

Multi- λ Fiber-coupled Laser Modules



GENERAL DESCRIPTION

The Multi- λ is a series of highly integrated modules comprised of up to four wavelengths lasers, individual driving, control and stability electronics, and a multi-mode fiber pigtail. Custom OEM configurations are available and include wavelength options ranging from 405nm to 980nm, various power levels, fiber types and fiber connectors. We can co-engineer custom interfaces (with your engineering team) to match your system control, monitoring and operational requirements.

SERVICE

Optionally, we offer the complete value chain:

We design and develop laser modules which are optimized to meet the specific requirements of your application.

In order to evaluate the performance of the lasers in the design phase we offer the rapid manufacture of prototypes and small series production.

We scale up to volume production.

APPLICATIONS

- NGS DNA Sequencing
- Super-resolution confocal
- Fluorescence Excitation
- Medical Imaging

FEATURES

- Up to four individual laser wavelengths
- Round or rectangular beam output
- Uniform beam and low speckle
- High power stability
- Integrated control circuit
- Digital communication

Specifications

Optical

Available Wavelength (nm)	405	488	520	532	638	660	785
Wavelength tolerance (nm)	±5						
Typical output power (mW)	30	50	100	400	400	500	1000
Power stability (%) (8hrs, ±3°C)	<1						
RMS noise (%) (20Hz-20MHz)	<0.5						
Pk-Pk noise (%) (20Hz-20MHz)	<3						
Fiber core size (µm)	Ø400/ 385x385/ 150x450						
Numerical aperture (N.A.)	0.22						
Non-uniformity of beam (%) (near-field)	<20						
Rise time (ms)	<1						
Fall time (ms)	<1						
Warm-up time (minute) (from cold start)	<3						
Laser safety classification	3B or 4						

Electrical

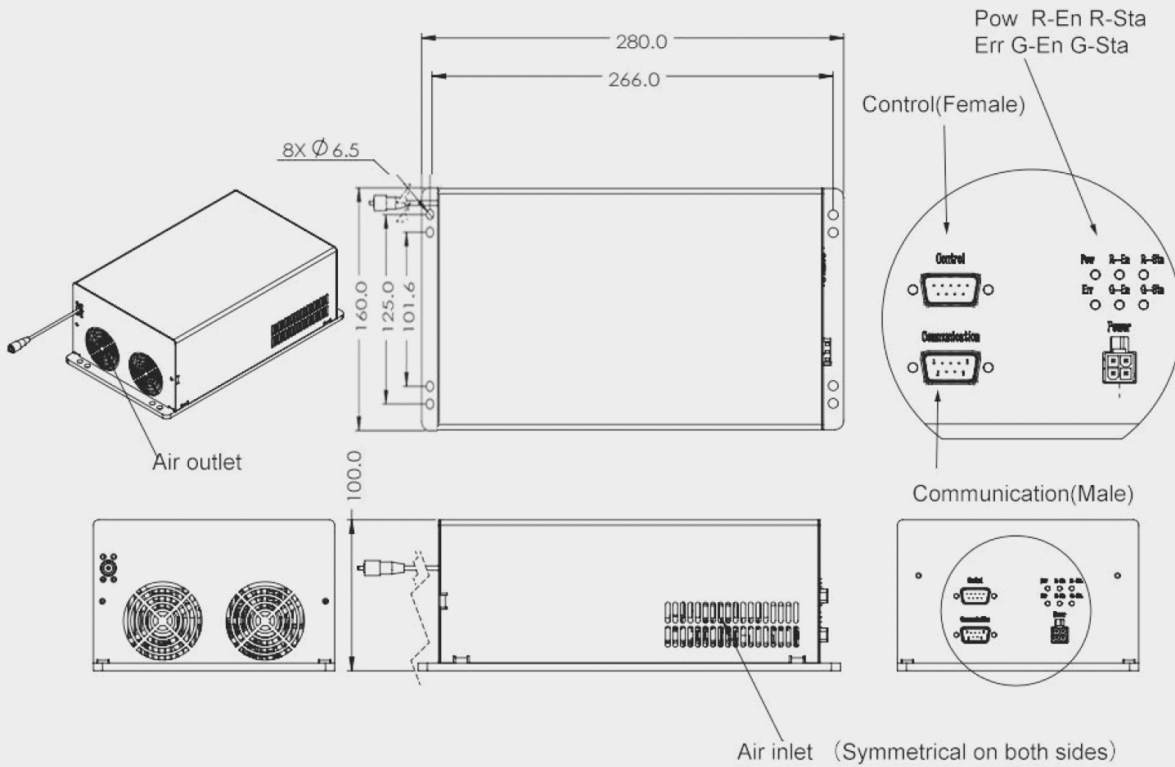
Supply voltage (VDC)	24
Input current (A)	1~10
Power input connector	5566-04A
Control interface connectors	RS232 or RS485

Environmental

Dimensions (mm)	280 x 266 x 100
Baseplate operating temperature (°C)	20~40
Non-operating condition (°C)	-20~+60
Shock (G, 11ms) (non-operating)	25
Vibration (G, 5Hz-500MHz) (non-operating)	2
Humidity (%) (non-condensing)	15~70

Dimensions

Unit: mm



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