High power laser diode & Turn-key solutions

AeroDIODE

www.aerodiode.com

High power laser diode

Choose your own high power fiber-coupled laser diode alone or associated with a modular & easy-to-use driver

Fiber-coupled high power laser diodes at 808nm, 915nm or 976nm are sourced from the most reliable manufacturers and offered as stock items or associated with a CW turn-key laser diode driver with TEC and air cooled temperature regulation. Two driver+diode form-factors can be chosen. The integrated version is offered with either a high power connector or a 3mm collimator.

1st Choose your laser diode :

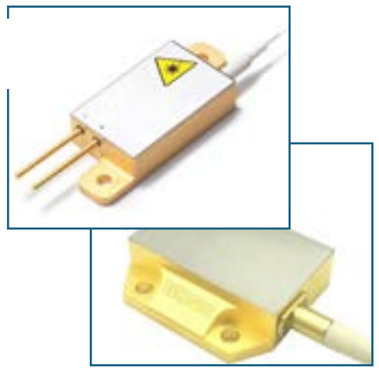
Diode	Wavelength	Power	Typ. Operating Current/Voltage	Spectral Tolerance/ Width	Fiber properties	Back reflection isolation
1	808 nm	50 W	10A/14V	±10nm/5nm	200/240 NA=0.22 (NA filling : 0.12-0.17)	30dB 1040-1200 nm
2		100 W	10A/26V			
3	915 nm	10 W	12A/1.7V		106.5/125 NA=0.22 (NA filling : 0.12-0.17)	
4		30 W	13A/6V			
5		80 W	14A/14V			
6		140 W	13A/25V			
7	976/980 nm (Broad emission spectrum)	10 W	12A/1.7V			
8		30 W	10A/10V			
9		80 W	12A/14V			
10		150 W	12A/26V			
11	976 nm (Narrow emission spectrum)	10 W	10A/2V	±0.5nm/0.5nm		
12		30 W	10A/7V			
13		60 W	10A/13V			
14		100 W	10A/23V			
15	1064 nm	10 W	10A/1.6V	±10nm/5nm	200/240 NA=0.22	

Driver specifications (optional) :

	CCM (standard)	CCM-HP (High Power)
For laser diodes	1, 3, 4, 7, 8, 11,12 (see first table)	2, 5, 6, 9, 10, 13, 14 (see first table)
Output current	up to 13A	up to 21A
Output voltage	up to 23V	up to 36V
Laser diode temperature regulation range	15-40°C	
Laser diode temperature stability	<10 mK	
Modulation rate	100 KHz	
Compatibility & libraries	Win 7/10 ; Hexa / DLLs / LabVIEW / Python	
Others	Photodiode input and APC mode ; Auto mode for precise voltage adjustment ; The fan speed is automatically adjusted ; Ultra-low noise properties	
Power supply	24 V	
Dimensions (open version) (mm)	238*119*112	238*146*142.5
Dimensions (integrated version) (mm)	248.4*162*153.6 mm	

2nd Choose your product form factor : ONLY DIODE, OPEN or INTEGRATED :

ONLY DIODE



➢ High power laser diodes are offered alone with a 2m 105/125/250µm bare fiber output

OPEN VERSION

CCM

➢ Open driver : ideal for lab use (fiber laser R&D etc.) - The laser diode can be easily replaced by the user

New ! INTEGRATED VERSION with high power connector or collimator :

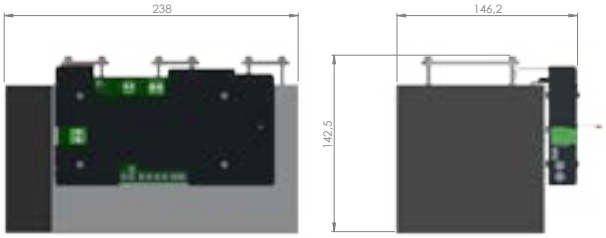
CCMI

➢ Integrated driver : an easy-to-use solution with protected fiber and high power connector or collimator (customer choice)

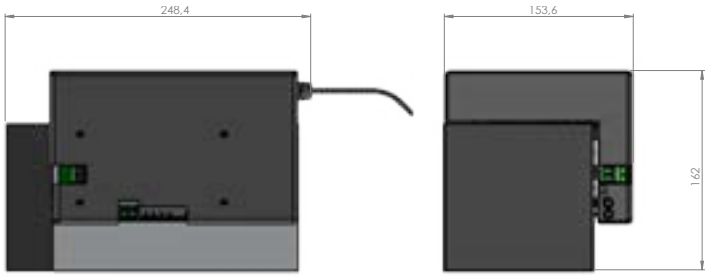
Technical Specifications

GUI :

Mechanical :



➢ Open driver



➢ Integrated module

Classification :

Name	High Power LD :
Diode type	1 : 808 nm - 50 W 2 : 808 nm - 100 W 3 : 915 nm - 10 W 4 : 915 nm - 30 W 5 : 915 nm - 80 W 6 : 915 nm - 140 W 7 : 976 nm - 10 W - Broad spectrum 8 : 976 nm - 30 W - Broad spectrum 9 : 976 nm - 80 W - Broad spectrum 10 : 976 nm - 150 W - Broad spectrum 11 : 976 nm - 10 W - Narrow spectrum 12 : 976 nm - 30 W - Narrow spectrum 13 : 976 nm - 60 W - Narrow spectrum 14 : 976 nm - 100 W - Narrow spectrum 15 : 1064 nm - 10 W
Form Factor	1: Laser diode alone 2 : Laser diode with open driver 3a : Laser diode with integrated driver & **high power connector** 3b : Laser diode with integrated driver & 3 **mm collimator**

Ordering information :

High Power LD - [_] - [_]

Diode type	Form Factor
1	1*
2	2
3*	3a
4*	3b
5	
6	
7*	
8*	
9	
10	
11*	
12	
13	
14	
15	

* : Min order quantity may apply - see website ordering informations

Photos : ALPhANOV - Version 01/2020

AeroDIODE
Product Manager : sebastien.ermeneux@aerodiode.com
+33 (0)6 27 69 41 52
www.aerodiode.com