	mm		
Storage temperature	°C	-20 to 65	
Operating temperature	°C	0 to 50	
Operating relative humidity	%	0 to 95	Non-condensing

CUSTOMIZATION

The **MAESTRO-2000** is an amplifier platform that can be customized to match Customers 'specific requirements. Please contact Cybel.

COMPLIANCE with Regulatory Requirements: These OEM 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

Website: www.cybel-llc.com