

High Power Fiber Coupled Diode Laser

LM Series (With PD, without Pilot Beam)



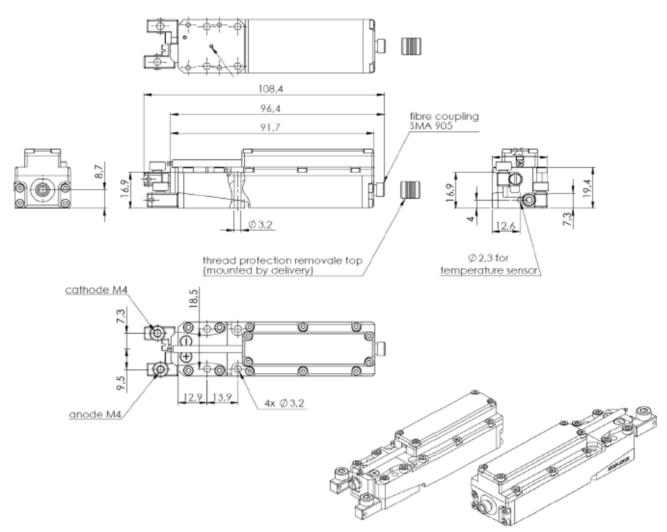
Features

- · High brightness
- High E/O efficiency
- Compact housing
- · Hermetically sealed housing
- · Conduction Cooling
- · Plug and play fiber connector

Applications

- · Advanced Manufacturing
- Health
- · Information Technology
- · Scientific Research

Product Dimensions (mm)



Remark: The structure drawing is for reference only. Please feel free to contact us for any special requirements.



Product Specifications

Product Code		FCS000009 ²	FCS000008 ²	FCS000011 ²
Part No. 1		FL-LM2002-15-976-200	FL-LM2001-20-981-200	FL-LM2012-55-976-200
Optical Data	Unit	Value	Value	Value
CW-nominal output power	W	15	20	55
Centroid wavelength	nm	976	981	976
Wavelength tolerance (±)	nm	1	1	1
Spectral width (FWHM)	nm	≤1	≤1	≤1
Wavelength Temp. drift	nm/°C	~0.01	~0.01	~0.01
Wayalangth atabilization		Yes (spectral efficiency≥	Yes (spectral efficiency \geq	Yes (spectral efficiency≥
Wavelength stabilization		90%)	90%)	90%)
Operation Conditions				
Nominal diode heat sink Temp.	°C	25	25	25
Diode heat sink operation Temp. ³	°C	+15 +30	+15 +30	+15 +30
Minimum heat sink capacity	W	50	70	130
Electrical Data				
Max. operation current start of life	Α	≤30	≤40	≤85
Max. operation current end of life	Α	≤36	≤50	≤102
Typical threshold current	Α	≤6	≤6	≤8
Typical operation voltage	V	≤2	≤2	≤2
Typical slope	W/A	≥0.7	≥0.8	≥0.7
Typical E/O efficiency	%	≥33	≥33	≥38
Fiber connection				
Fiber included		1	1	1
Fiber core diameter	μm	200	200	200
Numerical aperture		0.22	0.22	0.22
Fiber optic connector		SMA905	SMA905	SMA905
Fiber length	m	1	1	1
Package				
Dimensions	mm³	108.4×25×28	108.4×25×28	108.4×25×28
Weight basic package	kg	0.35	0.35	0.35
Storage Temp.	°C	-20 +60	-20 +60	-20 +60
Additional Features				
High reflection bandwidth (> 99% S&P polarized)	nm	1030 1130	1030 1130	
Temp. sensors		NTC & Pt100	NTC & Pt100	NTC & Pt100
Monitor diode (driver: 5V)		Output signal: 02.5V	Output signal: 02.5V	Output signal: 02.5V
Accessories package 4		Yes	Yes	Yes
Measurement				
Fiber		non AR coated, 200µm	non AR coated, 200µm	non AR coated, 200µm
Diode heat sink Temp.	°C	25	25	25

 $^{^{1}}$ Part No. = Brand Code - Series - Power - Centroid Wavelength - Fiber Core Diameter.

In the accessory package, the positive and negative electrodes of the "diode" need to be reversely connected to the negative and positive electrodes of the module; The insulation and thermal conductivity of the "carbon film" are very important to the installation and use of the laser, as the housing of the laser is



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 $^{^{\}rm 2}$ Typical customization of products.

³ Operation beyond recommended temperature may cause lifetime reduction or even damage to the product.