

## MANTARAY-1064 1064nm High Power Fiber Amplifier

### Key Features

- Output power 1 to 10W
- Operating BW 1050-1100nm
- Single mode, single frequency
- Wide dynamic range
- Standard or PM fiber
- High polarization extinction ratio
- Control Modes: ACC and APC
- High beam quality:  $M^2 < 1.1$
- Compact & rugged design
- RS 232 or USB interface

### 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 amplifiers at different wavelengths with same high performance and compact footprint:

- ◆ STINGRAY-1550
- ◆ SCIROCCO-1950
- ◆ MISTRAL-2051
- ◆ HELIOS-2100

The **CYBEL MANTARAY-1064** is a 1micron high power, single mode, single frequency amplifier that delivers up to 10W of saturated output power with near diffraction limited output beam (i.e.  $M^2 < 1.1$ ).

The **MANTARAY-1064** comes either in a standard or polarization maintaining fiber configuration, that provides the user with stable and high performance over a bandwidth from 1050nm to 1100nm. 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 **SKYLINE** 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.



# MANTARAY-1064 Specifications

OPTICAL	Unit	Min	Max	Comments
Optical bandwidth	nm	1050	1100	
Input signal power	dBm	+3	+15	
Input signal linewidth	kHz	10		
Output signal power	W	1	10	Unit based
ASE output power	mW	200		At Pout =10W
Polarization ext. ratio	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 PVC
Input fiber length		1m/ Std. or Panda FC/APC		3mm PVC
<b>ELECTRICAL</b>				
Voltage	V	18 to 30		
Warm up time	min	20		
Power consumption	W	<70	<150	@Pout max
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 65		
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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