

### Key Features

- Output Power >1.5W
- Linewidth <1MHz
- Stable Single Frequency
- Low intensity noise
- Single Mode,  $M^2 \approx 1$
- Standard or All-PM version
- Adjustable Wavelength & Power
- Compact & Rugged Module
- PM Output with High PER
- USB
- Operation Temp: 10 to 45°C

### Applications

- LIDAR
- Fiber Optic Sensing
- Laser Spectroscopy
- Coherent communications
- Analog & RF Photonics

### MAKO SERIES

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

- ◆ MAKO-1030
- ◆ MAKO-1550
- ◆ MAKO-1550+
- ◆ MAKO-NL-1900
- ◆ MAKO-NL-2000

The CYBEL MAKO-NL-BT 1064 is a single frequency narrow linewidth fiber laser designed for low noise applications. The MAKO-NL-BT 1064 benchtop unit produces a highly stable 1064nm CW output up to 1.5W with a sub-MHz linewidth range, low RIN and intensity noise and excellent OSNR.

The MAKO-NL-BT 1064 design laser comes in a 19” rack mount benchtop unit with either a standard or an all polarization maintaining (PM) fiber that provides steady performance in adverse environmental conditions. External monitoring and control can be achieved via USB computer interface.



### Turn-Key Rack Mount Benchtop

# MAKO-NL-BT 1064 Specifications

OPTICAL	Unit	Value	Comment
Center wavelength	nm	1064	Other wavelengths available
Output power	W	Up to 1.5	
Output signal linewidth (3 dB)	MHz	<1	Option of 100KHz or less
Beam quality (M <sup>2</sup> )	kHz	<1.1	
Side mode sup. ratio (SMSR)	dB	50	@Pout=1W, Res; 0.05nm
Polarization ext. ratio	dB	≥ 18	PM version
Relative intensity noise (RIN)	dBc/Hz	<120 @ 500Hz	
Output fiber stability	%	<1	With 30dB output isolator
Pigtail output fiber	m	SMF 28 or PM Panda fiber	Armored cable, optional
Fiber length	m	1	FC/APC connector termination
Output power tuning range	%	10 to 100	
<b>ELECTRICAL/MECHANICAL</b>			
Voltage	V	110-220	
Warm-up Time	min	20	
Mechanical package	inch	19	2U-Rack mounted benchtop
Supply power consumption	W	25	@Pout max=1.5W
Control interface		USB	
<b>ENVIRONMENTAL</b>			
Operating temperature	°C	10 to 45	
Operating relative humidity	%	0 to 95	Non-condensing

## CUSTOMIZATION

The **MAKO** is a laser platform that can be customized to match Customers' specific requirements. Please contact Cybel.

**COMPLIANCE with Regulatory Requirements:** These benchtop 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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