

## MAKO-AMP-1030

1030 nm, 30 dB, 500 mW  
Fiber Amplifier

### Key Features

- >30 dB small signal gain
- CW power >500 mW
- Low ASE:<1% at 0 dBm input
- Low power consumption: <10 W
- Gaussian beam profile:  $M^2 \approx 1$
- Compact & rugged design
- Operation Temp: 0 to 60 °C
- SM/PM versions

The **CYBEL MAKO-AMP-1030** is a compact fiber amplifier for use with wavelengths between 1025 and 1035 nm. The amplifier provides high small signal gain (>30 dB) and a saturated output power of over 500 mW. The amplifier output has a near-Gaussian profile ( $M^2 \approx 1$ ).

The **MAKO-AMP-1030** output power is adjustable through a through a RS-232 computer interface.

**MAKO-AMP-1030** is an efficient, ultra-compact (97x78x15mm<sup>3</sup>) and light weighted (150g), all-fiber OEM unit specifically designed for sensing applications requiring small footprint.

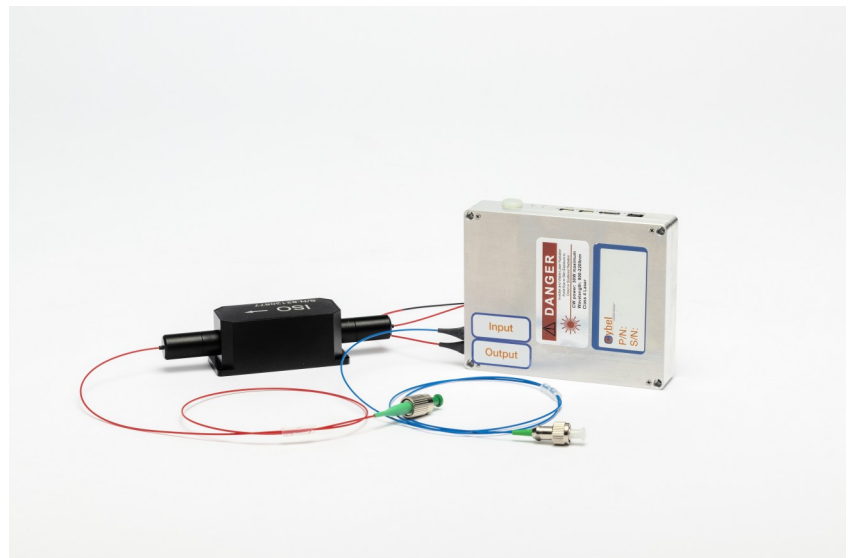
### Applications

- Free space comm.
- Target illumination
- Remote sensing

## MAKO SERIES

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

- ♦ MAKO-AMP-1064
- ♦ MAKO-AMP-1550
- ♦ MAKO-AMP-1900
- ♦ MAKO-AMP-2000



**MAKO-AMP 1030: 97x78x15mm<sup>3</sup>**

# MAKO-AMP-1030 Specifications

| OPTICAL                               | Unit           | Min       | Max  | Comments                                   |
|---------------------------------------|----------------|-----------|------|--|
| Optical Bandwidth                     | nm             | 1025      | 1035 | Single Mode Operation Wavelength           |
| Input Signal Linewidth                | kHz            | 10        |      |  |
| Input Signal Power                    | mW             | 1         | 10   |  |
| Output Signal Power                   | W              | 1         |      | With Pin=0 dBm(1 mW)                       |
| Output Power Tunability               | %              | 5 - 100   |      | At Pout = 1 W                              |
| Output mode, MFD                      | μm             | 10-11     |      |  |
| Polarization Ext. Ratio (PER)         | dB             | ≥ 20      |      | PM Version                                 |
| Output Beam Quality (M <sup>2</sup> ) | M <sup>2</sup> | 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                    |
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| Output Isolation                      | dB             | 20        |      | Optiional, External to the OEM             |
| Connectors                            |                | FC/APC    |      | Other Connectors and Collimators Available |
| ELECTRICAL                            |                |           |      |  |
| Voltage                               | V              | 2.4 & 12  |      |  |
| Warm up Time                          | min            | 20        |      |  |
| Power Consumption                     | W              | < 15      |      | 25 °C, @Pout max = 1 W                     |
| Control Interface                     |                | RS-232    |      |  |
| Mode of Operation                     |                | ACC       |      |  |
| GENERAL                               |                |           |      |  |
| Dimensions                            | mm             | 97x78x15  |      | W/O heat sink                              |
| Storage Temperature                   | °C             | -10 to 65 |      |  |
| Operating Case Temp.                  | °C             | 0 to 60   |      |  |
| Humidity                              | %              | 5 to 95   |      | Non condensing                             |

## CUSTOMIZATION

The **MAKO-AMP** 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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