

Key Features

- Peak power: up to 5 kW
- Average output power >1 W
- Rep. Rate 20 kHz - 1 MHz
- Pulse width 4 ns to 50ns
- High beam quality $M^2 < 1.1$
- RS-232 interface
- Operation Temp: 0 to 50°C
- Standard or PM version

The CYBEL ALLEGRO-1550 is a fiber laser that offers dual mode operation CW & pulsed mode. This unique fiber laser can switch from CW to pulse mode operation and vice-versa. Delivering 1W output power in CW mode or 5 kW peak power with 4 ns pulse width at 20 kHz repetition rate. Other pulse widths and frequency ranges are possible. This versatile module is available at several operating wavelengths.

The ALLEGRO-1550 module is a single mode fiber device with diffraction limited output beam quality $M^2 < 1.1$. This laser unit comes in either standard or PM fiber.

The ALLEGRO-1550 laser is housed in a compact OEM package (97x78x15mm³). And provides control of pulse width, pulse rate, output power, and selection of mode (CW/pulse), via a RS232 interface.

Applications

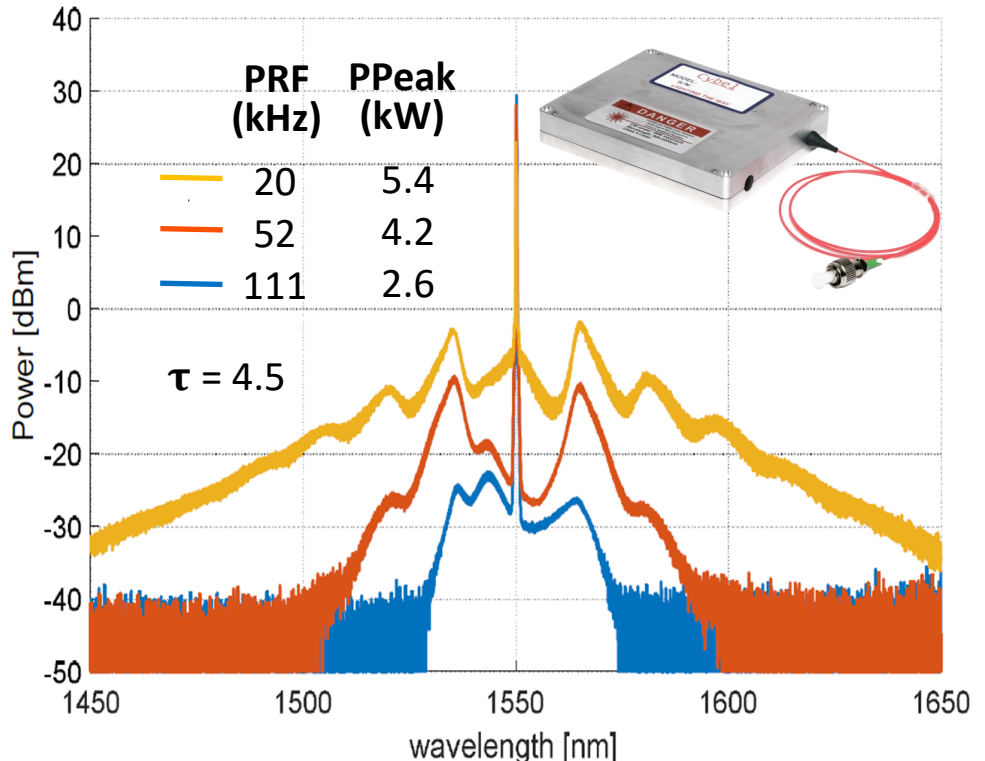
- LIDAR-LADAR
- Range finding
- Mapping
- Remote sensing
- Beacon source
- Seed source for Amplifier

SKYLINE SERIES

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

- ◆ SPACELIGHT-1030
- ◆ SKYLIGHT-1550
- ◆ ASTROLIGHT-2000
- ◆ VULCAN-2000

ALLEGRO DUAL-MODE PERFORMANCE



ALLEGRO-1550 Specifications

OPTICAL	Unit	Value	Comments
Wavelength	nm	1550	Different λ 's available
Mode of operation		CW & Pulsed	
Average output power	W	1	Higher output power available
Output peak power	kW	5	@20 kHz
Output energy/pulse	μ J	20	@20kHz - 4 ns
Output power tunability	%	5-100	
Optical polarization	dB	>18	PM1550
Beam quality (M^2)	M^2	1.1	
Output fiber length	m	1	
ELECTRICAL			
Voltage	V	2 & 12	
Warm-up Time	min	20	
Power consumption	W	10	
Interface		RS-232	
Control mode		ACC	
GENERAL			
Dimensions	mm	97x78x15	w/o heat sink
Storage temperature	$^{\circ}$ C	-10 to 65	
Operating case temp.	$^{\circ}$ C	0 to 50	
Humidity	%	5 to 95	Non condensing

CUSTOMIZATION

The ALLEGRO 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.



62 Highland Ave.
Bethlehem, PA 18017
Phone: 610-691-7012

Sales: contact@cybel-llc.com

Website: www.cybel-llc.com