

## Key Features

- High pulse energy:  $>10\mu\text{J}$
- High peak power:  $>2.5\text{kW}$
- Adjustable repetition rate
- Adjustable pulse width
- Gaussian beam profile:  $M^2 \approx 1$
- Compact & rugged design
- Operation Temp:  $-10$  to  $50^\circ\text{C}$
- PM version

The **CYBEL MAKO-1030** is a compact pulsed fiber laser that can deliver 2.5kW 4ns pulses. The laser output has a near-Gaussian profile ( $M^2 \approx 1$ ).

The **MAKO-1030** pulse width ( 4 to 50ns ) and repetition rate ( 10 to 2,000kHz ) are continuously adjustable through an analog input control. The optical output power is adjustable through a separate digital control.

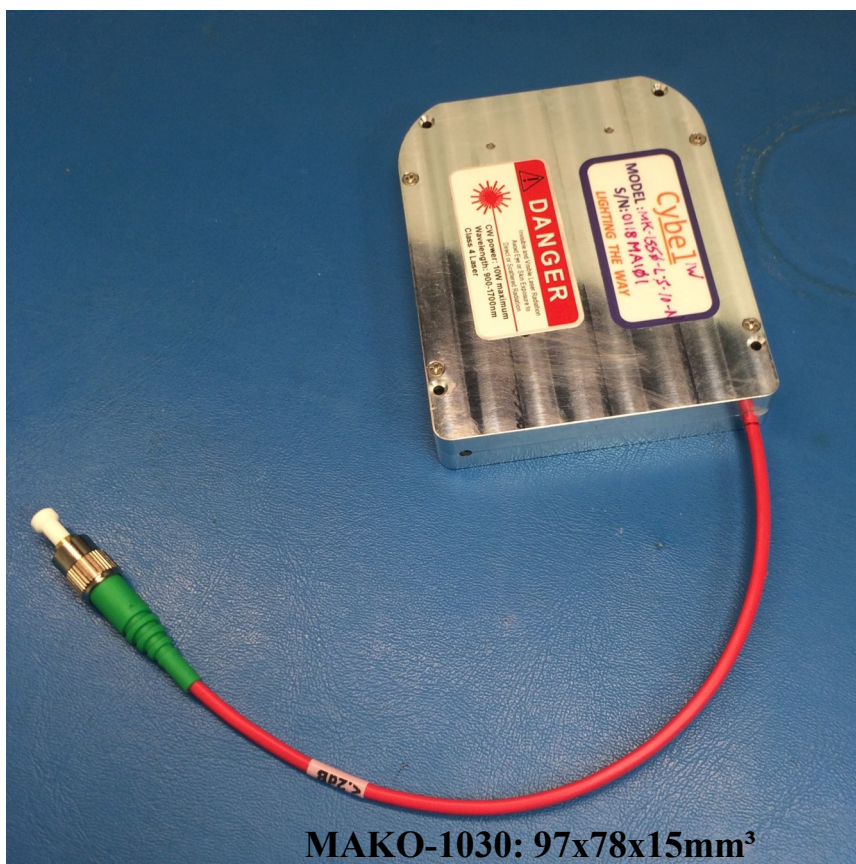
The **MAKO-1030** is an efficient, ultra-compact (97x78x15 mm<sup>3</sup>) and ultra-light ( 150g ), all-fiber OEM unit specifically designed for sensing applications requiring small size.

# Applications

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

# MAKO SERIES

- ◆ MAKO-1064
- ◆ MAKO-1550
- ◆ MAKO-1550+
- ◆ MAKO-NL-1550
- ◆ MAKO-NL-1900
- ◆ MAKO-NL-2000



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

# MAKO-1030 Specifications

OPTICAL	Unit	Value	Comment
Center wavelength	nm	1030	Other wavelengths available
Optical bandwidth, pulsed	nm	1	>95% power in band, 2.5kW peak power
Average output power, pulsed	W	1.2	100kHz, 5ns
Pulse repetition rate	kHz	10 to 2000	Adjustable
Power tunability	%	0 to 100	
Pulse width	ns	4 to 50	Adjustable
Peak power	kW	2.5	
Energy-per-pulse	μJ	10	
ASE level, pulsed	%	2	%power, 50kHz, 20ns, 1.5W avg. power
Pulse energy variation	% RMS	5	100kHz, 5ns, 1.5W avg. power
Output mode (M <sup>2</sup> )	M <sup>2</sup>	1.1	
Output mode, MFD	μm	10	
Output fiber length	cm	50	Other lengths available
Output fiber description		3mm SS, FC/APC	Armored cable available on request
ELECTRICAL/MECHANICAL			
Mechanical package	mm	97x78x15	
Supply power consumption	W	15	25°C, 1.2W output power
Control interface		RS 232	
ENVIRONMENTAL			
Operating temperature	°C	-10 to 50	
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 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.



1195 Pennsylvania Ave  
Bethlehem, PA 18018  
Phone: 61-691-7012

Sales: [contact@cybel-llc.com](mailto:contact@cybel-llc.com)

Website: [www.cybel-llc.com](http://www.cybel-llc.com)