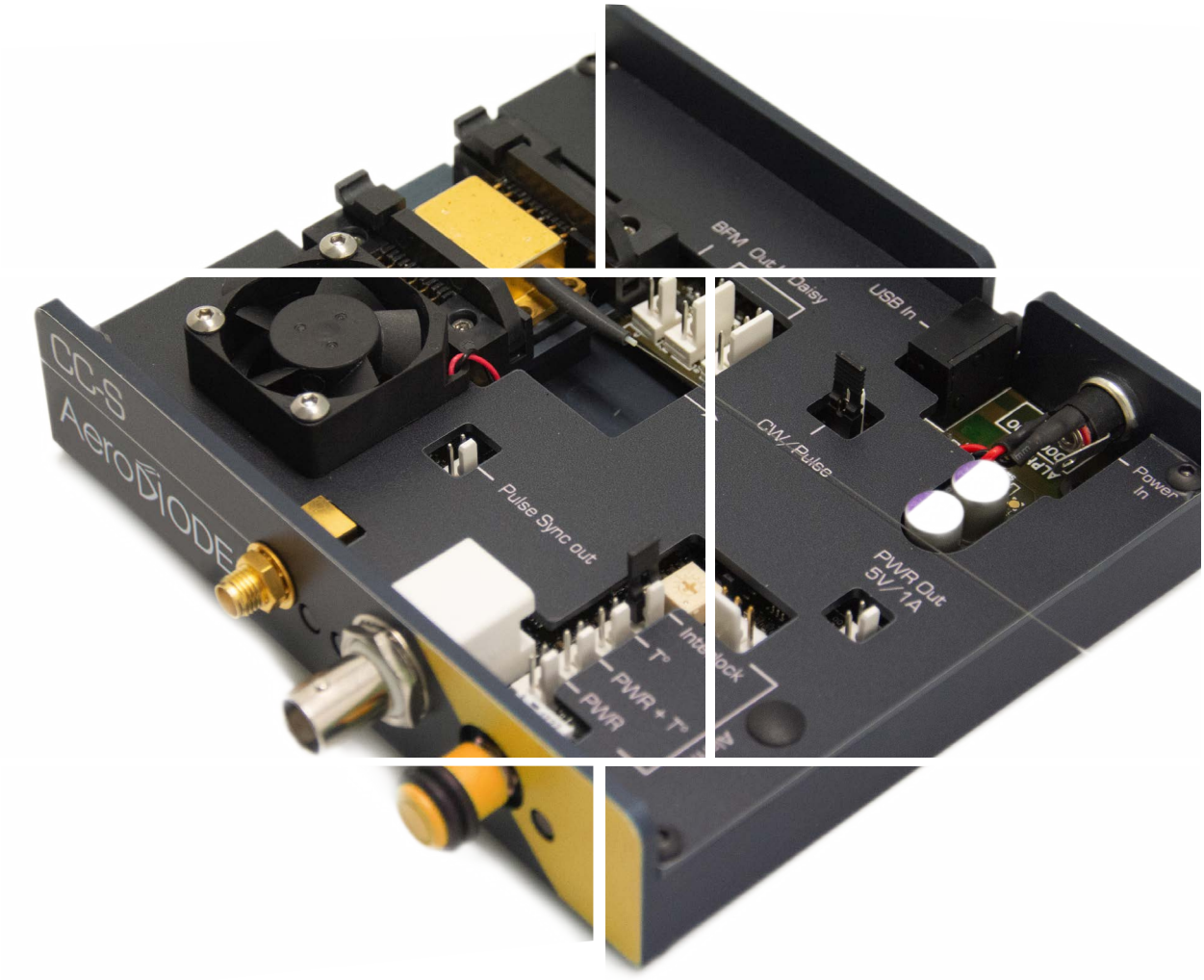
Laser diodes & turn-key solutions from 1270 to 1650 nm



AeroDIODE

www.aerodiode.com

Choose your own fiber-coupled DFB, Fabry-Perrot or multi-emitters laser diode + turn-key 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.

1st Choose your laser diode :

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 available 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 configuration available on demand)
2*	40 mW	60 mW					
3*	100 mW*	150 mW					
3b*	150 mW	225 mW					
4*	400 mW*	600 mW	Single mode Fabry-Perot 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

* 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.

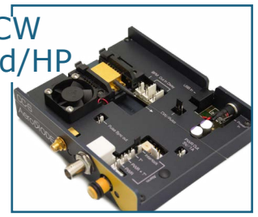
2nd Choose your Driver performance :

	LASER DIODE VERSION :	CW Driver (for singlemode diodes : «CCS-CW» is the open driver and CCSI-CW is the integrated version)	Pulse & CW Driver (from 1 ns to CW : «CCS» is the open driver and «CCSI» is the integrated version)	User design pulse shape Driver (From 0.5 ns to 8 µs : «SHAPER» 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
Output Power - CW / Pulse (Typical values)	1 : 10 mW	10 mW / No	10 mW / 15 mW	No / 15 mW	No
	2 : 40 mW	40 mW / No	40 mW / 60 mW	No / 60mW	
	3 : 100 mW	100 mW / No	100 mW / 150 mW	No / 150 mW	
	4 : 400 mW	400 mW / No	400 mW / 600 mW	No / 400 mW	
	5/6 : 20/40 mW	Ultra-narrow wavelength linewidth DFB models - see the 1550 nm product webpage - requires a special ultra low noise laser diode driver (not shown here).			
	7/8 : 15W/30 W	No			15 W / 30 W
Laser diode T°	Any	15 - 50 °C			15-40°C
Pulse duration (Ext trigger)		CW only	0.5 ns - CW	0.5 ns - 8 µs	10 µs - CW
Pulse duration (Internal pulse generator)			0.5 ns - 500 ns		No
Typ rise/fall time ; Min pulse duration			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			< 8 ps	< 2 ns (8 ps with clock synchronization)	
Adj. CW offset (pulse regime)			Optional	No	Yes (external mode)
Interface/GUI/libraries		USB - Windows 7/10 - DLLs - Hexa/Linux - Labview - Python			

3rd Choose your product form factor : OPEN-FRAME or INTEGRATED

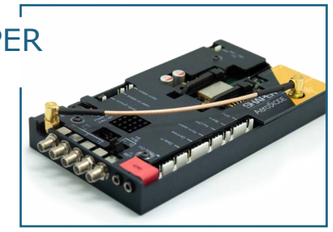
OPEN-FRAME VERSIONS :

CCS-CW
CCS-std/HP



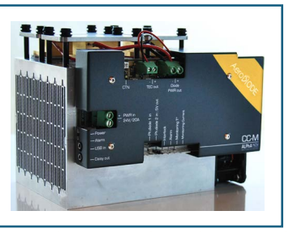
➢ Open-frame driver for CW, std and HP electronics boards for single mode diodes

SHAPER



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

CCM



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

INTEGRATED VERSIONS :

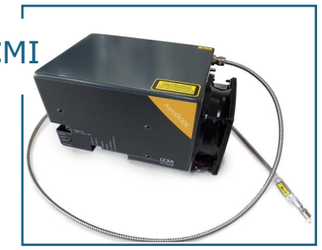
CCSI-CW/
std/HP

➢ Integrated version for CW, std and HP electronics boards

SHAPER-I

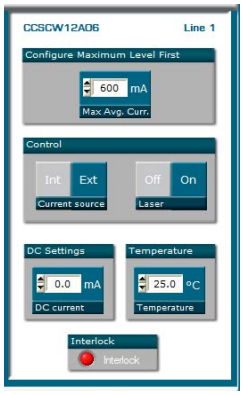
➢ Integrated version for Shaper electronics board

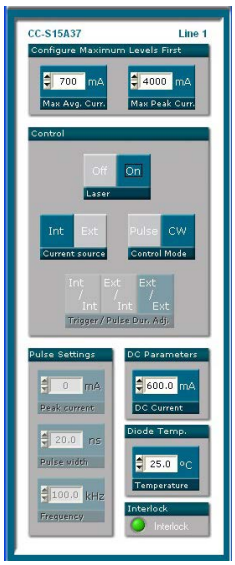
CCMI

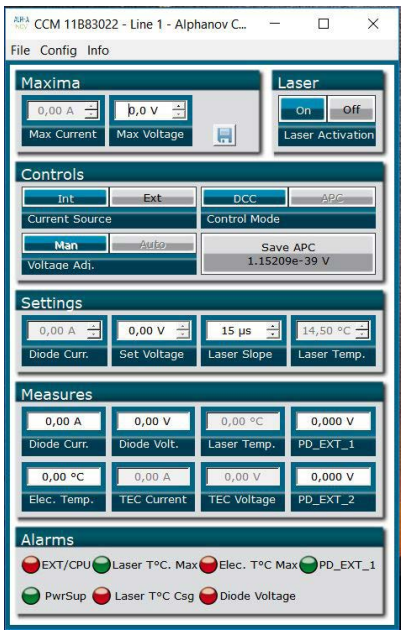


➢ Integrated version multimode diodes (15 or 30 W models)

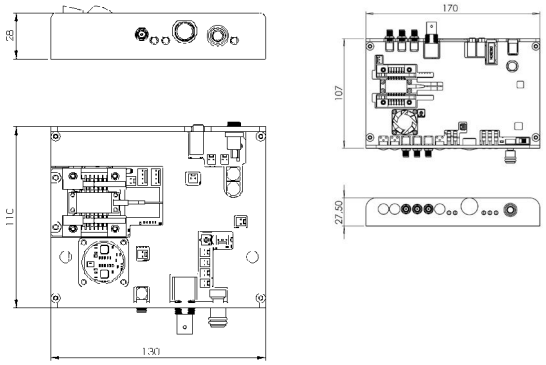
GUI (examples)



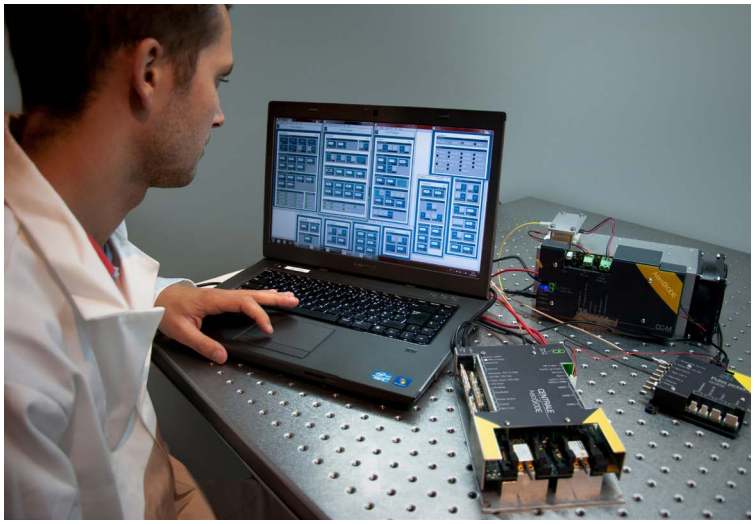




Mechanical (examples) :



CW & Pulsed SHAPER



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) LN: Ultra low noise driver TDLAS: Low noise CW driver with modulation HPP : High Pulse Performance
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)

Nothing or 1 : SMF
2 : PMF

[_]LD - [_] - [_] - [_] - [_]

Diode model*
1 5*
2 6*
3* 7*
3b* 8*
4*

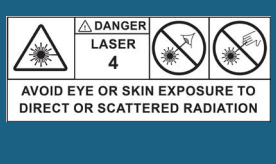
Driver type
0
1
2
3
4
LN
TDLAS
HPP

Form Factor
0
1
2

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).

AeroDIODE



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