

## PERSEUS BT 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 M<sup>2</sup> < 1.1
- Compact design: 19 " 2U
- RS-232 or USB interface
- Optical trigger input

## **Applications**

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

### **BENCHTOP SERIES**

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

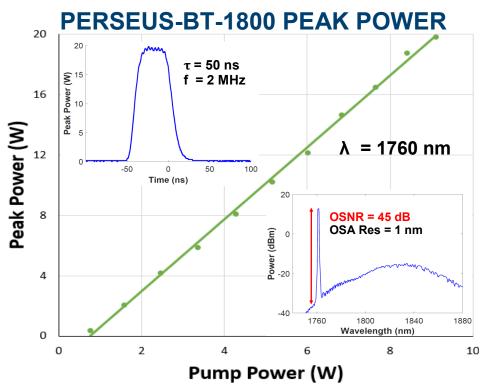
- ◆ PERSEUS-BT-NL-1800
- ◆ ASE-BT-1800

The CYBEL PERSEUS-BT-1800 is a 1800 nm pulsed fiber laser that delivers pulses ( $\tau$ ) 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-BT-1800** comes in 19 " 2U Rack-Mount and delivers up to 5 W average power and 2.5  $\mu$ J pulse energy at  $\tau$  = 50 ns, PRF = 2 MHz.

The Laser is available in standard & polarization maintaining (PM) fiber with a near-Gaussian beam ( $M^2 < 1.1$ ).

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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# PERSEUS-BT-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	110-200		@ 60/50 Hz
Warm Up Time	min	20		
Power Consumption	W	30		@ Pout Max= 5 W
Control Interface		USB and RS-232		
Mode of Operation		ACC		
GENERAL				
Dimensions	mm <sup>3</sup>	19"		2U Rack-Mount Benchtop
Storage Temperature	°C	-10 to 70		
Operating Case Temp.	°C	10 to 50		
Humidity	%	5 to 95		Non Condensing

#### **CUSTOMIZATION**

The **PERSEUS-1800 BT**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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