# Laser diodes & turnkey solutions from 1270 to 1650 nm





## Choose your own fiber-coupled DFB, Fabry-Perrot or multi-emitters laser diode + turnkey driver solution from 1270 to 1650 nm

Standard singlemode DFB or Bragg laser diodes from 10 to 400 mW are offered as stock items or associated with a CW or nanosecond pulsed turn-key driver. Multimode solutions up to 30 W are also offered coupled in a 105µm-core fiber.

1 St Choose your laser diode :



			1					
Diode Model*	Power (CW)	Power (Pulse) (typ)	Technology	Wavelength (nm)	Fiber	Emisison Bandwidth (typ)	Form-factor	
1	10 mW	15 mW	. Single mode DFB**	Many wavelength avai- lable between 1270 and 1650 nm (see the table on website page for exact power vs wavelengths)	SMF or PM versions available	~200 kHz **	14 pin Butterfly- type-1 (other pin configu- ration available on demand)	
2*	40 mW	60 mW						
3*	100 mW*	150 mW						
3b*	150 mW	225 mW						
<b>4</b> *	400 mW*	600 mW	Single mode Fabry-Per- rot w. Bragg	Several models between 1420 and 1500 nm (only)	PM Only	~0.2 nm	14 pin Butterfly- type 1	
5/6*	20/40 mW*	20/40 mW	DFB - Ultra narrow linewidth	1550 nm	SMF or PM	< 50 kHz	14 pin Butterfly- 4 pin configuration available	
7 or 8*	15 W/30 W*	30 W	Multimode multi-emitters	1470 or 1550 nm	105 μm core, NA=0.22	~ 10 nm	80*80*25 mm3	

<sup>\*</sup> Not all laser diode types and versions are available at each wavelength - The model number depends on the product wavelength : see the products webpages by wavelength for detailed information (from 1310 nm to 1650 nm) and scroll-down to see all configurations and prices; \*\* see the laser diode datasheets and product webpage.

3 rd

Choose your product form factor: OPEN-FRAME or INTEGRATED

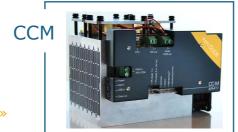
## **OPEN-FRAME VERSIONS:**



> Open-frame driver for CW, std and HP electronics boards for single mode diodes



Open-frame driver for «Shaper» electronic board and single mode diodes



Open-frame driver for multimode diodes (15 or 30 W here) with integrated thermal regulation and air cooling

# 2nd Choose your Driver performance:

	LASER DIODE VER- SION :	CW Driver (for singlemode diodes : « <u>CCS-CW</u> » is the open driver and CCSI-CW is the integrated version)	Pulse & CW Driver (from 1 ns to CW : « <u>CCS</u> » is the open driver and «CCSI» is the integrated version)	User design pulse shape Driver (From 0.5 ns to 8 µs : « <u>SHA-PER</u> » is the open driver and Shaper-i is the integrated version)	High power driver for multimode diodes (30W) : «CCM» is the open frame driver and «CCMI» the turn-key version	
	1 : 10 mW	10 mW / No	10 mW / 15 mW	No / 15 mW		
	2 : 40 mW	40 mW / No	40 mW / 60 mW	No / 60mW		
Output Power - CW / Pulse	3:100 mW	100 mW / No	100 mW / 150 mW	No / 150 mW	No	
(Typical values)	4 : 400 mW	400 mW / No	400 mW / 600 mW	No / 400 mW		
	5/6: 20/40 mW	Ultra-narrow wavelength line special ulti				
	7/8 : 15W/30 W	No			15 W / 30 W	
Laser diode T°			15-40°C			
Pulse duration (Ext trigger)			0.5 ns - CW	0.5-22-0.00	10 μs - CW	
Pulse duration (Internal pulse generator)		CW only	0.5 ns - 500 ns	0.5 ns - 8 μs	No	
Typ rise/fall time; Min pulse duration			3 (ns/A) ; 1.5 ns	< 1ns/A ; 1.5 ns	few μsec	
Internal rep rate adjust- ment	· Any		1 Hz - 4 MHz (250 MHz optional)	1 Hz - 20 MHz	No	
Temporal Jitter			< 8 ps	< 2 ns (8 ps with clock syn- chronization)		
Adj. CW offset (pulse regime)			Optional	No	Yes (external mode)	
Interface/GUI/libraries		USB - Windows 7/10 - DLLs - Hexa/Linux - Labview - Python				

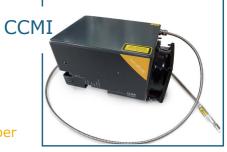
### **INTEGRATED VERSIONS:**



➤ Integrated version for CW, std and HP electronics boards



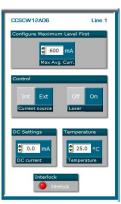
➤ Integrated version for Shaper electronics board

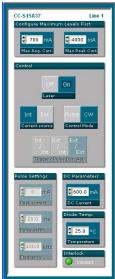


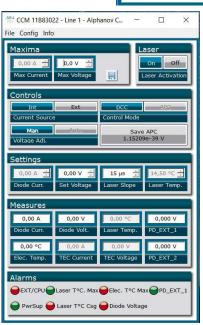
➤ Integrated version multimode diodes (15 or 30 W models)



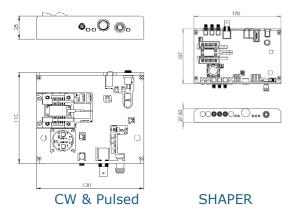
# GUI (examples)

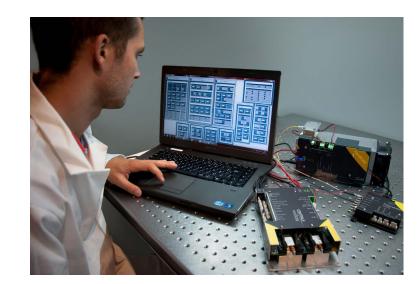






### Mechanical (examples):



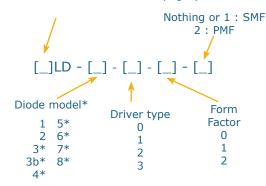


#### Classification:

Name	1550 LD:			
Wavelength	Choose any wavelength between 1270 and 1650 nm (models 1-3) or between 1420 and 1500 nm (model 4) (note: only the 1310, 1550 and 1650 nm DFBs are available with 100 mW CW power)			
Diode model*	1: 10 mW DFB Butterfly singlemode 2: 40 mW DFB Butterfly singlemode 3: 100 mW DFB singlemode* 3b: 150 mW DFB singlemode* 4: 400 mW Bragg singlemode*	5: 20 mW DFB (Ultra narrow emission wavelength)* 6: 40 mW DFB (Ultra narrow emission wavelength)* 7: 15 W Multimode* 8: 30 W Multimode*		
Driver Electronics :	0: Laser diode alone 1: CCS-CW (open driver for CW only) 2: CCS-std (Pulse and CW Driver)	3: SHAPER (pulse only with user design pulse shape) 4: CCM (High power version for multimode diodes)		
Form Factor	0: Laser diode alone 1: Open frame 2: Integrated			
SMF or PM  Nothing or 0 or 1: SM Fiber 2: PM Fiber				

#### Ordering information:

Wavelength (any value between 1270 and 1650 nm - see the dedicated webpages)



Example: 1550LD-3-2-1-2 = 1550 nm 100 mW laser diode with a PM Panda fiber output, mounted on a «pulsed On/Off & CW» open frame driver

\*: See the product webpage tables for exact laser diode model codification which is specific for each wavelength (scroll down the webpages to see all configurations and prices).



