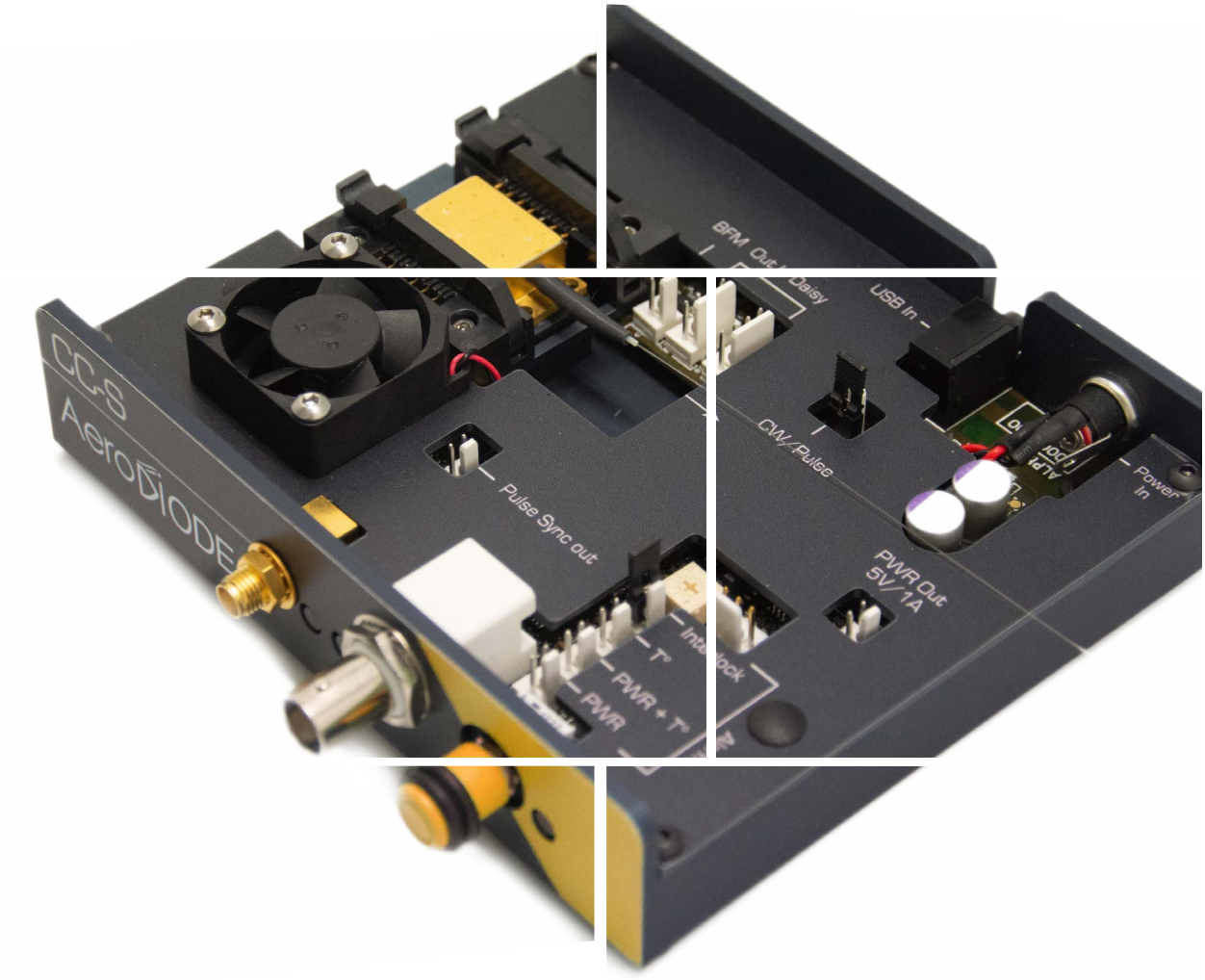
981nm Laser diode & Turn-key solutions



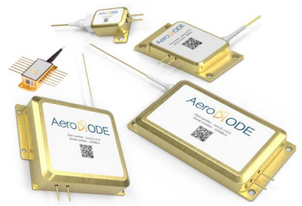
AeroDIODE

www.aerodiode.com

981nm laser diode

Choose your own fiber-coupled laser diode + turn-key Driver solution

Standard singlemode or multimode laser diodes are offered as stock items or associated with a CW or pulsed turn-key laser diode driver. All modules have narrow emission linewidth.



1st Choose your laser diode :

Diode type	Power (CW)	Power (Pulse)	Technology	Wavelength (nm)	Fiber	Emisison Band-width (typ)	Package (mm)
1	500 mW	1000 mW	Butterfly single mode	981±1nm	SM 980	~0.1 nm	14 pin Butterfly-type 1
2	1000 mW	1500 mW					
3	10 W	10 W	Multimode single emitter	981±0.5nm	105 µm NA=0.22	~0.5 nm	17*14*6.1
4	30 W	30 W	Multimode multi emitter				25*43*11.6
5	60 W	60 W				~0.7 nm	80*48*16
6	140 W	140 W		981±1nm			80*80*24.8

2nd Choose your Driver performance :

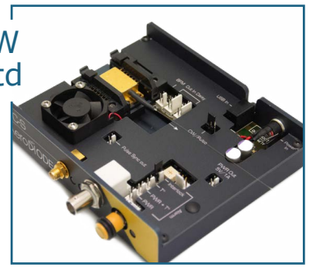
LASER DRIVER VERSION :

	981 nm Laser Diode Model	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 («SHAPER» open driver from 0.5 ns to 8 µs)	Multimode diode Driver (High power driver for 10 to 150 W diodes : CCM is the open version, CCMI is the integrated version)
Output Power - CW / Pulse (Typical values)	1- Single mode 500 mW	500 mW / No	500 mW / 1000 mW	No / 1000 mW	Not compatible
	2- Single mode 1000 mW	900 mW / No	450 mW / 1500 mW	No / 1500 mW	
	3-6: Multimode : 10 W 30 W 60 W 140 W	Not compatible			10 W / 10 W 30 W / 30 W 60 W / 60 W 140 W / 140 W
User design Pulse shape	Any	No	No (On-Off only)	Yes	No
Laser diode T°		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			< 25 ps	< 2 ns	
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

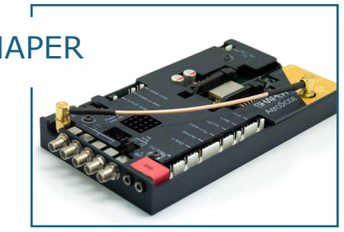
OPEN-FRAME VERSIONS :

CCS-CW
CCS-std



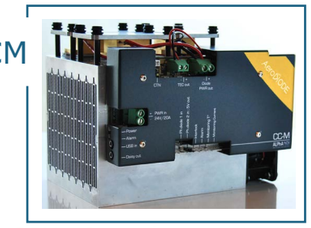
➢ Open-frame driver for CW, std and HP electronics Boards for single mode diodes

SHAPER



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

CCM



➢ «CCM» Open-frame driver for Multimode diodes (10-180W)

INTEGRATED VERSIONS :

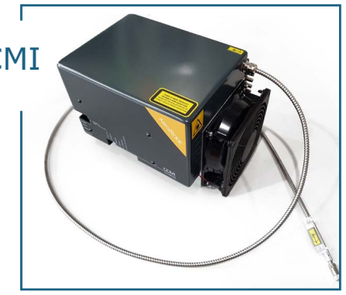
CCSI-CW/
std

➢ Integrated version for CW, std and HP electronics Boards

SHAPER-I

➢ Integrated version for Shaper electronics Board

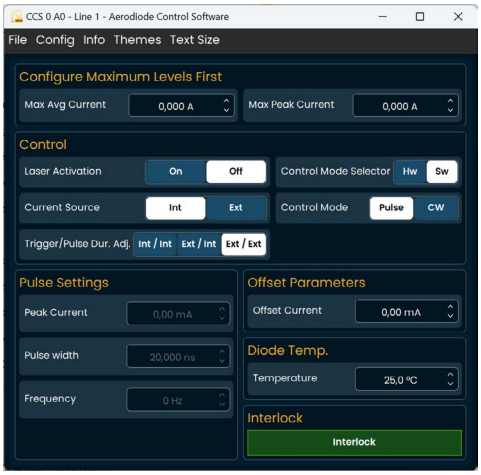
CCMI

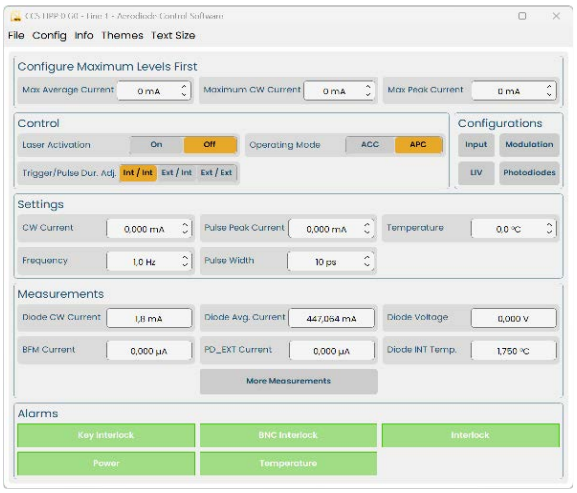


➢ «CCMI» Open driver for Multi-mode diodes (10-180W)

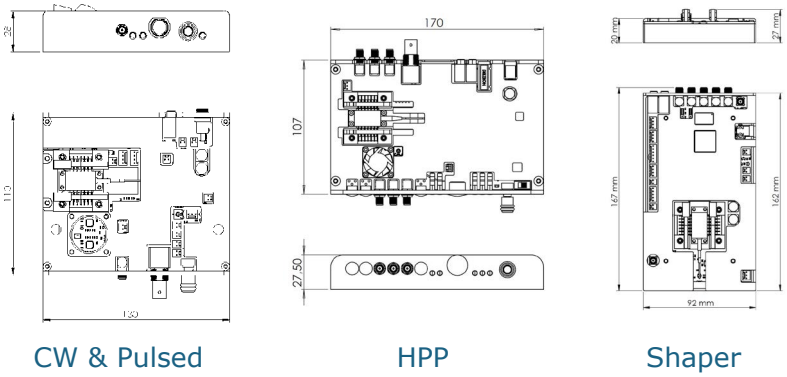
Technical Specifications

GUI examples

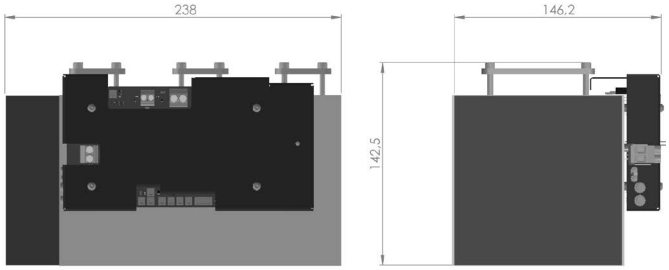




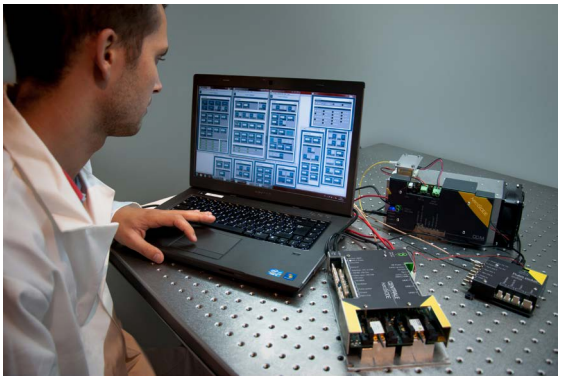
Mechanical examples



CW & Pulsed HPP Shaper



CCM (for Multimode diodes)



Classification :

Name	981LD :
Diode type	1: 500 mW Butterfly singlemode 2: 1000 mW Butterfly singlemode 3: 10 W multimode 4: 30 W multimode 5: 60 W multimode 6:: 140 W multimode
Driver Electronics :	0 No driver (Laser diode only) 1: CW (CW laser emission driver) TDLAS : High end CW driver for high power and low noise 2: Pulse & CW (Pulse and CW driver) 3 : SHAPER (User design temporal pulse shape driver) 4 : High Power (for multimode diodes model 3 to 6)
Form Factor	0: No driver (Laser diode only) 1: Open frame 2: Integrated

Ordering information :

981LD - [_] - [_] - [_]

Diode type	Driver type	Form Factor
1	0	0
2	1	1
3	TDLAS	2
4	2	
5	3	
6	4	

AeroDIODE

DANGER LASER 4
AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION

Product Manager : sales.aerodiode@aerodiode.com
+33 (0)6 27 69 41 52
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