

MANTARAY-AMP-1064

1064nm High Power Fiber Amplifier

Key Features

- Output power 1 to 10 W
- Operating BW 1050 - 1100 nm
- Single mode, single frequency
- Wide dynamic range
- Standard or PM fiber
- High polarization extinction ratio
- Control Modes: ACC and APC
- High beam quality: $M^2 \approx 1.1$

Applications

- Coherent or spectral beam combining
- Free Space Communications
- Spectroscopy
- Mapping
- LIDAR and Sensing

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

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

SKYLINE SERIES

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

- ♦ STINGRAY-AMP-1550
- ♦ SCIROCCO-AMP-1950
- ♦ MISTRAL-AMP-2051
- ♦ HELIOS-AMP-2100



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MANTARAY-1064 Specifications

OPTICAL	Unit	Min	Max	Comments
Optical Bandwidth	nm	1050	1100	Single Mode Operation Wavelength
Input Signal Linewidth	kHz	10		
Input Signal Power	mW	1	10	
Output Signal Power	W	10		With NL Seed Source
Output Power Tunability	%	5 - 100		At Pout =10 W
Polarization Ext. Ratio (PER)	dB	≥ 20		PM Version
Output Beam Quality (M ²)	M ²	1.1		
Signal to Noise Ratio (OSNR)	dB	≥ 45		OSA Res. = 1 nm
Output Power Variation (RMS)	%	≤ 3		After 20 Min. Warm-up
Output Fiber Length	m	> 0.7		Longer Fiber at Request
Input Fiber Length	m	> 0.7		Longer Fiber at Request
Output Isolation	dB	20		Optional, External to the OEM
Connectors		FC/APC		Other Connectors and Collimators Available
ELECTRICAL				
Voltage	V	18 to 30		
Warm up Time	min	20		
Power Consumption	W	< 150		25 °C, @Pout max=10 W
Control Interface		RS-232		
Mode of Operation		ACC		APC Available
GENERAL				
Dimensions	mm	200x150x43		W/O heat sink
Storage Temperature	°C	-10 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.



62 Highland Ave.
Bethlehem, PA 18017
Phone: 610-691-7012

Sales: contact@cybel-llc.com

Website: www.cybel-llc.com