

Key Features

- Peak power: up to 5kW
- Average output power >1W
- Rep. Rate 100kHz - 1MHz
- Pulse width 2 to 10ns
- High beam quality $M^2 < 1.1$
- Linewidth broadening >25GHz
- USB interface
- Operation Temp: 0 to 50°C
- Standard or PM version

The **CYBEL PROTEUS-1064** series is a line of fiber lasers that operate in either CW or pulsed modes. With a 25GHz line broadening modulation, this laser delivers 1W output in a CW mode or 5kW peak power with 2.5ns pulse width at 100kHz frequency repetition rate. Other pulsewidth and frequency ranges are possible. This versatile module is available at several operating wavelengths from 1030 to 1090nm.

The **PROTEUS-1064** 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, and its output power is scalable up to 10W in an OEM format.

The **PROTEUS-1064** laser is housed in a compact OEM package (200x150x43mm³). Its output power and monitoring of key operating parameters such as automatic current controlled (ACC) are done via an USB port. This laser is also available in a benchtop.

Applications

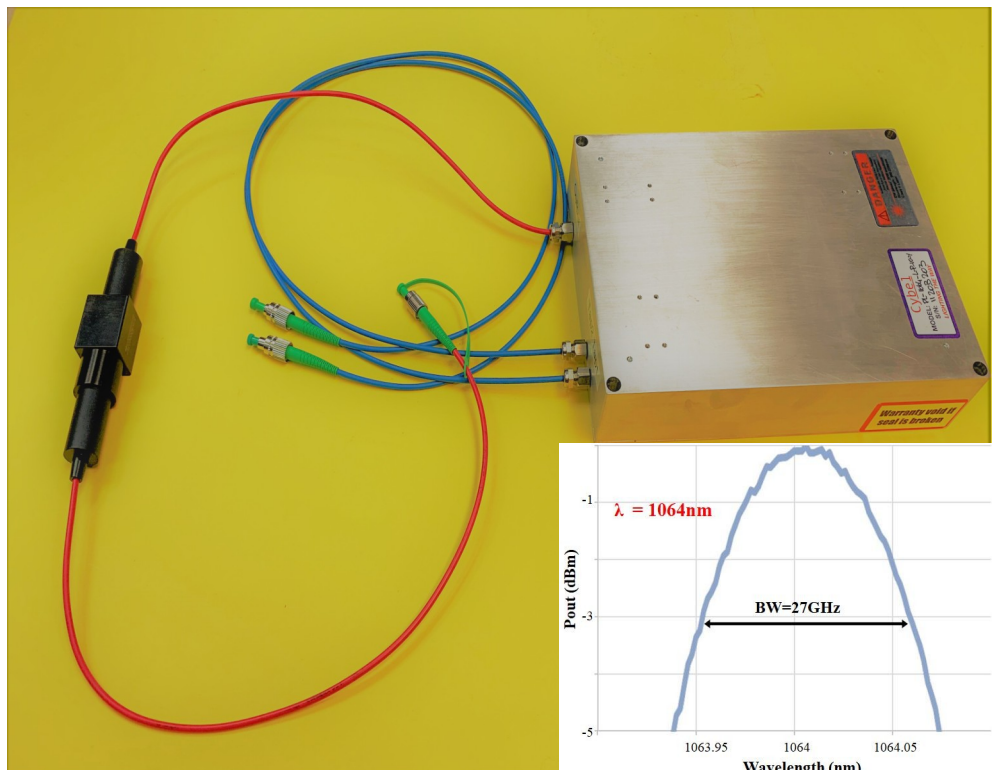
- LIDAR-LADAR
- Range finding
- Mapping
- Remote sensing
- Nonlinear optics conversion
- Seed source for Amplifier

SKYLINE SERIES

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

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

PROTEUS with 25GHz Linewidth Broadening



PROTEUS-1064 Specifications

OPTICAL	Unit	Value	Comments
Wavelength	nm	1064	1030, 1050, and 1090nm available
Mode of operation		CW or Pulsed	
Average output power	W	1	Higher output power available
Output peak power	kW	5	@100kHz for Pave
Output energy/pulse	μJ	10	@100kHz - 2.5ns
Output power tunability	%	5-100	
Optical polarization	dB	>18	
Beam quality (M ²)	M ²	1.1	
Output fiber length	m	1	3mm Jacket - Fiber: 10.5μm, NA=0.085
Monitor fiber length	m	1	3mm Jacket - Fiber: PM980
ELECTRICAL			
Voltage	V	18 to 30	
Warm-up Time	min	20	
Power consumption	W	<100	@Pave max
Interface		USB	
Control mode		ACC	
GENERAL			
Dimensions	mm	200x150x43	w/o heat sink
Storage temperature	°C	-20 to 65	
Operating case temp.	°C	0 to 50	
Humidity	%	5 to 95	Non condensing

CUSTOMIZATION

The **SKYLINE** 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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