

## STINGRAY 1550nm High Power Fiber Amplifier

### Key Features

- Output power 1 to 15W
- Wide bandwidth 1545-1565nm
- Single mode, single frequency
- Wide dynamic range
- Standard or PM fiber
- High polarization extinction ratio
- Control Modes: APC and ACC
- High beam quality:  $M^2 < 1.1$

### Applications

- Coherent or spectral beam combining
- Free Space Communications
- Spectroscopy
- Mapping
- LIDAR and Sensing
- Test and Measurement
- Seed source for Amplifier

### SKYLINE SERIES

Also available at different standard wavelengths with same high performance and compact footprint:

- ◆ MANTARAY-1060
- ◆ MISTRAL-2051
- ◆ MAGNI-NL-10W-1950
- ◆ ASTROLIGHT-5W-1950
- ◆ MAESTRO-20W-2000
- ◆ HELIOS 5W-2100

The **CYBEL STINGRAY-1550** is a 1550nm high power, single mode, single frequency amplifier that delivers up to 15W of saturated output power with a near diffraction limited output beam ( i.e.  $M^2 < 1.1$  ).

The **STINGRAY-1550** comes either in a standard or polarization maintaining fiber configuration, that provides the user with stable and high performance over a bandwidth from 1545nm to 1565nm. 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.

The **STINGRAY-1550** amplifiers are efficient and compact all-fiber OEM units that can be used in a variety of applications, including industrial or laboratory uses, optical transmission systems or field deployment.



# STINGRAY-1550 Specifications

OPTICAL	Unit	Min	Max	Comments
Optical bandwidth	nm	1545	1565	
Input signal power	dBm	-10	+13	
Input signal linewidth	kHz	10		
Output signal power	W	1	15	Unit based
ASE output power	mW	200		At Pout =10W
Polarization Ext. Ratio (PER)	dB	≥17		At rated Pout
Output beam quality M <sup>2</sup>	M <sup>2</sup>	1.1		
Pout tunability	%	10-100		Nominal
Output power variation	%	≤3		RMS
Output isolation	dB	-30		Fiber isolator
Output fiber length		1m/ Std. or Panda FC/APC		Armored cable
Monitor fiber length		1m/ Std. or Panda FC/APC		3mm
Input fiber length		1m/ Std. or Panda FC/APC		3mm
<b>ELECTRICAL</b>				
Voltage	V	18 to 30		
Warm up time	min	20		
Power consumption	W	200		@Pout max=10W
Control interface		USB and RS 232		
Mode of operation		ACC and APC		
<b>GENERAL</b>				
Dimensions	mm	200x150x43		w/o heat sink
Storage temperature	°C	-20 to 70		
Operating case temp.	°C	-10 to 50		
Humidity	%	5 to 95		Non condensing

## CUSTOMIZATION

The **SKYLINE** 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.



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