

High Power Fiber Coupled Diode Laser

ND Series



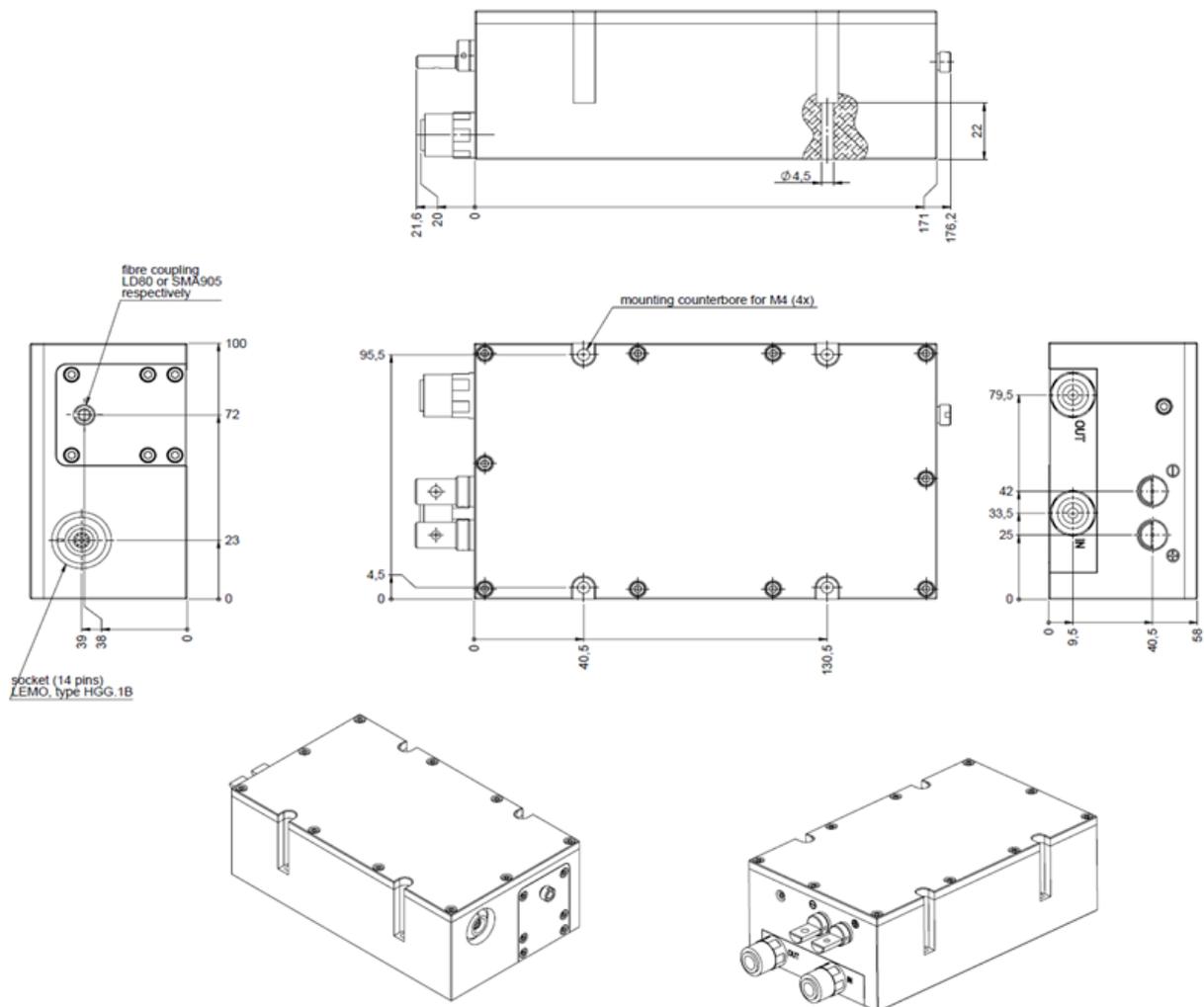
Features

- High brightness
- High E/O efficiency
- Compact housing
- Hermetically sealed housing
- Water 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	FCS000024	FCS000027	FCS000025	FCS000026
Part No. ¹	FL-ND2161-120-980-200	FL-ND3011-150-980-400	FL-ND3002-120-808-200	FL-ND3003-120-808-400

Optical Data	Unit	Value	Value	Value	Value
CW-nominal output power	W	120	150	120	120
Centroid wavelength	nm	980	980	808	808
Wavelength tolerance (±)	nm	10	10	10	10
Spectral width (FWHM)	nm	20	20	20	20
Wavelength Temp. drift	nm/°C	~ 0.34	~ 0.34	~ 0.28	~ 0.28
Wavelength stabilization		/	/	/	/

Operation Conditions					
Nominal diode heat sink Temp.	°C	25	25	25	25
Diode heat sink operation Temp. ²	°C	+15 ... +30	+15 ... +30	+15 ... +30	+15 ... +30
Minimum heat sink capacity	W	300	340	300	300
Chiller flow capacity	L/min	5	5	5	5
Water pressure	bar	4	4	4	4

Electrical Data					
Max. operation current start of life	A	≤65	≤75	≤65	≤65
Max. operation current end of life	A	≤78	≤90	≤78	≤78
Typical threshold current	A	≤8	≤8	≤8	≤8
Typical operation voltage	V	≤6	≤6	≤6	≤6
Typical slope	W/A	≥2.4	≥2.4	≥2.3	≥2.3
Typical E/O efficiency	%	≥39	≥40	≥37	≥39

Fiber connection					
Fiber included		/	/	/	/
Fiber core diameter	µm	200	400	200	400
Numerical aperture		0.22	0.22	0.22	0.22
Fiber optic connector		SMA905	LD80	SMA905	SMA905

Package					
Dimensions	mm ³	197.8×100×58	197.8×100×58	197.8×100×58	197.8×100×58
Weight basic package	kg	2.2	2.2	2.2	2.2
Storage Temp.	°C	-20 ... +60	-20 ... +60	-20 ... +60	-20 ... +60

Additional Features					
Temp. sensors		NTC & Pt100	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	Output signal: 0...2.5V
Pilot beam (driver: 5V, 40mA)		>0.7mW, 635±20nm	>0.7mW, 635±20nm	>0.7mW, 635±20nm	>0.7mW, 635±20nm

Measurement					
Fiber		non AR coated, 200µm	non AR coated, 400µm	non AR coated, 200µm	non AR coated, 400µm
Diode heat sink Temp	°C	25	25	25	25

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

²Operation beyond recommended temperature may cause lifetime reduction or even damage to the product.

