

Key Features

- Output power up to 25W
- Bandwidth from 1545 to 1565nm
- 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: 15 to 40°C
- Option of output collimator

Applications

- Optical Fiber Telecom
- Fiber Sensing
- Test and Measurement
- Frequency Doubler
- Coherent Beam Combining

Cybel Benchtop Products

- ◆ MANTARAY-BT-1064
- ◆ MISTRAL-BT-20W-2051
- ◆ MAESTRO-BT-20W-2000
- ◆ HELIOS-BT-10W 2100

The CYBEL STINGRAY-BT-1550 is a line of high power Erbium Ytterbium fiber amplifier (EYDFA) designed for amplification over a broad wavelength bandwidth from 1545 to 1565nm. This fiber amplifier is a single mode, single frequency amplifier that delivers up to 25W of saturated power with near diffraction limited output beam (i.e. $M^2 < 1.1$). This amplifier can be customized for specific wavelength and a large range of applications.

The STINGRAY-BT-1550 is a high efficiency and maintenance free fiber amplifier. This EYDFA comes as a turn key benchtop instrument with 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 USB port. OEM package is available.



Turn-Key Rack Mount Benchtop

STINGRAY-BT-1550 Specifications

OPTICAL	Unit	Value	Comment
Wavelength	nm	1545 to 1565	Other wavelength available
Input signal power	dBm	-10 to 13	Other range available
Input signal linewidth	kHz	<10	
Output power	W	5 to 25	
Polarization ext. ration (ER)	dB	≥ 17	PM version
Beam quality (M ²)	M ²	<1.1	
Output isolator	dB	25	Optional-Collimator
In/out fiber length	m	1	Optional-Armored cable
In/out fiber		Single mode, low bend loss	
Monitor fiber length	m	1	Optional-Armored cable
ELECTRICAL			
Voltage	V	110-220	19 " benchtop unit-rack mount
Warm-up time	min	15	
Supply power consumption	W	400	@Pout max=20W
Control interface		USB	
Control mode		ACC-APC	Automatic shut-off with LOS (loss of signal or min preset input power level)
GENERAL			
Dimensions	inch	19	2U Rack-Mount Benchtop-OEM available
Storage temperature	°C	-20 to 65	
Operating temperature	°C	10 to 40	
Operating relative humidity	%	5 to 95	Non-condensing

CUSTOMIZATION

The **STINGRAY-BT-1550** is an amplifier platform that can be customized to match Customers ' specific requirements. Please contact Cybel.

COMPLIANCE with Regulatory Requirements: These BENCHTOP-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.



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