

Key Features

- Output Power >1W
- Linewidth 1MHz to 10kHz
- 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-NL-1030
- ◆ MAKO-NL-1064
- ◆ MAKO-NL-1550
- ◆ MAKO-NL-2000

The CYBEL MAKO-NL-BT 1900 is a single frequency narrow linewidth fiber laser designed for low noise applications in the wavelength range from 1850 to 2000nm.

The MAKO-NL-BT 1900 benchtop produces a highly stable CW output of more than a 1W with a sub-MHz linewidth range, low RIN and intensity noise and excellent OSNR.

This 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-1900 Specifications

| OPTICAL | Unit | Value | Comment |
|--------------------------------|--------|--------------------------|---------------------------------|
| Center wavelength | nm | 1900 | 1850 to 2000nm |
| Output power | W | >1 | Scalable ; High power available |
| Output signal linewidth (3 dB) | MHz | <1 | Option of 10KHz or less |
| Beam quality (M ²) | 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 | cm | 100 | FC/APC connector termination |
| Output power tuning range | % | 10 to 100 | |
| ELECTRICAL/MECHANICAL | | | |
| Voltage | V | 110-220 | |
| Warm-up Time | min | 20 | |
| Mechanical package | inch | 19 | 2U-Rack mount Benchtop |
| Supply power consumption | W | 25 | @Pout max=1W |
| Control interface | | USB | |
| ENVIRONMENTAL | | | |
| Operating temperature | °C | 10 to 45 | |
| Operating relative humidity | % | 0 to 95 | Non-condensing |

CUSTOMIZATION

The MAKO-NL-BT-1900 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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