

BlueCut

High Energy Industrial Femtosecond Laser 1030 nm



NEW

The BlueCut is an industrial-grade micro-Joule fiber laser system. Based on all-fiber integrated technology, this is an inherently robust and stable system, which comes in a sealed package designed for OEM integration.

The system is maintenance free and easily field serviceable, ensuring maximum up-time demanded by both industrial and scientific applications. The high repetition rates available from the BlueCut combined with its high average power and beam quality allow for high throughput and increased efficiency especially for industrial micro-processing applications.

MenloSystems

KEY SPECIFICATIONS

- Wavelength 1030 nm
- Pulse Energy: >4 μ J
- Pulse Duration: < 500 fs

APPLICATIONS

- Micro Material Processing
 - FBG and Waveguide Writing
 - Semiconductors
 - Organic Materials
 - Solarcells
- Biomedical Applications in
 - Life Science
 - Ophthalmology
 - Multi Photon Microscopy
- Scientific Applications
 - Seeding of Solid State Amplifiers
 - Nonlinear Frequency Conversion

FEATURES

- Adjustable Repetition Rate
- Active Air Cooled
- All-Fiber Technology
- Compact Design for OEM Integration
- Robust and Stable
- Maintenance Free
- Remote Controllable

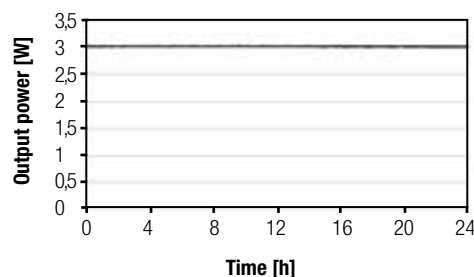
OPTIONS

- Inquire about options for OEM integration

PERFORMANCE DATA

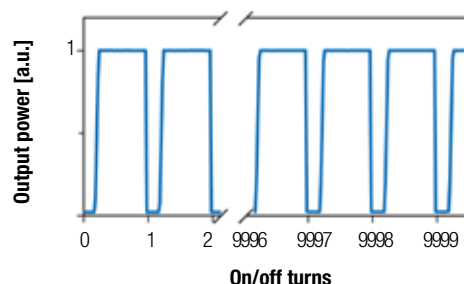
Amplitude noise

< 1 % rms over 24 h



Reproducibility

Identical and consistent laser performance



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SPECIFICATIONS

Center Wavelength	1030 nm
Maximum Pulse Energy	>4 μJ^*
Maximum Avg. Power	>3 W*
Repetition Rate	single pulse to 10 MHz
Pulse Duration	<500 fs
Spectral Bandwidth	>5 nm
Long-term Power Stability	<1 % rms (over 12 h)
Beam Quality	$M^2 < 1.25$, typ. <1.2
Polarization	linear

*whatever applies first for a given repetition rate

EXAMPLE

	Average Power	Pulse Energy
250 kHz	1 W	4 μJ
1 MHz	3 W	3 μJ
10 MHz	3 W	0.3 μJ

UTILITY AND ENVIRONMENTAL REQUIREMENTS

Operating Voltage	24 VDC, 20A (optional power supply for 100-240 VAC/50-60 Hz)
Power Consumption	<500 W
Cooling Requirements	no water cooling is required
Warm-up Time	<20 min
Communication interface	RS232 or USB
Range of Operating Temperature	15 to 40°C
Dimensions Head	325 x 445 x 110 mm ³
Dimensions Controller	19" x 4U x 495 mm (448 x 352 x 495 mm ³)

ORDERING INFORMATION

Product Code	BlueCut
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Please call for pricing. Specifications are subject to change without notice. Custom modifications are available, please inquire.

