660 nm Laser diodes & Turnkey solutions

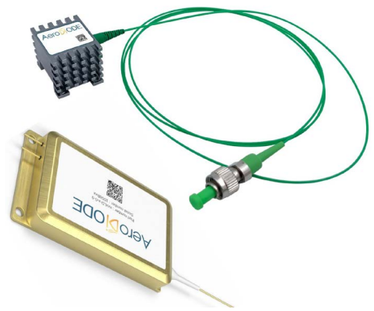
AeroDIODE

www.aerodiode.com

660 nm laser diode

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

Standard singlemode laser diodes at 660 nm (with TEC) are offered as stock items or combined with a CW or pulsed turn-key laser diode driver. The laser diode module has a 14-pin DIL form-factor (self cooled «Hedgehog» packaging compatible with butterfly laser diode drivers). A multimode model at 665 nm is also offered up to 10 W in a 105µm-core fiber.



1st Choose your laser diode :

Diode model	Power (CW)	Power (Pulse)	Technology	Wavelength (nm)	Fiber (or eq.)	Emisison Bandwidth (typ)	Package (mm)
1	15 mW	20 mW	Fabry-Pérot Singlemode	662 ± 5 nm	Single mode 630-HP or SM 63 if PM OPTION	~1 nm	Hedgehog (14 pin DIL) Compatible with butterfly laser diode drivers
2	40 mW	50 mW					
3	10 W	10 W	Fabry-Pérot Multimode	665 ± 5 nm	Multimode 106 µm NA=0.22	~ 3 nm	80*48*16

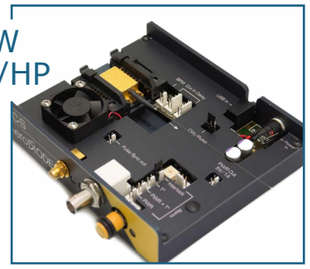
2nd Choose your Driver performance :

	660 nm Laser Diode version	LASER DRIVER 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- singlemode 15 mW	15 mW / No	15 mW / 20 mW	No / 20 mW	Not compatible
	2- singlemode 40 mW	50 mW / No	40 mW / 50 mW	No / 50 mW	Not compatible
	3- Multimode : 10 W	Not compatible			10 W / 10 W
Laser diode T°	Any	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 (<10 ps with clock synchronization)	
Interface/GUI/libraries		USB - Windows 10/11 - DLLs - Hexa/Linux - Labview - Python			

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

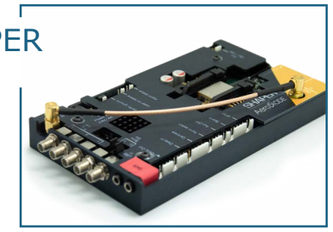
OPEN-FRAME VERSIONS :

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

INTEGRATED VERSIONS :

CCSI-CW/
std/HP/HPP

➢ Integrated version for CW, std and HP electronics Boards

SHAPER-I

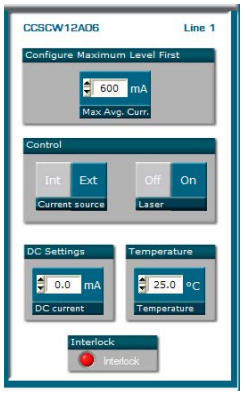
➢ Integrated version for Shaper electronics Board (single mode diodes)

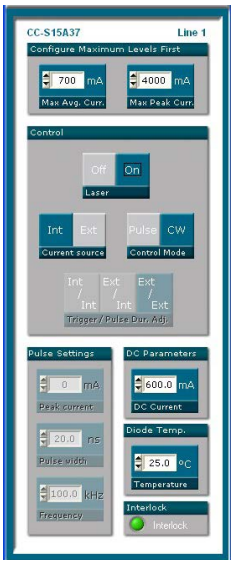
CCMI

➢ «CCMI» Integrated driver for Multimode diodes

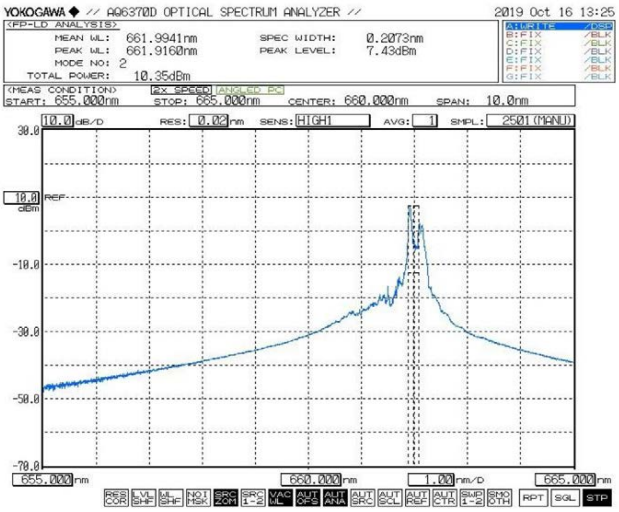
Technical Specifications

GUI (examples)





Spectrum (examples) :



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)

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

Classification :

Name	660LD :
Diode type	0: Laser diode only 1: 15 mW singlemode (Hedgehog form factor) 2 : 40 mW singlemode (Hedgehog form factor) 3: 10 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) LN : Ultra-low Noise driver
Form Factor	0: No driver (laser diode alone) 1: Open frame driver version 2: Integrated driver version

Ordering information :

660LD - [_] - [_] - [_] - Options

Diode type
1
2
3

Driver type
0
1
2
3
4
LN
HPP
TDLAS

Form Factor
0
1
2

AeroDIODE

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

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