

## MORAY-BT-1600

### 10W 1570-1610nm

### L-Band EYDFA

#### Key Features

- Wavelength 1570 to 1610nm
- Output power 1 to 10W
- Single frequency operation
- Laser linewidth: <math><1\text{MHz}</math>
- Single mode,  $M^2 \approx 1.1$
- Benchtop or OEM unit
- Noise figure: 8dB
- Standard or All-PM version
- Efficient forced air cooling system
- Optional Output collimator

#### Applications

- Optical fiber transmission
- Testing and Measurement
- Nonlinear R&D
- Fiber Sensing
- Spectroscopy

#### Cybel Broadband Amplifiers & laser products

- ◆ STINGRAY-BT-1550
- ◆ MANATARAY-BT-1064
- ◆ MAESTRO-BT-1950
- ◆ MISTRAL-BT-2050
- ◆ HELIOS-BT-2100
- ◆ TENOR-BT-1900-2050

The **CYBEL MORAY-BT-1600** series is a line of high optical power Erbium Ytterbium fiber amplifiers (EYDFA) designed for operation over the bandwidth from 1570 to 1610nm. The **MORAY-BT-1600** amplifier delivers up to 10W of CW output power with a random or linear polarization and a single mode high beam quality,  $M^2 < 1.1$ . These amplifiers are built to maintain stable performance in R&D experiment as well in field applications.

The **MORAY-BT-1600** laser comes in a 19" rack mount benchtop unit with either a standard or an all polarization maintaining (PM) fiber. It is also available in a compact OEM format (200x150x43mm<sup>3</sup>) for easy system integration and deployment. Output power, key monitoring, and operating parameters such as automatic current control (ACC) and automatic power control (APC) modes are controlled from a USB port.



## MORAY-BT-1600 Specifications

OPTICAL	Unit	Value		Comment
Operating wavelength	nm	1570	1610	
Signal linewidth	MHz	2		
Output power	W	5	10	@Pin= 2mW, Lower Pout available
Output power tunable range		10	100	
Input power	dBm	3	15	
Noise Figure	dB	8		@Pout =5W
Output power stability	%	3		After 20min warm-up time
Polarization extinction ratio	dB	≥ 18		PM version
Beam quality ( M <sup>2</sup> )	M <sup>2</sup>	<1.1		
Input/output isolator	dB	30		Output collimator option & fiber tap option
Out fiber length	m	1		SM or PM 1550-Armored cable, Optional
Input monitoring		yes		Loss of Signal ( LOS ) option available
Connector		FC/APC		Other connector and Collimator available
<b>ELECTRICAL</b>				
Voltage	V	110-220		19 " benchtop unit/ 50-60Hz
Warm-up time	min	20		
Power consumption	W	200		@Pout=10WI.Laser Interlock
Control interface		USB		Front panel control parameter interface
Control mode		ACC-APC		Control via USB port
<b>GENERAL</b>				
Dimensions	Inch	19		2U-Rack mount Benchtop-OEM Available
Storage temperature	°C	-20 to 65		
Operating case temperature	°C	10 to 40		
Operating relative humidity	%	5 to 95		Non-condensing

### CUSTOMIZATION

The **MORAY-BT-1600** 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.

