

Single Mode Fiber Coupled Laser

Description

This single mode fiber coupled laser is designed for DNA detection instrument, flow cytometer and biological detection instrument. It features high stability, low noise, and superior performance. It is available in standard and mini size.

Features

- High Signal-to-Noise Ratio
- Higher Beam Quality
- Industrial Standard Size
- Customization

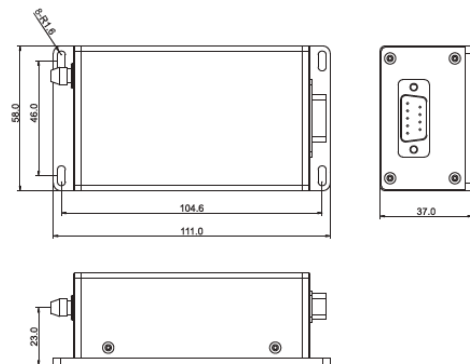
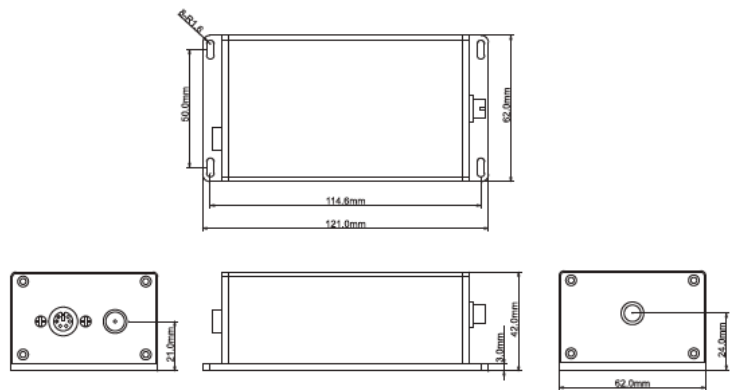
Applications

- Flow Cytometry
- Confocal Microscopy
- Raman Microscopy
- DNA Sequencing and Analysis
- Medical Imaging and Instrumentation
- Genomics

Wavelength

- 375nm, 395nm, 405nm, 445nm, 473nm, 488nm, 505nm, 532nm, 561nm, 638nm, 660nm, 785nm.

Mechanical Drawings



Unit: mm

Specifications

Parameter	Unit	375FC	395FC	405FC	445FC
Wavelength	nm	375	395	405	445
Output Power	mW	30, 50	30, 50, 80	30, 50, 100, 200, 300	30, 50, 80
Fiber Cable Type	/	3mm Mono-Coil	3mm Mono-Coil	3mm Mono-Coil	3mm Mono-Coil
Fiber Cable Length	m	1.0	1.0	1.0	1.0
Fiber Numerical Aperture (1/e ²)	/	0.12NA	0.12NA	0.12NA	0.12NA
Fiber Core Diameter	µm	2.5	2.5	2.5	2.5
Spatial Mode	/	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀
M ² (Beam Quality)	/	≤1.2	≤1.2	≤1.2	≤1.2
Beam Asymmetry	/	≤1:1.2	≤1:1.2	≤1:1.2	≤1:1.2
RMS Noise (20Hz to 20MHz)	%	<0.2	<0.2	<0.2	<0.2
Peak-to-Peak Noise (20Hz to 20kHz)	%	<0.5	<0.5	<0.5	<0.5
Long Term Power Stability (8hrs, ±3°C)	%	<1.0	<1.0	<1.0	<1.0
Operating Voltage	VDC	5.0	5.0	5.0	5.0
Polarization Ratio	/	Min 100:1, Vertical ±5°			
Laser Safety Classification	/	IIIb			
Laser Drive Modes	/	CW, Analog Modulation, Digital Modulation, Computer Control			
ESD Protection	/	Level 4			
Power Consumption	W	Typ. 5, Max. 13			
Laser Head Baseplate Temperature	°C	≤50			
Dimensions	mm	Standard: 62x121x42, Mini: 58x111x37			
Operating Temperature	°C	+10 to +40			
Storage Temperature	°C	-20 to +60			
MTBF	hrs	>10000			

Parameter	Unit	473FC	488FC	505FC	532FC
Wavelength	nm	473	488	505	532
Output Power	mW	30, 50	30, 50, 100	30, 50	30, 50, 100
Fiber Cable Type	/	3mm Mono-Coil	3mm Mono-Coil	3mm Mono-Coil	3mm Mono-Coil
Fiber Cable Length	m	1.0	1.0	1.0	1.0
Fiber Numerical Aperture (1/e ²)	/	0.13NA	0.13NA	0.13NA	0.13NA
Fiber Core Diameter	µm	4.0	4.0	4.0	4.0
Spatial Mode	/	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀
M ² (Beam Quality)	/	≤1.2	≤1.2	≤1.2	≤1.2
Beam Asymmetry	/	≤1:1.2	≤1:1.2	≤1:1.2	≤1:1.2
RMS Noise (20Hz to 20MHz)	%	<0.2	<0.2	<0.2	<0.2
Peak-to-Peak Noise (20Hz to 20kHz)	%	<0.5	<0.5	<0.5	<0.5
Long Term Power Stability (8hrs, ±3°C)	%	<1.0	<1.0	<1.0	<1.0
Operating Voltage	VDC	5.0	5.0	5.0	5.0
Polarization Ratio	/	Min 100:1, Vertical ±5°			
Laser Safety Classification	/	IIIb			
Laser Drive Modes	/	CW, Analog Modulation, Digital Modulation, Computer Control			
ESD Protection	/	Level 4			
Power Consumption	W	Typ. 5, Max. 13			
Laser Head Baseplate Temperature	°C	≤50			
Dimensions	mm	Standard: 62x121x42, Mini: 58x111x37			
Operating Temperature	°C	+10 to +40			
Storage Temperature	°C	-20 to +60			
MTBF	hrs	>10000			

Parameter	Unit	561FC	638FC	660FC	785FC
Wavelength	nm	561	638	660	785
Output Power	mW	30, 50,100	30, 50, 100	30, 50, 100	30, 50, 100
Fiber Cable Type	/	3mm Mono-Coil	3mm Mono-Coil	3mm Mono-Coil	3mm Mono-Coil
Fiber Cable Length	m	1.0	1.0	1.0	1.0
Fiber Numerical Aperture (1/e ²)	/	0.13NA	0.13NA	0.13NA	0.13NA
Fiber Core Diameter	µm	4.5	4.5	4.5	4.5
Spatial Mode	/	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀
M ² (Beam Quality)	/	≤1.2	≤1.2	≤1.2	≤1.2
Beam Asymmetry	/	≤1:1.2	≤1:1.2	≤1:1.2	≤1:1.2
RMS Noise (20Hz to 20MHz)	%	<0.2	<0.2	<0.2	<0.2
Peak-to-Peak Noise (20Hz to 20kHz)	%	<0.5	<0.5	<0.5	<0.5
Long Term Power Stability (8hrs, ±3°C)	%	<1.0	<1.0	<1.0	<1.0
Operating Voltage	VDC	5.0	5.0	5.0	5.0
Polarization Ratio	/	Min 100:1, Vertical ±5°			
Laser Safety Classification	/	IIIb			
Laser Drive Modes	/	CW, Analog Modulation, Digital Modulation, Computer Control			
ESD Protection	/	Level 4			
Power Consumption	W	Typ. 5, Max. 13			
Laser Head Baseplate Temperature	°C	≤50			
Dimensions	mm	Standard: 62x121x42, Mini: 58x111x37			
Operating Temperature	°C	+10 to +40			
Storage Temperature	°C	-20 to +60			
MTBF	hrs	>10000			