

# 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 μrad/°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 <sub>00</sub>
Beam Quality	<1.4M <sup>2</sup>
Pointing Stability	<10 μrad/°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**

LASE-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
	Wavelength	Output Power	Beam Shape	wavelength Stable	Polarization	Beam Size									
405=1	450=2	488=3	520=4	525=5	639=6	640=7	655=8	660=9	685=A	785=B	830=C	1550=D			
	1mW=1	2mW=2	3mW=3	5mW=4	10mW=5	20mW=6									
	elliptical=1	fan= 2		No=1	Yes=2	Random=1	Single=2	1mm=1	2mm=2	3mm=3	4mm=4	Special=0	1	1	1