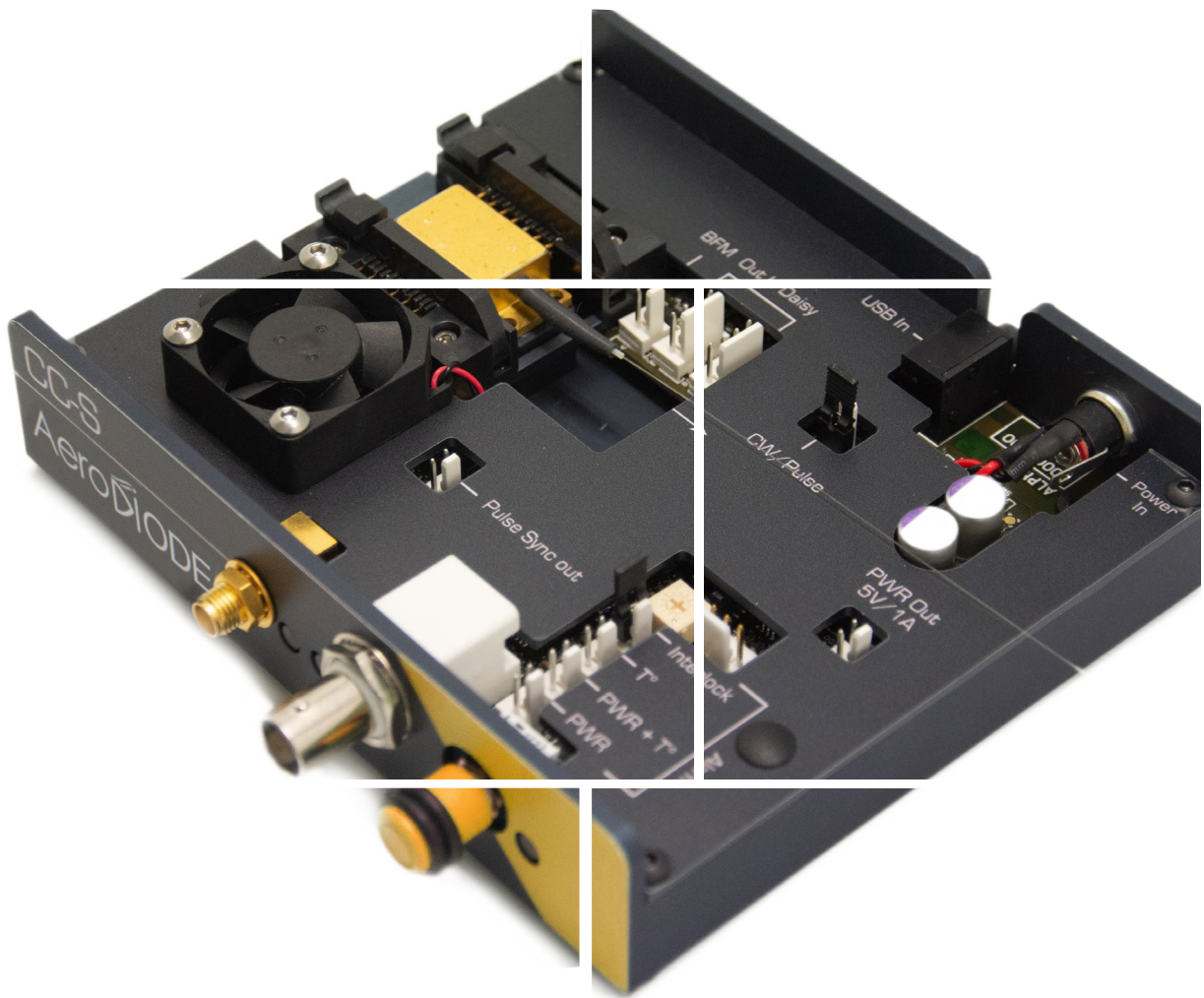# 915 nm Laser diode & Turn-key solutions
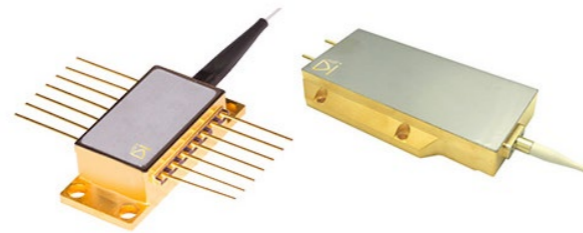

![AeroDIODE logo]

915 nm laser diode

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

Standard singlemode or multimode laser diodes are sourced from the most reliable manufacturers and offered as stock items or associated with a CW or pulsed turn-key laser diode driver.
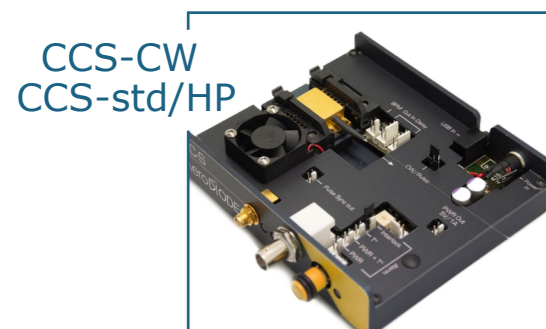
1st
Choose your laser diode :

Diode type	Power (CW)	Power (Pulse)	Technology	Wavelength (nm)	Fiber	Emisison Band-width (typ)	Package (mm)
1	300 mW	600 mW	Butterfly single mode	915±5nm	PM 980	~0.1 nm	14 pin Butterfly-type 1
2	10 W	10 W	Multimode single emitter	915 ± 10 nm	Multimode 106 µm NA=0.22	~5 nm	
3	45 W	45 W					38.5*45*10
4	80 W	80 W	Multimode multi emitter				48*75*15
5	140 W	140 W					54*99*15.5

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

2nd
Choose your Driver performance :

	808 nm 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 («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	300 mW / No	250 mW / 1000 mW	No / 1000 mW	Not compatible
	2- Multimode : 10 W/45 W/ 80 W or 140 W		Not compatible		10 W / 10 W 45 W / 45 W 80 W / 80 W 140 W / 140 W
User design Pulse shape		No	No (On-Off only)	Yes	No
Laser diode T°			15 - 50 °C		15 - 40 °C
Pulse duration (Ext trigger)			0.5 ns - CW	0.5 ns - 8 µs	10 µs - CW
Pulse duration (Internal pulse generator)	Any	CW only	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)			No		Yes (external mode)
Interface/GUI/libraries			USB - Windows 7/10 - DLLs - Hexa/Linux - Labview - Python		

OPEN-FRAME VERSIONS :

SHAPER

CCS-CW CCS-std/HP

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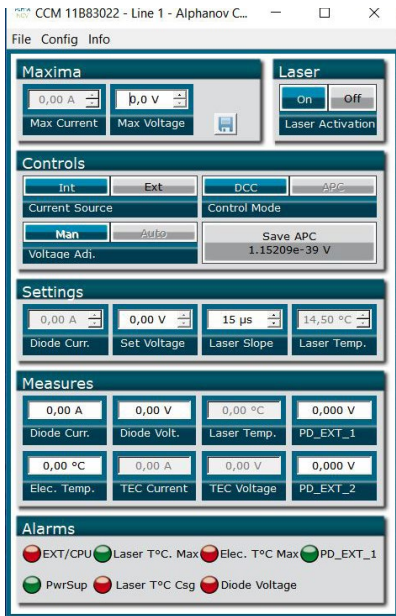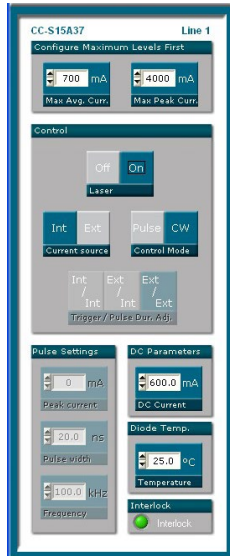
CCM

➤ Open-frame driver for CW, std and HP electronics Boards for single mode diodes
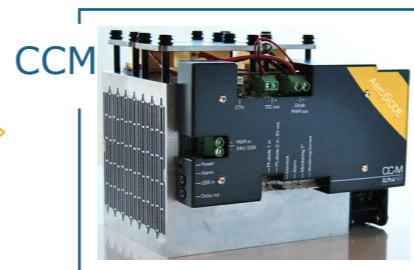
➤ «CCM» Open-frame driver for Multimode diodes

INTEGRATED VERSIONS :

SHAPER-I

CCSI-CW/ std/HP/HPP

CCMI

➤ Integrated version for Shaper electronics Board

➤ Integrated version for CW, std and HP electronics Boards

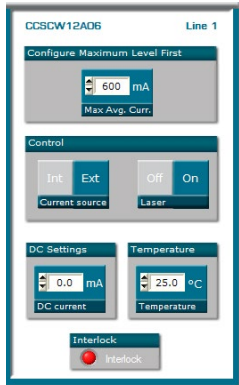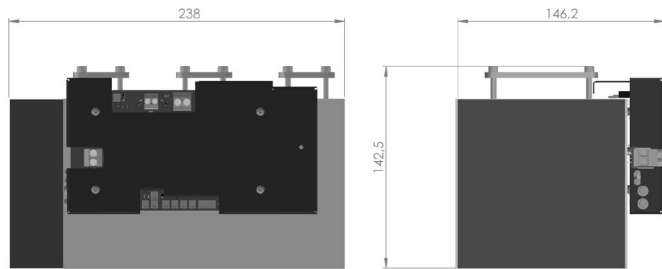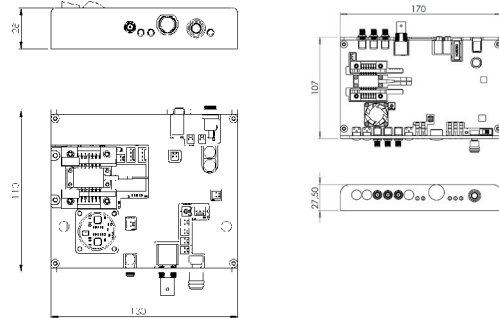➤ «CCMI» Integrated driver for Multimode diodes

AeroDIODE

Technical Specifications

GUI (examples)

CCSCW12A06 Line 1

Configure Maximum Level First
600 mA
Max Avg. Curr.

Control
Int | Ext — Current source
Off | On — Laser

DC Settings
0.0 mA — DC current

Temperature
25.0 °C — Temperature

Interlock
● Interlock

CC-S15A37 Line 1

Configure Maximum Levels First
700 mA — Max Avg. Curr.
4000 mA — Max Peak Curr.

Control
Off | On — Laser
Int | Ext — Current source
Pulse | CW — Control Mode
Int/Int | Ext/Int | Ext/Ext — Trigger/Pulse Dur. Adj.

Pulse Settings
0 mA — Peak current.
20.0 ns — Pulse width
100.0 kHz — Frequency

DC Parameters
600.0 mA — DC Current
Diode Temp.
25.0 °C — Temperature
Interlock
● Interlock

CCM 11B83022 - Line 1 - Alphanov C...

File Config Info

Maxima
0,00 A | 0,0 V
Max Current | Max Voltage

Laser
On | Off
Laser Activation

Controls
Int | Ext | DCC | APC
Current Source | Control Mode
Man | Auto | Save APC 1.15209e-39 V
Voltage Adj.

Settings
0,00 A | 0,00 V | 15 µs | 14,50 °C
Diode Curr. | Set Voltage | Laser Slope | Laser Temp.

Measures
0,00 A | 0,00 V | 0,00 °C | 0,000 V
Diode Curr. | Diode Volt. | Laser Temp. | PD_EXT_1
0,00 °C | 0,00 A | 0,00 V | 0,000 V
Elec. Temp. | TEC Current | TEC Voltage | PD_EXT_2

Alarms
● EXT/CPU ● Laser T°C. Max ● Elec. T°C Max ● PD_EXT_1
● PwrSup ● Laser T°C Csg ● Diode Voltage

Mechanical (examples) :

CW & Pulsed

SHAPER

CCM (for Multimode diodes)
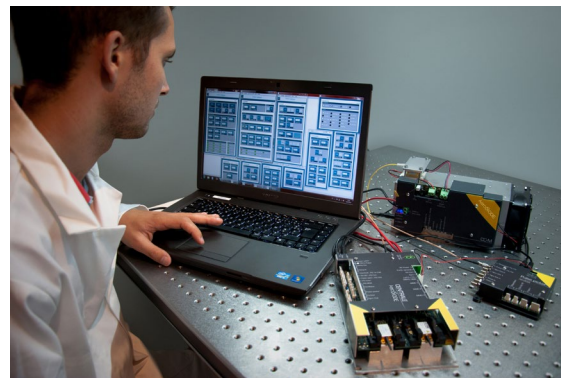
Classification :

Name	915LD :
Diode type	1: 300 mW Butterfly singlemode 2: 10 W multimode 3: 45 W multimode 4: 80 W multimode 5: 140 W multimode
Driver Electronics :	0: No driver (laser diode alone) 1: CW (CW laser emissiononly) 2: Pulsed and CW Driver 3 : SHAPER (User design temporal pulse shape) 4 : CCM/CCMI (for multimode high power laser diodes)
Form Factor	0: No driver (laser diode alone) 1: Open frame driver version 2: Integrated driver version

Ordering information :

915LD - [_] - [_] - [_]

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

AeroDIODE

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