

BlueCut OEM Seed

MenloSystems

Femtosecond Seed Laser
1025-1070 nm



The BlueCut OEM Seed is a high repetition rate ultrashort pulse laser in a compact turnkey design based on our figure 9[®] modelocking technology. It is designed as a seed source for ultrafast chirped pulse laser amplifiers. Available center wavelengths allow for seeding of the established active solid state and fiber materials. It is suitable for the generation of highest peak power pulses with sub 300 fs duration. The laser covers a wide range of repetition rates with constant pulse energy. The BlueCut OEM seed is designed for industrial application with full remote control over RS232 or USB interface. The compact rack mount housing allows easy integration into high-power laser systems.

KEY SPECIFICATIONS

- Wavelength 1025-1070 nm
- Pulse Energy: >2 nJ
- Pulse Duration: Compressible to < 300 fs
- Repetition Rate: 100 kHz- 10 MHz

APPLICATIONS

- Seed for Solid State or Fiber Amplifiers
- 2P Microscopy
- Ophthalmology
- Material Processing
- Cold Ablation
- Thin Film Processing

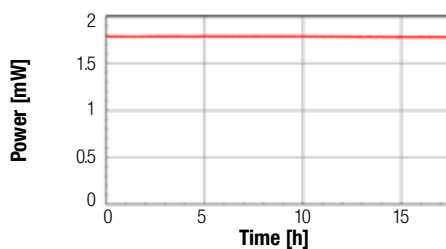
FEATURES

- figure 9[®] Modelocking
- Selectable Repetition Rate
- Modular Internal Design
- Active Air Cooled
- Single Mode Linear Polarized Fiber Output
- Remote Controllable

PERFORMANCE DATA

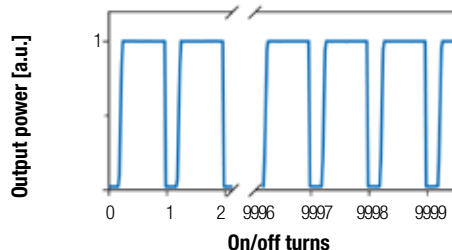
Amplitude noise

<0.5% rms over 16 h

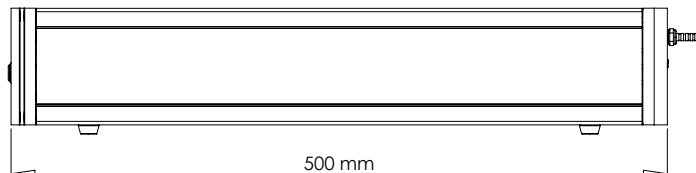
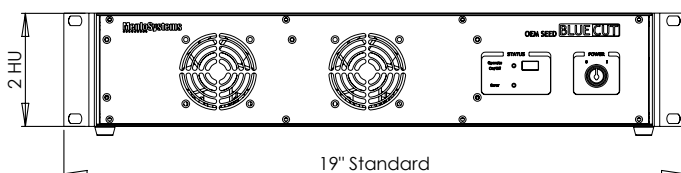


Reproducibility

Identical and consistent laser performance



LASER HEAD



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MATCHING AMPLIFIER MATERIALS

Wavelength	Material
1025 nm - 1070 nm	Yb: fiber (silicate)
1025 nm - 1065 nm	Yb: phosphate glass
1025 nm - 1055 nm	Yb: NGW
1025 nm - 1039 nm	Yb: KYW
1030 nm	Yb: YAG
1030 nm - 1070 nm	Yb: silicate glass
1034 nm	Yb: Lu_2O_3
1035 nm - 1037 nm	Yb: KGW

Wavelength	Material
1041 nm	Yb: Sc_2O_3
1047 nm	Nd: YLF (pi)
1053 nm	Nd: YLF (sigma)
1054 nm	Nd: phosphate glass
1057 nm - 1070 nm	Nd: fiber
1062 nm	Nd: silicate glass
1064 nm	Nd: YAG

Call us for further information.

SPECIFICATIONS

Selectable Center Wavelength	1025-1070 nm
Pulse Energy	2 nJ
Selectable Repetition Rate	100 kHz - 10 MHz
Pulse Duration	50 - 500 ps, compressible to <300 fs
Spectral Bandwidth (FWHM)	7 - 12 nm
Polarization	linear polarized
Output Port	single mode fiber, SC / APC connector

UTILITY AND ENVIRONMENTAL REQUIREMENTS

Operating Voltage	24 VDC, 120 W (optional power supply for 100-240 VAC/50-60 Hz)
Power Consumption	<120 W
Cooling Requirements	no water cooling is required
Warm-up Time	20 min
Output Fiber Length	4 m
Communication interface	RS232 or USB
Range of Operating Temperature	15 to 40°C
Dimensions	19" x 2U x 495 mm (448 x 88.52 x 495 mm ³)
Weight	15 kg

ORDERING INFORMATION

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

MenloSystems



Invisible laser radiation
avoid exposure to beam
Class 4 laser

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