

PureBeam™ Laser

Single Mode, Perfect Circular Beam, Low Divergence, Excellent Power Stability 0.08%

- Ultra-Stable Laser Power <0.08%
- Pure Single Mode
- Low Noise
- Adjustable Focus
- 350nm to 1670nm
- USB Computer Interface
- High Signal-to-Noise
- Power up to 20mW
- Pointing Stability < 10 μ rad/°C
- Analog or Digital Modulation
- Compact Head
- RS232 or USB Computer Interface

The PureBeam™ laser provides the highest-performing elliptical laser beam available for measurement, profiling and life science applications. It uses single-mode fiber to filter out multimode for a perfect circular beam profile with low divergence. It comes with an advanced drive electronics to provide exceptional output power stability and low signal-to-noise. With RS-232/USB control option, the laser power is adjustable as well as onboard diagnostics for operating hours, diode current, output power, temperature, and more. It has a manual focus adjustment allowing the user to optimize the focus location for the best measurement resolution. The compact laser head is connected to the driving electronics with a fiber cable.

PERFORMANCE SPECIFICATIONS

Parameter	Specifications
Spatial Mode	TEM ₀₀
Beam Quality	<1.4M ²
Pointing Stability	<10 μ rad/°C
Beam Angle (borsight)	<3 mrad
RMA Noise(20Hz – 20MHz)	<2%
Peak-Peak Noise(20Hz-20MHz)	<1%
Warm-Up Time	<1 minutes
Operating Temperature	-10 to + 65°C Case
Storage Temperature	-40 to +85°C



BLOCK DIAGRAM



MECHANICAL SPECIFICATIONS

DIMENSIONS ARE IN INCHES (METRIC EQUIVALENTS ARE IN PARENTHESIS)
DIMENSIONAL TOLERANCES: .XX = ± 0.02 (0.51), .XXX = ± 0.005 (0.127)

ORDER INFORMATION

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	1	1
Prefix	Wavelength	Output Power	Beam Shape	Wavelength Stabilize	Polarization	Beam Size			
LASE-	405 = 1	1mW = 1	Elipitical = 1	No = 1	Random = 1	1mm = 1			
	450 = 2	2mW = 2	Fan = 2	Yes = 2	Single = 2	2mm = 2			
	488 = 3	3mW = 3				3mm = 3			
	520 = 4	5mW = 4				4mm = 4			
	525 = 5	10mW = 5							
	639 = 6	20mW = 6							
	640 = 7								
	655 = 8								
	660 = 9								
	685 = A								
	785 = B								
	830 = C								
	1550 = D								