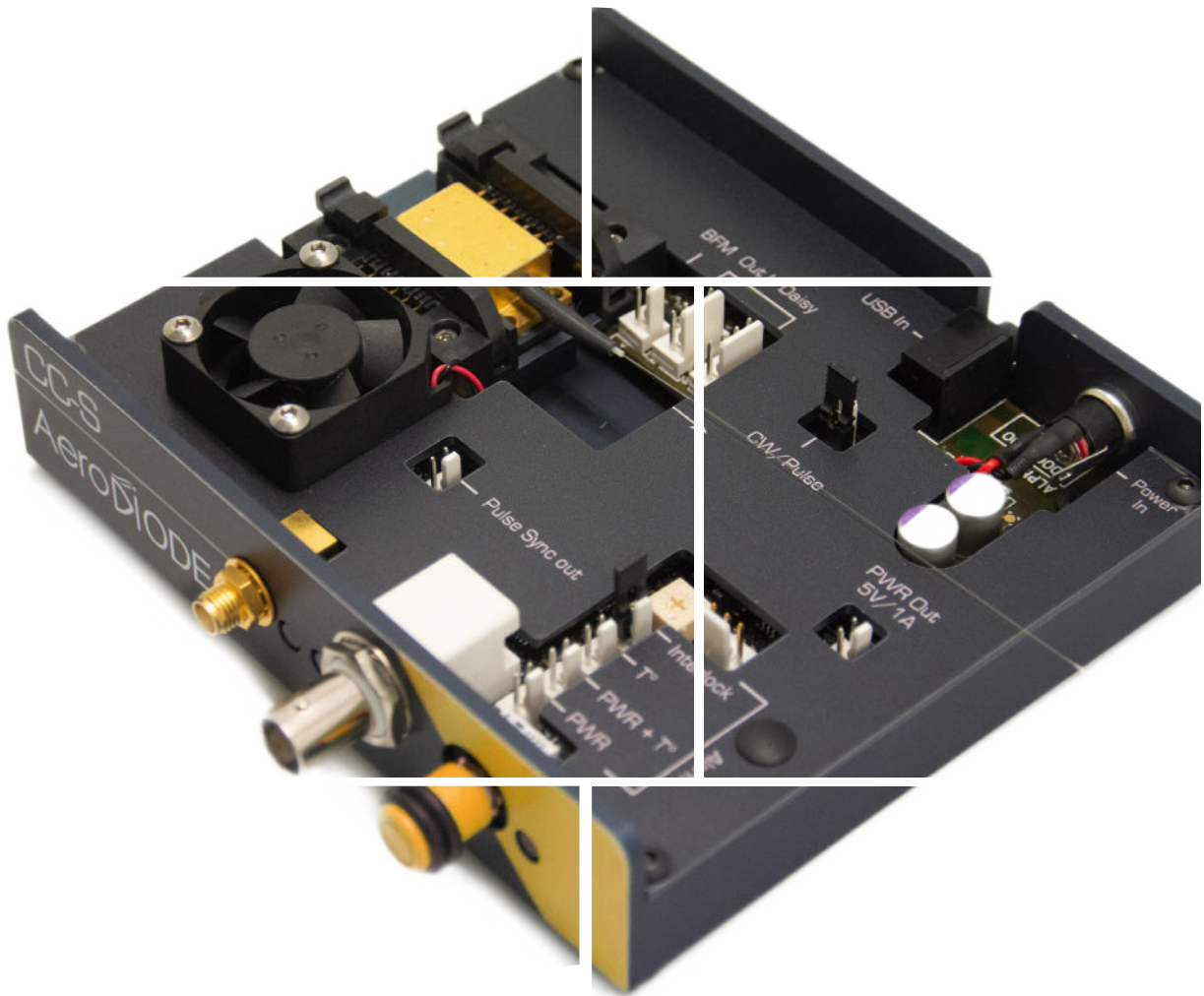# 790-795 nm
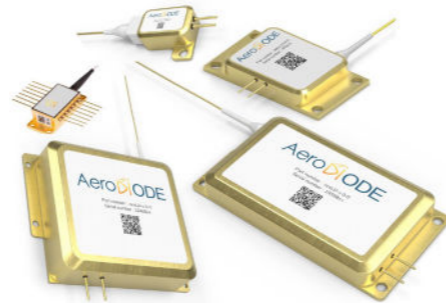# Laser diodes
& Turn-key solutions

![AeroDIODE logo]

790-795 nm laser diode

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

Standard singlemode or multimode laser diodes in the 790-795 nm wavelength range are offered as stock items or combined with a CW or pulsed turn-key laser diode driver.
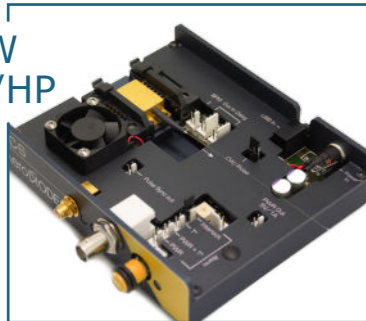
1st
Choose your laser diode :

Diode model	Power (CW)	Power (Pulse)	Technology	Wavelength (nm)	Fiber (or eq.)	Emission Bandwidth (typ)	Package (mm)
1	250 mW	400 mW	Butterfly single mode	790 ± 5 nm (792 nm ± 1 nm with FBG option)	Hi 780 PM 780	~1 nm (0.2 nm with FBG OPTION)	14 pin Butterfly-type 1
2	8 W	4 W	Multimode single emitter	793 ± 3 nm	Multimode 105 µm NA=0.22	~ 3 nm	31*17*6.1
3	30 W	12 W	Multimode multi emitter				25*43*11
4	50 W	30 W					48*80*16
5	90 W	90 W				~ 5 nm	80*80*25
6	130 W	130 W					190*73*22
7	180 W	180 W					222*50*24.9

2nd
Choose your Driver performance :

LASER DRIVER VERSION :

	790-795 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-std» is the open driver and CCSI-std is the integrated version)	User design pulse shape Driver («Shaper» open driver / «Shaper-I» integrated version) 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	250 mW / No	250 mW / 400 mW	No / 400 mW	Not compatible
	2- Multimode : 8 W / 30 W / 50 W / 90 W	Not compatible			8 W / 8 W, 30 W / 30 W, 50 W / 50 W, 90 W / 90 W (no driver available for 130 W or 180 W models)
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 optical pulse duration (Butterfly package diodes)			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			

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

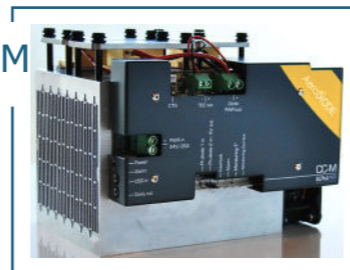## OPEN-FRAME VERSIONS :

CCS-CW CCS-std/HP

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

SHAPER

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

CCM

➤ «CCM» Open-frame driver for Multimode diodes (10-200W)

INTEGRATED VERSIONS :

CCSI-CW/ std/HP/HPP

➤ Integrated version for CW, std and HP electronics Boards

SHAPER-I

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

CCMI

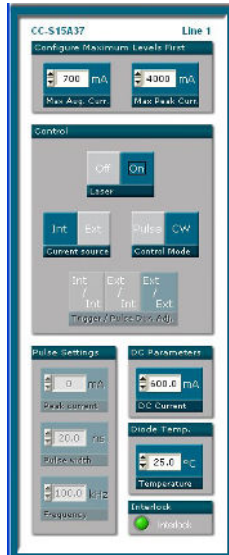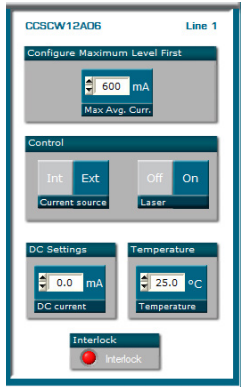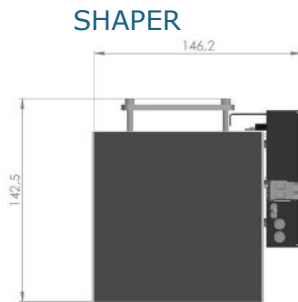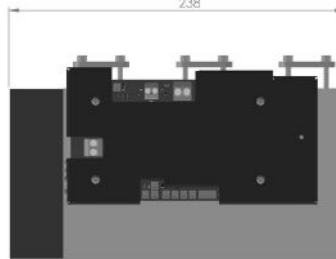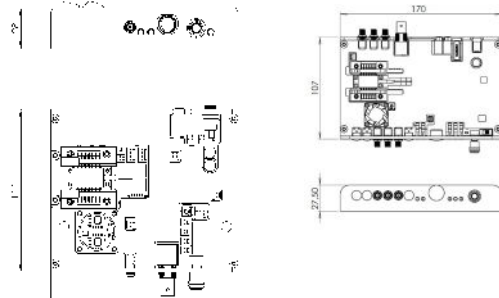➤ «CCMI» Integrated driver for Multimode diodes (4-140 W)

AeroDIODE   www.aerodiode.com

Technical Specifications

GUI (examples)

Mechanical (examples) :

CW & Pulsed   SHAPER

CCM (for Multimode diodes)

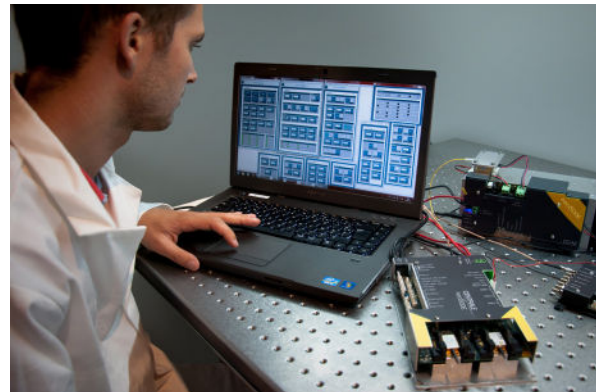## OPTIONS (see all prices on the website page) :

* 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)

Classification :

Name	790LD :	
Diode type	0: Laser diode only 1: 250 mW Butterfly singlemode 2: 8 W multimode 3: 30 W multimode 4: 50 W multimode	5: 90 W multimode 6: 130 W multimode 7 : 180 W multimode
Driver Electro-nics :	0: 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)	
Form Factor	0: No driver (laser diode alone) 1: Open frame driver version 2: Integrated driver version	

Ordering information :

790LD - [_] - [_] - [_] - Options

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

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