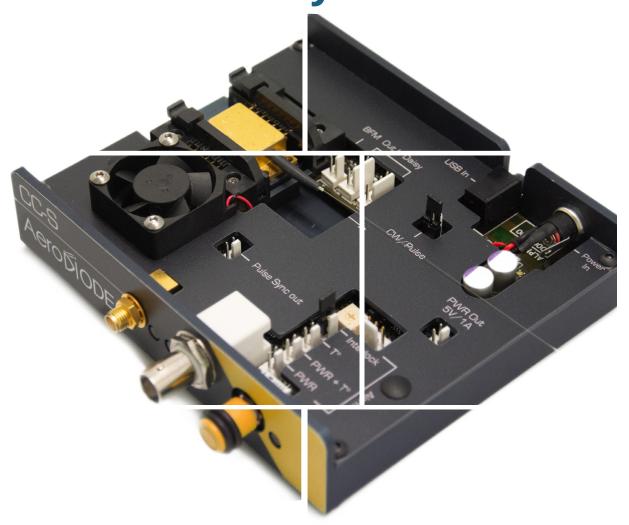
# 830 nm Laser diodes & Turn-key solutions



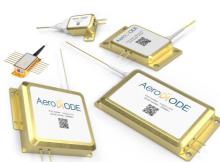


## 830 nm laser diode

# Choose your own **fiber-coupled laser diode** + turn-key driver solution

Standard singlemode or multimode laser diodes in the ~830 nm wavelength range are offered as stock items or combined with a CW or pulsed turn-key laser diode driver.

1 St Choose your laser diode :



Diode model	Power (CW)	Power (Pulse)	Technology	Wavelength (nm)	Fiber (or eq.)	Emisison Bandwidth (typ)	Package (mm)	
1	200 mW	400 mW	Butterfly single mode	830 ± 3 nm (830 nm ± 1 nm with FBG option)	Hi 780 PM 780 (option)	~1 nm (0.2 nm with FBG OPTION)	14 pin Butterfly- type 1	
2	600 mW	600 mW	Butterfly MULTI- MODE with VBG	830 ± 0.5 nm		< 0.1 nm		
3	2 W	2 W	Multimode single emitter	830 ± 3 nm	Multimode 106 µm NA=0.22	3.5 nm	30.9*17*7.7	
4	20 W	20 W	Multimode multi- emitter	030 ± 3 nm		~ 4.5 nm	123.5*50*22	

Choose your product form factor : OPEN-FRAME or INTEGRATED

#### **OPEN-FRAME VERSIONS:**





> Open-frame driver for «Shaper» electronic Board for single mode diodes

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

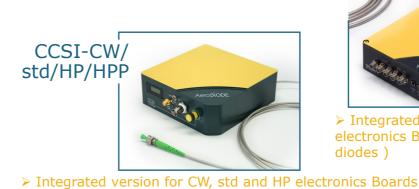


«CCM» Open-frame driver for Multimode diodes



		LASER DRIVER VERSION :					
	830 nm Laser Diode version	CW Driver [for singlemode diodes : « <u>CCS-CW</u> » is the open driver and <u>CCSI-CW</u> is the integrated version)	Pulse & CW Driver (from 1 ns to CW : « <u>CCS-std</u> » is the open driver and <u>CCSI-std</u> is the integrated version)	User design pulse shape Driver (« <u>Shaper</u> » open driver / « <u>Shaper-l</u> » inte- grated version) from 0.5 ns to 8 µs	Multimode diode Driver (High power driver for 10 to 150 W diodes : <u>CCM</u> is the open version, <u>CCMI</u> is the integrated version)		
	1- Butterfly singlemode	200 mW / No	200 mW / 400 mW	No / 400 mW	Not compatible		
Output Power - CW / Pulse (Typical values)	2- Butterfly Multimode	600 mW / No	600 mW / 600 mW	No / 600 mW	Not compatible		
	3- Multimode : 2 W / 20 W	Not compatible			2 W / 2 W 20 W / 20 W		
Laser diode T°			15 - 40 °C				
Pulse duration (Ext. trigger)			0.5 ns - CW		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 optical pulse duration (Butterfly package diodes)	Any		3 (ns/A) ; 1.5 ns	<1ns/A; 1.5 ns	few µsec		
Internal rep rate adjustment			1 Hz - 4 MHz (250 MHz optional)	1 Hz - 20 MHz	No		
Temporal Jitter			< 25 ps	< 2 ns			
Interface/GUI/libraries		USB - Windows 7/10 - DLLs - Hexa/Linux - Labview - Python					

#### **INTEGRATED VERSIONS:**





> Integrated version for Shaper electronics Board (single mode diodes )

) × «CCMI» In

**CCMI** 



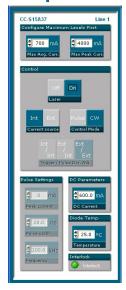
«CCMI» Integrated driver for Multimode diodes



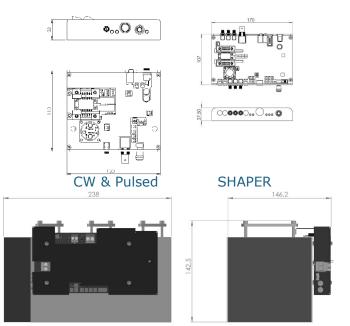
### **Technical Specifications**

#### GUI (examples)





#### Mechanical (examples):

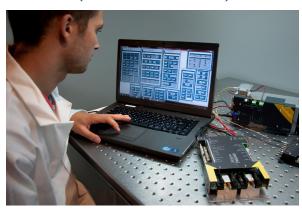


# OPTIONS (see all prices on the website page):

- \* PM fiber output
- \* Narrow spectrum (FBG-based)
- \* Optical collimator (3mm or high power 10 mm version)
- \* 250 MHz rep rate for pulse diode +driver versions
- \* Special Benchtop version for lab use (see the description on the website page and the picture below)



#### CCM (for Multimode diodes)



#### Classification:

Name		830LD :			
	Diode type	0: Laser diode only 1: 200 mW Butterfly singlemode 2: 600 mW Butterfly Multimode 3: 2 W multimode 4: 20 W multimode			
	Driver Electro- nics :	O: No driver (laser diode alone) 1: CCS/CCSI-CW (CW laser emission only - for singlemode laser diodes) 2: CCS-CCSI-std (Pulsed and CW Driver - for singlemode laser diodes) 3: SHAPER (User design temporal pulse shape - for singlemode laser diodes) 4: CCM/CCMI (for multimode high power laser diodes) LN: Ultra-low Noise driver			
	Form Factor	O: No driver (laser diode alone) 1: Open frame driver version 2: Integrated driver version			

#### Ordering information:

