

# SKYLIGHT 1550nm, Pulsed High Power Fiber Laser

### **Key Features**

- High energy up to 40uJ
- High peak power up to 10kW
- Adjust. PRF up to 1.5MHz
- Adjust. pulse width: 2 8ns
- High beam quality M<sup>2</sup><1.3</li>
- Compact & rugged design
- RS 232 or USB interface
- Optical trigger output
- Operation Temp: -10 to 50° C
- PM version

## **Applications**

- LIDAR-LADAR
- Range finding
- Mapping
- Remote sensing
- Non linear optics conversion

### **SKYLINE SERIES**

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

- SPACELIGHT-1064
- ASTROLIGHT-2000

The CYBEL SKYLIGHT-1550 is a 1550nm eye safe pulsed fiber laser that delivers short pulses (2-8ns) over a wide range of repetition rates (200kHz-1.5MHz) with high pulse energy (up to 40uJ).

The **SKYLIGHT-1550** comes in either a 5W or 10W average power configuration with up to 10kW of peak power in a near-Gaussian beam ( $M^2 < 1.3$ ).

Output power and monitoring of key operating parameters are controlled from either an RS 232 or USB port while the pulses are triggered by either an external TTL input signal or through internal software control.

The **SKYLINE** is an efficient and compact all-fiber OEM unit specifically designed for airborne or ground sensing applications.





1195 Pennsylvania Ave. Bethlehem, PA 18018 Phone: 610-691-7012 Sales: contact@cybel-llc.com

Website: www.cybel-llc.com

# **SKYLIGHT Specifications**

OPTICAL	Unit	SKYLIGHT-5	SKYLIGHT-10	Comments
Wavelength	nm	1545		1535nm to 1560nm
Mode of operation		pulsed		
Repetition rate	kHz	200 to 1500		Adjustable
Pulse width	ns	4	4	Software Adjustable
Average output power	W	5	10	
Output peak power	kW	5	10	@250kHz for Pave
Output energy/pulse	uJ	20	40	@250kHz
Output power tunability	%	3-100		
Optical polarization		Elliptical		Time varying PM optional
Beam quality (M²)	M²	1.1	1.3	
Max. reflectivity of ext. sys.	dB	-40		No output isolator
Output fiber length	m	0.5		Armored cable
Monitor fiber length	m	0.5		Armored cable
ELECTRICAL				
Voltage	V	18 to 30		
Warm- up time	min	20		
Power consumption	W	<90	<200	@Pout max
Control interface		USB and RS 232		
Control mode		ACC		
GENERAL				
Dimensions	mm	200x150x43		w/o heat sink
Storage temperature	°C	-20 to 65		
Operating case temp.	°C	-10 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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