

MAKO-1550

Compact 1550nm Pulsed Fiber Laser

Key Features

- High pulse energy: >20µJ
- Optical linewidth 100nm
- High peak power: >1.5kW
- Adjustable Freq. rep. rate
- Adjustable pulse width
- Gaussian beam profile: M² ≃1
- Compact & rugged design
- Operation: -10 to 50 °C
- Standard and PM version

Applications

- LIDAR LADAR
- Range finding
- Target illumination
- Remote sensing

MAKO SERIES

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

- MAKO-1030
- MAKO-1064
- MAKO-1550+
- MAKO-NL-1550
- MAKO-NL-1900
- MAKO-NL-2000

Cybel

The **CYBEL MAKO-1550** is a compact 1550nm eye safe pulsed fiber laser that can deliver either 1.5kW 4ns pulses with a broad linewidth (100nm). The laser output has a near-Gaussian profile ($M^2 \approx 1$).

The **MAKO-1550** 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-1550 is an efficient, ultra-compact (97x78x15mm³) and ultra-light (150g), all-fiber OEM unit specifically designed for sensing applications requiring small



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MAKO-1550 Specifications

OPTICAL	Unit	Value	Comment
Center wavelength	nm	1545	Other wavelengths available
Optical bandwidth, pulsed	nm	100	>95% power in band, 2.5kW peak power
Average output power, pulsed	W	1.5	50kHz, 20ns
Pulse repetition rate	kHz	10 to 2000	Adjustable
Power tunability	%	0 to 100	
Pulse width	ns	4 to 50	Adjustable
Peak power	kW	1.5	
Energy-per-pulse	μJ	30	
ASE level, pulsed	%	2	%power, 50kHz, 20ns, 1.5W avg. power
Pulse energy variation	% RMS	5	50kHz, 20ns, 1.5W avg. power
Output mode M ²	M ²	1.1	
Output mode, MFD	μm	11.5	
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, 1.5W 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.



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