Power Technology Incorporated

IQ
375 - 500nm

6.05 IN

Ø 1.50 IN

Standard Features
- PID temperature control loop
- Constant current with automatic power control
- Precision current source

Optional Features
- Analog modulation, or TTL digital modulation
- Circularized or standard elliptcal beam
- Onboard microprocessor with software interface

Applications
- Laser Projection Displays
- Metrology
- Microscopy
- BioAnalytics
- Lithography

Single Mode Instrument Quality Lasers 375 - 500nm

Power Technology's Instrument Quality (IQ) series of laser diode modules are designed specifically to address the needs of high-end OEM applications requiring superior optical quality and ultra-stable temperatures, wavelengths & output powers.

With wavelengths ranging from 375 to 488nm, IQ series laser modules incorporate quality glass lenses to achieve optical clarity at up to 3000mA of drive current. For added beam quality, users may choose an IQ module with beam circularization.

All IQ lasers feature a precision current source and a PID temperature control loop that allows the unit to operate optimally at 8VDC at a wide temperature range of 15-35 C. This creates less excess heat within the laser module, increasing diode lifetime, efficiency and reliability.

Specifications

	IQ1C65 (LD2011)	IQ1C165 (LD1992)	IQ1C75 (LD2006)	IQ1C17 (LD4071)	IQ1C55 (LD1911)	IQ1C95 (LD??)
Wavelength (nm)	375	405	445	488	488	405
Output Power (mW)	65	165	75	17	55	135
Temperature Stability (°C)	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1
Collimated Beam Size ($1/e^2$)	1.04 x 2.21	1.04 x 1.72	0.89 x 2.38	0.95 x 2.74	1.19 x 2.86	TBD
Beam Divergence (mrad)	0.47 x 0.22	0.50 x 0.31	0.65 x 0.25	0.66 x 0.23	0.53 x 0.22	TBD
Mode Structure	Single	Single	Single	Single	Single	Multi
Operating Voltage (VDC)	8	8	8	8	8	8
Typical Operating Current (mA)	450	450	450	450	450	450
Max Operating Current (mA)	3000	3000	3000	3000	3000	3000
Temperature Range (°C)	15-35	15-35	15-35	15-35	15-35	15-35
Size	6.05" x Ø1.50"	6.05" x Ø1.50"	6.05" x Ø1.50"	6.05" x Ø1.50"	6.05" x Ø1.50"	6.05" x Ø1.50"