PureBeam™ Pulse Laser 1535nm



Single Mode, High Energy, Compact, Low Power Consumption, Turn-Key Unit



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The PureBeam™ pulse laser is a fully integrated turn-key unit. It incorporates an erbium-doped laser material pumped by a semiconductor laser and a driver for convenience and ease of use. It provides a high-energy laser pulse in an all-in-one compact metal package. The out beam is single mode with a near perfect circular shape. The repetition is adjustable manually via rotating a potentiometer or remotely with a TTL control signal via a male BNC connector. The unit accompanies a wall pluggable DC power. It is designed for eye-safe laser ranging and bio-medical applications. It has an output power control manual potentiometer that adjusts power from 50% to 100%. A manual rotating optical attenuator is an option that adjusts the output power from 1 to 100%. Battery operational option is also available for field application.

Features

- Pulse Energy> 500 μJ
- Pure Single Mode
- Adjustable Repetition Rate
- Turn-Key Unit
- 1535 nm
- Compact Size

Specifications

Parameter	Min	Typical	Max	Unit
Wavelength		1535		nm
Spatial Mode		TEM _{oo}		
Pulse Energy		> 500		μJ
Pulse Width		5		ns
Pulse Repetition	1		10	Hz
Pulse Stability		10		%
Sports Diameter		0.3		mm
Beam Divergency Angle		< 10		mrad
Life Span		5x10 ⁷		pulse
Operating Temperature	-40		65	°C
Storage Temperature	-40		85	°C

Legal notices: All product information is believed to be accurate and is subject to change without notice. Information contained herein shall legally bind Agiltron only if it is specifically incorporated into the terms and conditions of a sales agreement. Some specific combinations of options may not be available. The user assumes all risks and liability whatsoever in connection with the use of a product or its application.

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© Photonwares Corporation

P +1 781-935-1200

E sales@photonwares.com



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Ordering Information

	5	5	1	1	2	1	1	1	1
Prefix	Wavelength	Pulse Power	Beam Shape	Wavelength Stabilize	Polarization	Beam Size	Configuration	Rotating Attenuator	
LASP-	1535 = 5	500 μJ = 5	Circular=1	Yes=1	Yes = 2		Regular = 1 Special = 0	Non=1 Yes=2	

Laser Safety

This product meets the appropriate standard in Title 21 of the Code of Federal Regulations (CFR). FDA/CDRH Class 1M laser product. This device has been classified with the FDA/CDRH under accession number 0220191. All versions of this laser are Class 1M laser products, tested according to IEC 60825-1:2007/EN 60825-1:2007. An additional warning for Class 1M laser products. For diverging beams, this warning shall state that viewing the laser output with certain optical instruments (for example eye loupes, magnifiers, and microscopes) within a distance of 100 mm may pose an eye hazard. For collimated beams, this warning shall state that viewing the laser output with certain instruments designed for use at a distance (for example telescopes and binoculars) may pose an eye hazard.

Wavelength = $1.3/1.5 \mu m$.

Maximum power = 30 mW.



*Caution - Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

*IEC is a registered trademark of the International Electrotechnical Commission.



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Typical Laser Pulse





