
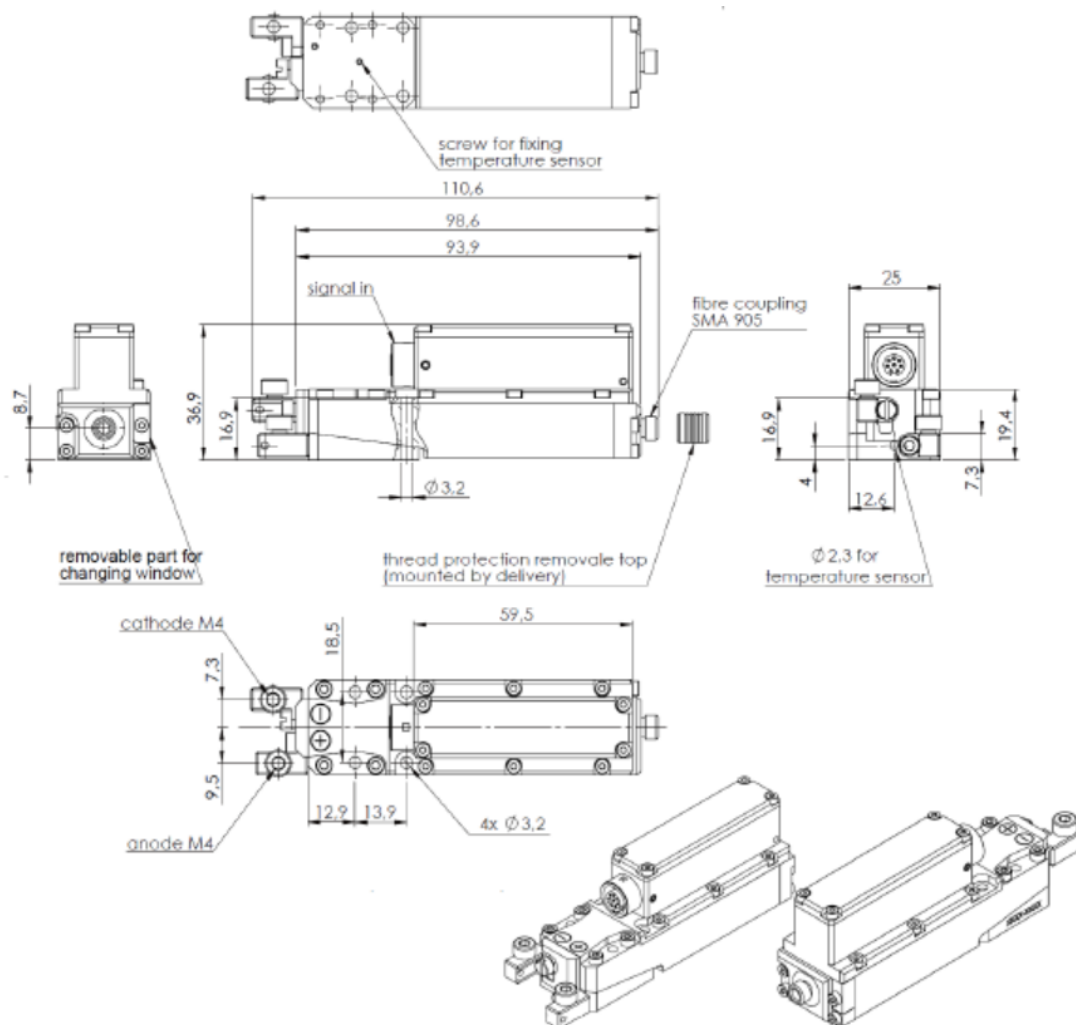


High Power Fiber Coupled Diode Laser LM Series (With Pilot Beam)

	<h3>Features</h3>	<h3>Applications</h3>
	<ul style="list-style-type: none"> • High brightness • High E/O efficiency • Compact housing • Hermetically sealed housing • Conduction Cooling • Plug and play fiber connector 	<ul style="list-style-type: none"> • 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	FCS000014		FCS000015		FCS000013 ²	
Part No. ¹	FL-LM2047-25-808-200		FL-LM2048-50-980-200		FL-LM2045-40-980-400	
Optical Data						
	Unit	Value	Value	Value	Value	Value
CW-nominal output power	W	25	50	40		
Centroid wavelength	nm	808	980	980		
Wavelength tolerance (±)	nm	10	10	10		
Spectral width (FWHM)	nm	≤5	≤5	≤5		
Wavelength Temp. drift	nm/°C	~0.28	~0.34	~0.34		
Wavelength stabilization		/	/	/		
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	60	100	90		
Electrical Data						
Max. operation current start of life	A	≤40	≤70	≤55		
Max. operation current end of life	A	≤48	≤84	≤66		
Typical threshold current	A	≤10	≤8	≤8		
Typical operation voltage	V	≤2	≤2	≤2		
Typical slope	W/A	≥0.9	≥0.8	≥0.9		
Typical E/O efficiency	%	≥39	≥43	≥44		
Fiber connection						
Fiber included		/	/	/		
Fiber core diameter	μm	200	200	400		
Numerical aperture		0.22	0.22	0.22		
Fiber optic connector		SMA905	SMA905	SMA905		
Package						
Dimensions	mm ³	110.6×25×36.9	110.6×25×36.9	110.6×25×36.9		
Weight basic package	kg	0.35	0.35	0.35		
Storage Temp.	°C	-20 ... +60	-20 ... +60	-20 ... +60		
Additional Features						
Temp. sensors		NTC & Pt100	NTC & Pt100	NTC & Pt100		
Monitor diode (driver: 5V)		Output signal: 0...2.5V	Output signal: 0...2.5V	Output signal: 0...2.5V		
Pilot beam (driver: 3.3V, 25mA)		>0.7mW, 650±20nm	>0.7mW, 650±20nm	>0.7mW, 650±20nm		
Fiber detection sensor (PNP)		12V, ≤100mA	12V, ≤100mA	12V, ≤100mA		
Accessories package ⁴		Yes	Yes	Yes		
Measurement						
Fiber		non AR coated, 200μm	non AR coated, 200μm	non AR coated, 400μm		
Diode heat sink Temp.	°C	25	25	25		

¹ Part No. = Brand Code - Series - Power - Centroid Wavelength - Fiber Core Diameter.

² Typical customization of products.

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

⁴ 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 connected to its anode.

