

PERSEUS 1800 nm, 2.5 µJ Pulsed Fiber Laser

Key Features

- Energy up to 2.5 μJ
- Peak power up to 50 W
- Adjust. PRF up to 2 MHz
- Adjust. pulse width: 50 200 ns
- High beam quality M² < 1.1
- Compact design: 200x150x86 mm³
- RS-232 or USB interface
- Optical trigger input

Applications

- Optical component testing
- · Polymer processing
- Spectroscopy
- · Bio-medical analysis
- · OCT applications

SKYLINE SERIES

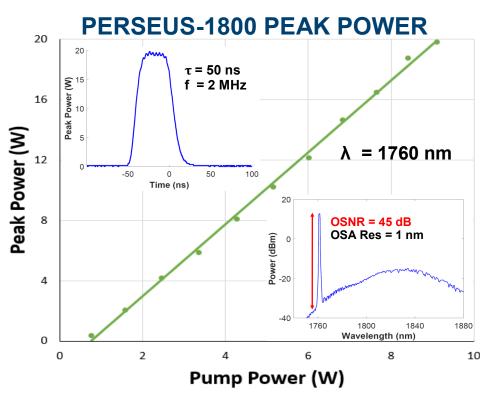
Also available at different standard wavelengths with same high performance and compact footprint:

- ◆ PERSEUS-NL-1800
- ASE-1800

The CYBEL PERSEUS-1800 is a 1800 nm pulsed fiber laser that delivers pulses (τ) from 50 to 200 ns over a wide range of repetition rates (PRF) from 500 kHz to 2 MHz with other wavelengths available from 1760 to 1950 nm

The **PERSEUS-1800** comes in a compact OEM package ($200x150x86 \text{ mm}^3$) and delivers up to 5 W average power and 2.5 μJ pulse energy at τ = 50 ns, PRF = 2 MHz. The **OEM Laser** is available in standard & polarization maintaining (PM) fiber with a near-Gaussian beam ($\text{M}^2 < 1.1$).

Output power and monitoring of key operating parameters are controlled from RS-232 while the pulses are triggered by either an external TTL input signal.





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Website: www.cybel-llc.com

PERSEUS-1800 Specifications

OPTICAL	Unit	Min	Max	Comments
Mode of Operation		Pulsed		
Wavelength	nm	1800		1760nm to 1900nm Wavelength Available
Spectral Width	nm	1		
Repetition Rate	kHz	500	2000	Adjustable
Pulse Width	ns	50	200	Adjustable
Output Peak Power	W	10	50	
Output Energy/Pulse	μЈ	0.2	2.5	
Average Output Power	W	1	5	
Output Power Tunability	%	10 - 100		
Polarization Ext. Ratio (PER)	dB	18		PM Version
Output Beam Quality (M²)		1.1		Diffraction Limited
Signal to Noise Ratio (OSNR)	dB	45		OSA Res. = 1nm
Output Power Stability (RMS)	%	3		After 20 Min Warm-Up Time
Output Fiber Length	m	1		FC/APC Connector
Output Isolation	dB	20		Optional
Connector		FC/APC		Other Connectors and Collimators Available
ELECTRICAL				
Voltage	V	18 to 30		
Warm Up Time	min	20		
Power Consumption	W	70		@ Pout Max= 5 W
Control Interface		USB and RS-232		
Mode of Operation		ACC		
GENERAL				
Dimensions	mm ³	200x150x86		W/O Heat Sink
Storage Temperature	°C	-10 to 70		
Operating Case Temp.	°C	10 to 50		
Humidity	%	5 to 95		Non Condensing

CUSTOMIZATION

The **PERSEUS-1800 OEM** 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





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