

MERCURY-AMP-1850

1850nm, 40dB, 1W
Fiber Amplifier

Key Features

- >40dB small signal gain
- CW power : 10 mW to 1 W
- Low ASE:<1% at 0dBm input
- Low power consumption: <15 W
- Gaussian beam profile: $M^2 \approx 1$
- Compact & rugged design
- Operation Temp: -10 to 50 °C
- SM/PM versions

The **CYBEL MERCURY-AMP-1850** is a compact fiber amplifier for use with wavelengths between 1850 and 2050 nm. The amplifier provides a high small signal gain and an output power from 10mW to a 1W. The amplifier output has a near Gaussian profile ($M^2 \approx 1$).

The **MERCURY-AMP-1850** output power is adjustable through a USB-C computer interface.

MERCURY-AMP-1850 is an efficient, ultra-compact (97x78x20 mm³) and light weight (250 g), all-fiber either standard or polarization maintaining OEM unit specifically designed for sensing applications requiring a small footprint.

Applications

- Frequency conversion
- Seed laser
- Range finding
- Remote sensing

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

- ♦ **MERCURY-AMP-1064**
- ♦ **MERCURY-AMP-1550**

MERCURY-AMP-1850



Dimensions: 97x78x20 mm³

MERCURY-AMP-1850 Specifications

OPTICAL	Unit	Min	Max	Comments
Optical Bandwidth	nm	1850	2050	Single Mode Operation Wavelength
Input Signal Power	dBm	-5	10	
Output Signal Power	W	1		With Pin=0 dBm(1 mW)
Output Power Tunability	%	5 - 100		
Output mode, MFD	μm	10-11		
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, Rad-Hard fiber
Input Fiber Length	m	> 0.7		Longer Fiber at Request, Rad-Hard fiber
Output Isolation	dB	20		Optional, External to the OEM
Connectors		FC/APC		Other Connectors and Collimators Available
ELECTRICAL				
Voltage	V	12		
Warm up Time	min	20		
Power Consumption	W	< 15		25 °C, @Pout max = 1 W
Control Interface		USB-C		
Mode of Operation		ACC & APC		
GENERAL				
Dimensions	mm	97x78x20		W/O heat sink
Storage Temperature	°C	-10 to 65		
Operating Case Temp.	°C	-20 to 65		
Humidity	%	5 to 95		Non condensing

CUSTOMIZATION

The **MERCURY-AMP-1064** 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