

# 660nm Laser diodes & Turn-key solutions



Aero  DIODE

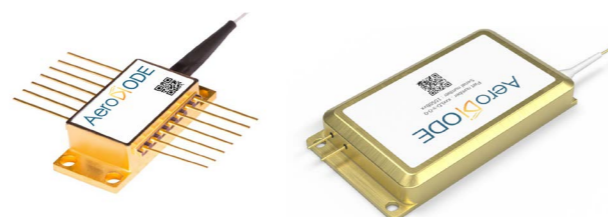
# 660nm laser diode

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

Standard singlemode laser diodes are offered as stock items or associated with a CW or pulsed open-frame or turn-key laser diode driver.

### 1st

Choose your laser diode:



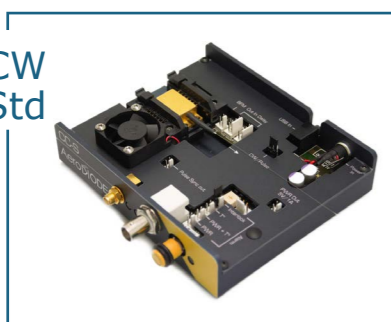
Diode model	Power (CW)	Power (Pulse)	Technology	Wavelength (nm)	Fiber core / NA	Emission Bandwidth (typ)	Package
1	50mW	120mW	Butterfly singlemode Fabry-Pérot	660 ± 10nm	Singlemode 3.5µ / 0.130	~1nm	14 pin Butterfly type 1
2	100mW	150mW					
3	10W	10W	Fabry-Pérot Multimode	665 ± 5nm	Multimode 106µm / 0.22	~3nm	80*48*16

### 3rd

Choose your product form factor: OPEN-FRAME or INTEGRATED

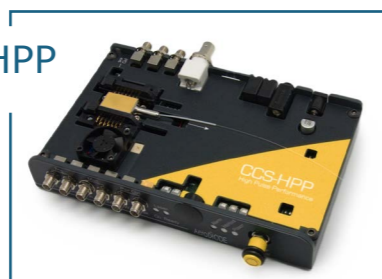
#### OPEN-FRAME VERSIONS:

CCS-CW  
CCS-Std



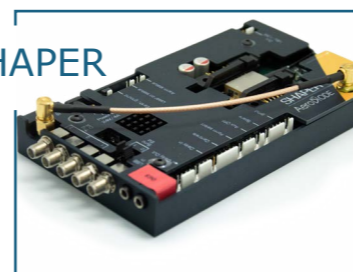
> Open-frame driver for CCS-CW and CCS-std electronics Boards for single mode diodes driven in both CW and pulse mode

CCS-HPP



> Open-frame driver for «CCS-HPP» electronic Board for singlemode diodes driven in both CW and pulse mode (High Pulse Performance model)

SHAPER



> «SHAPER» Open-frame pulsed driver with «user design pulse shape»

## 2nd

Choose your Driver performance:

LASER DRIVER VERSION:

	520nm 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 1ns to CW: «CCS-std» is the open driver and CCSI-std is the integrated version)	User design pulse shape Driver: «SHAPER» is the open driver and «Shaper-I» is the integrated version (from 0.5ns to 8µs)	Multimode diode Driver (High power driver for 10W diode: CCM is the open version, CCMI is the integrated version)
Output Power - CW / Pulse (Typical values)	1 - Singlemode 50mW	50mW / No	50mW / 120mW	No / 120mW	Not compatible
	2 - Singlemode 100mW	100mW / No	100mW / 150mW	No / 150mW	Not compatible
	3 - Multimode 10W	Not compatible			10W / 10W
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)	0.5 ns - 500 ns		No		No
Typ rise/fall time ; Min optical pulse duration (14 pin DIL package diodes)	3(ns/A) ; 1.5ns		< 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 (<10 ps with clock synchronization)		
Interface/GUI/libraries	USB - Windows 10/11 - DLLs - Hexa/Linux - Labview - Python				

#### INTEGRATED VERSIONS:

CCSI-CW  
CCSI-Std



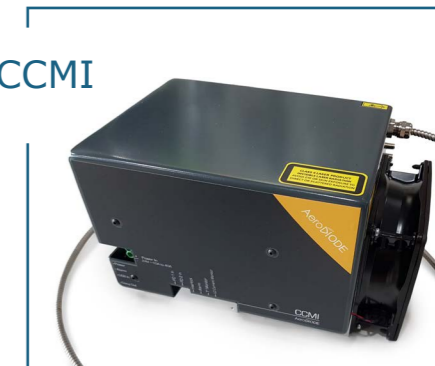
> Integrated version for CCS-CW and CCS-Std (pulse & CW) electronic Boards

SHAPER-I



> Integrated version for Shaper pulsed driver with «user-design pulse shape»

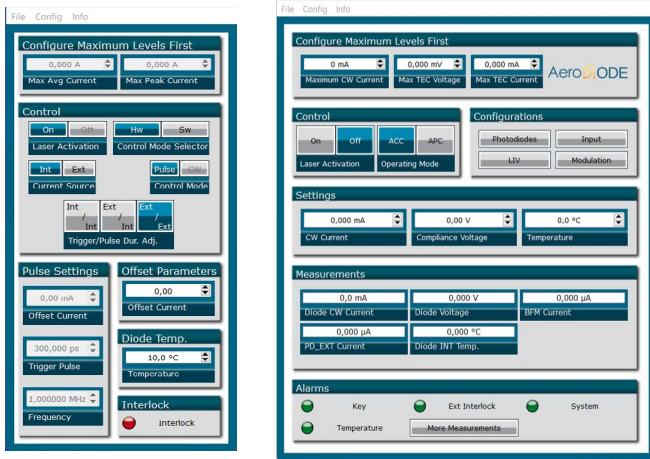
CCMI



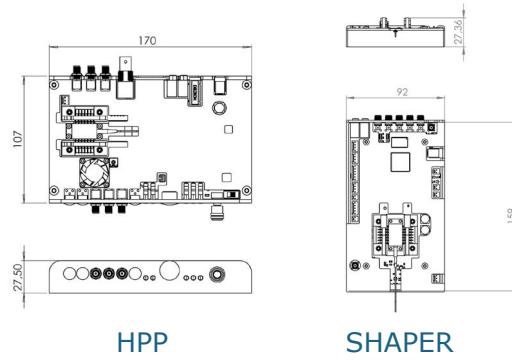
> «CCMI» Integrated driver for Multimode diode

# Technical Specifications

## GUI (examples):



## Mechanical (examples):



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

- \* PM fiber output
- \* Optical collimator (3mm)



> Example of 10 ns and 100 ns pulse shapes obtained with CCS-HPP driver



> All AeroDIODE products can be connected together (daisy chain) to a unique GUI interface which consolidates all modules functions

## Classification:

Name	660LD:
Diode type	1: 25mW butterfly singlemode 2: 50mW butterfly singlemode 3: 10W multimode
Driver Electronics :	0: No driver - laser diode alone 1: CCS-CW Driver (CW driver) 2: CCS-std Driver (Pulse & CW driver) HPP: Pulsed and CW Driver SHAPER: User design temporal pulse shape MMD: High power CCM(I) (for multimode diode)
Form Factor	0: No driver - laser diode alone 1: Open-frame driver version 2: Turn-Key Integrated driver version

## Ordering information:

