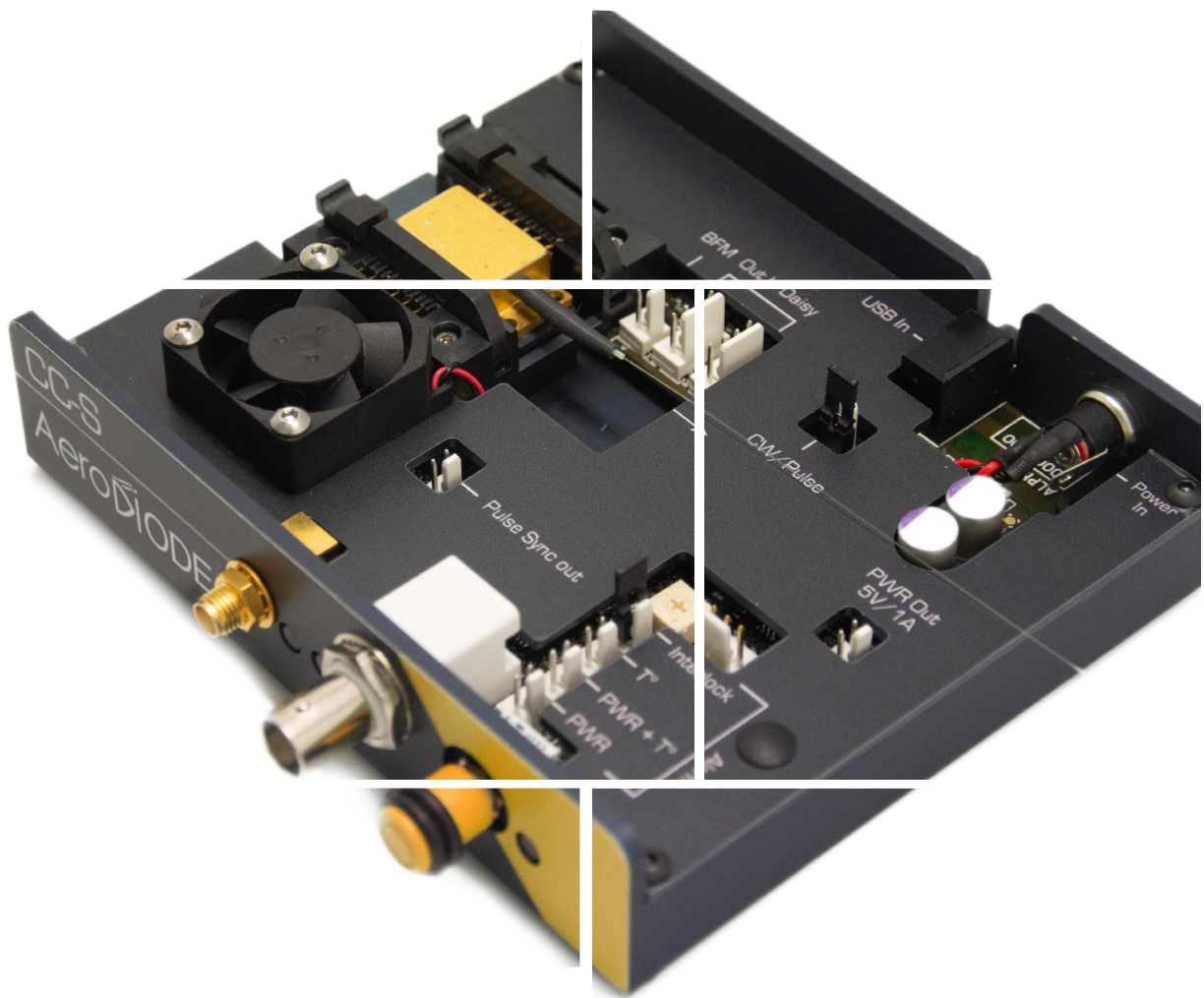


Laser diodes & turn-key solutions from 1270 to 1650 nm

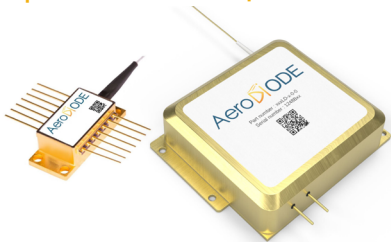


Aero*Di*ODE

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 web-site 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-Perrot 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.

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

2nd Choose your Driver performance :

LASER DIODE VER-SION :	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 : «SHA-PEB» 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	2 : 40 mW	3 : 100 mW	4 : 400 mW	5/6 : 20/40 mW	7/8 : 15W/30 W
Output Power - CW / Pulse (Typical values)	10 mW / No	40 mW / No	100 mW / No	400 mW / No	10 mW / 15 mW	No / 15 mW
	40 mW / No	40 mW / 60 mW	100 mW / 150 mW	400 mW / 600 mW	No / 60mW	No / 150 mW
	100 mW / No	100 mW / 150 mW	400 mW / 600 mW	No / 400 mW	No / 150 mW	No / 400 mW
	400 mW / No	400 mW / 600 mW	No / 400 mW	No / 400 mW	No / 400 mW	No / 400 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).					No
	No	No	No	No	No	15 W / 30 W
Laser diode T°	15 - 50 °C					15-40°C
Pulse duration (Ext trigger)	0.5 ns - CW					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
Internal rep rate adjust-ment	1 Hz - 4 MHz (250 MHz optional)					1 Hz - 20 MHz
Temporal Jitter	< 8 ps					< 2 ns (8 ps with clock syn-chronization)
Adj. CW offset (pulse regime)	Optional					No
Interface/GUI/libraries	USB - Windows 7/ 10 - DLLs - Hexa/Linux - Labview - Python					Yes (external mode)

INTEGRATED VERSIONS :

CCSI-CW/
std/HP

➤ Integrated version for CW, std and HP electronics boards

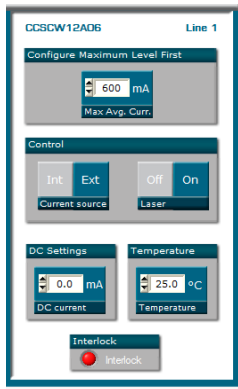
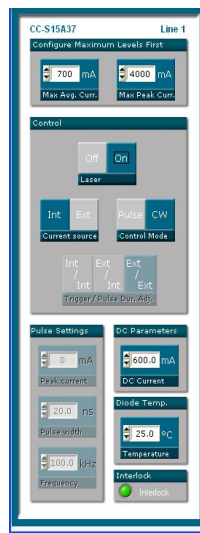
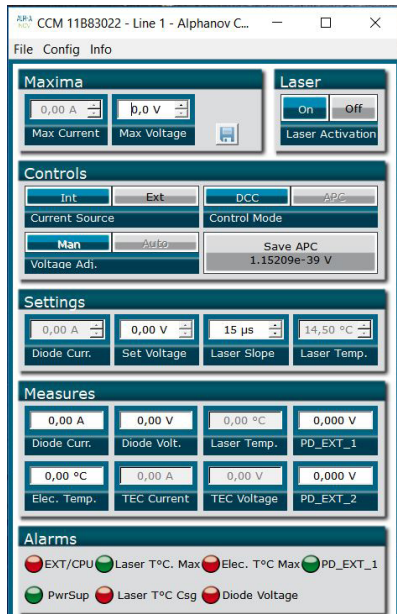
SHAPER-I

➤ Integrated version for Shaper electronics board

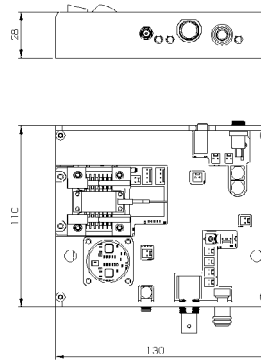
CCMI

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

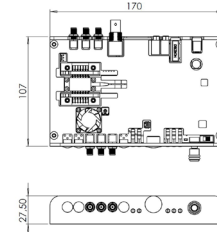
GUI (examples)



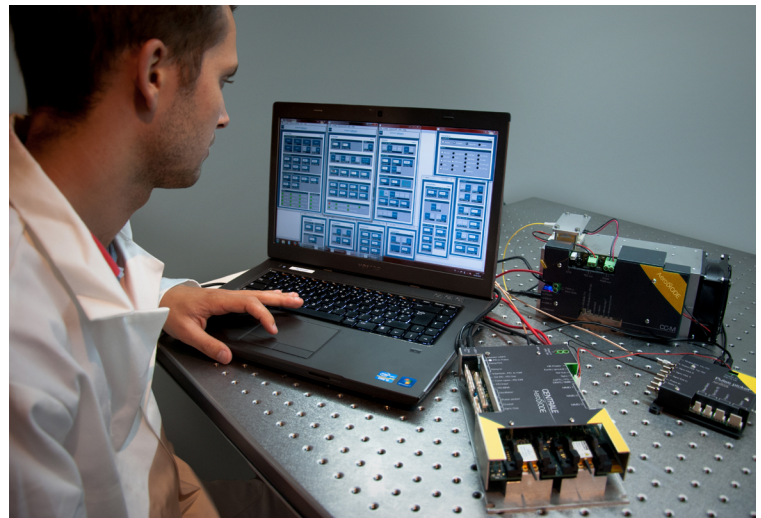
Mechanical (examples) :



CW & Pulsed



SHAPER



Ordering guide :

Please be advised that compatibility for certain options and wavelengths is model-specific. Refer to the product webpage for a comprehensive list of part numbers.

Wavelength	Laser diode model	Driver model	Form factor	Fiber type	Internal Isolator	Laser diode options*	Driver options*
[...]LD	[...]	ø : No driver	ø : No driver	SM : Singlemode fiber	ø : No int. isolator (multimode diode)	ø : No laser diode option	ø : No driver option
	See website for more information.	CW : CCS-CW	1 : Open frame	PM : Polarization maintaining fiber	NI : No int. isolator (singlemode diode)	T2 : Type 2 ⁽²⁾	250 : 250 MHz ⁽⁴⁾
		HP2 : CCS-CW-HP2	2 : Integrated	MM : Multimode fiber	I1 : Internal isolator	T2T : Type 2 Bias T ⁽²⁾	FUCE : Benchtop ⁽⁵⁾
		STD : CCS-std	OEM : For integration ⁽¹⁾		I2 : Internal double stage isolator	T2A : Type 2 Bias T Anode Grounded ⁽²⁾	Only for CCM driver models :
		HP : CCS-HP				TS : Special type ⁽²⁾	LN : Ultra-low Noise version
		UHP : CCS-UHP				FBG : Fiber Bragg Grating	TOMBAK : Synchronization module
		HPP : CCS-HPP				F1 : External fiber isolator	DB : Double board
		LN : CCS-LN				F12 : External fiber double stage isolator	FUCE-STD
		TDL : TDLAS				Only for laser diodes > 1 W :	FUCE-HP
		SHA : Shaper				SMA-HP : High power connector	
		CEN : Centrale				R : Red aiming beam	
		CCMMINI				LX : specific fiber length (X in cm) ⁽³⁾	
		CCMSTD				CX : specific core diameter (X in µm) ⁽³⁾	
		CCMHPP					
		CCMUHP					

(1) Not available for CCM driver models.

(2) Only compatible with some of the singlemode laser diodes.

(3) Please contact us.

(4) Available only for driver models STD, HP and UHP.

(5) Available only for integrated driver models CW, STD, HP and UHP.

*Each option is separated by a slash.

The Part Number list is subject to update. Access the current version [here](#).

AeroDiODE



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