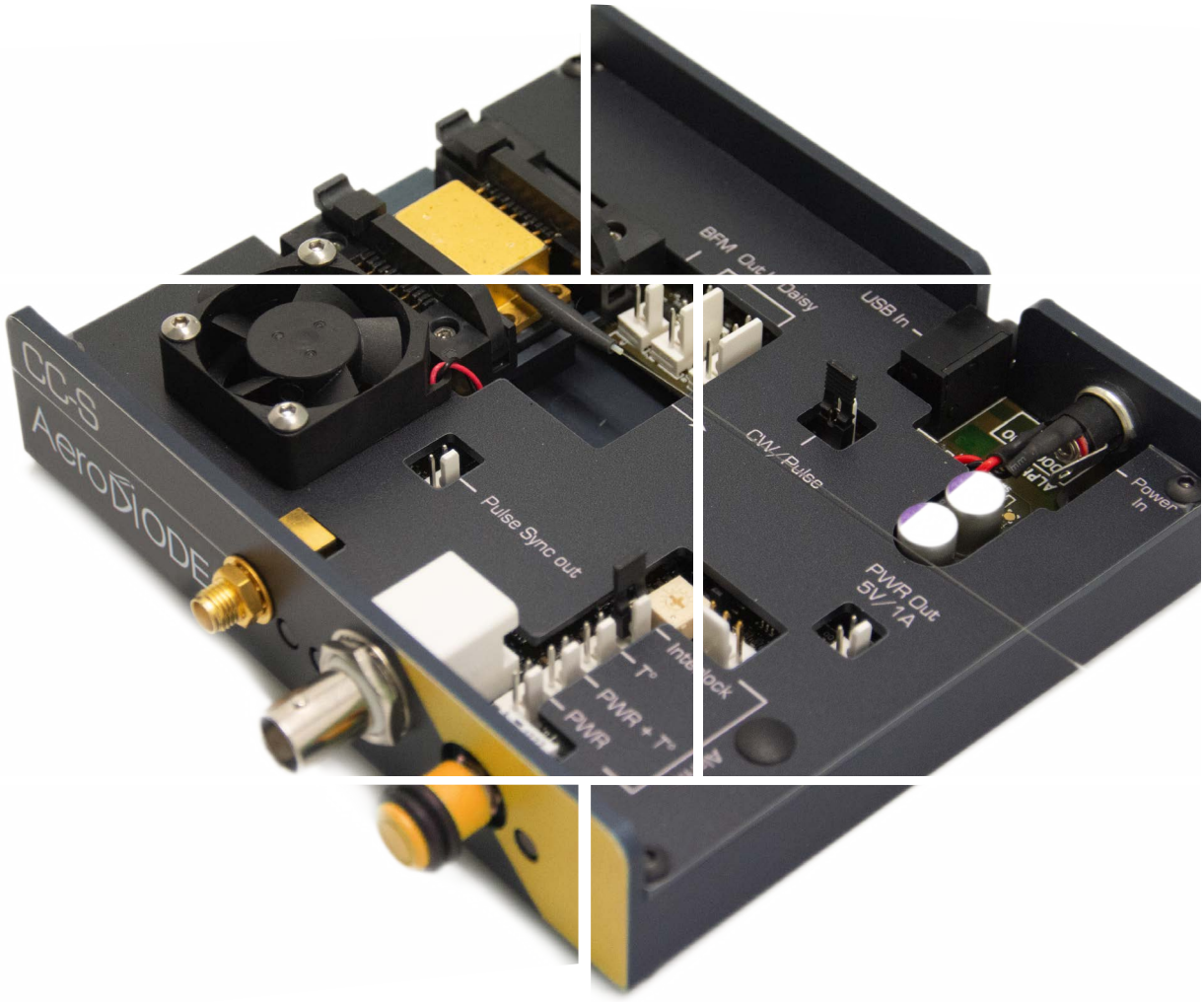
1053 nm
Laser diodes
& Turn-key solutions



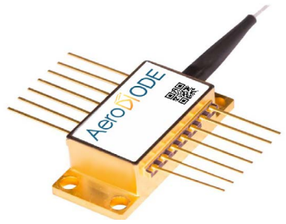
AeroDIODE

www.aerodiode.com

1053 nm laser diode

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

Standard singlemode Fabry-Pérot or DFB laser diodes in the 1053 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) (Chip Temprature @ 15°c)	Fiber (or eq.)	Emisison Band-width (typ)	Package (mm)
1	120 mW	600 mW	Butterfly single mode	1053 ± 5 nm (1053 nm ± 1 nm with FBG option)	Hi 1060 PM 980 (option)	~1 nm (0.2 nm with FBG OPTION)	14 pin Butterfly-type 1
2	300 mW	1200 mW		1053 ± 5 nm (1053 nm ± 1 nm with FBG option)			
3	70 mW	100 mW	DFB - Single frequency - Mode hop free	1053 ± 1 nm		100 kHz (single frequency)	

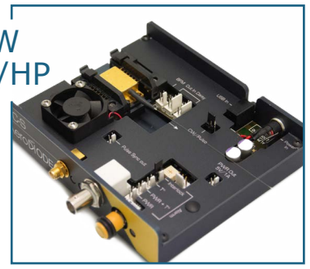
2nd Choose your Driver performance :

	1053 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) - An Ultra-low noise driver is also available and relevant for narrow DFB linewidth (diode model 3)- see the product webpage.	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 pulse Driver («Shaper» open driver / «Shaper-I» inte-grated version) from 0.5 ns to 8 µs
Output Power - CW / Pulse (Typical values)	1- Butterfly singlemode	120 mW / No	120 mW / 600 mW	No / 600 mW
		300 mW / No	300 mW / 900 mW	No / 800 mW
		DFB - 70 mW / No	70 mW / 100 mW	100 mW
Laser diode T°	Any	15 - 50 °C		
Pulse duration (Ext. trigger)		CW only	0.5 ns - CW	0.5 ns - 8 µs
Pulse duration (Internal pulse generator)			0.5 ns - 500 ns	
Typ rise/fall time ; Min optical pulse duration (Butterfly package diodes)			3 (ns/A) ; 1.5 ns	< 1ns/A ; 1.5 ns
Internal rep rate adjustment			1 Hz - 4 MHz (250 MHz optional)	1 Hz - 20 MHz
Temporal Jitter			< 25 ps	< 2 ns
Interface/GUI/libraries		USB - Windows 7/10 - DLLs - Hexa/Linux - Labview - Python		

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

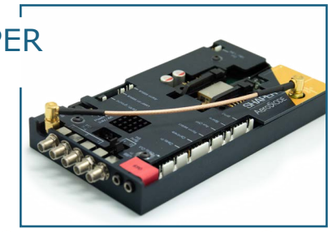
OPEN-FRAME VERSIONS :

CCS-CW
CCS-std/HP



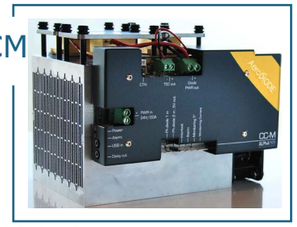
➢ Open-frame driver for CCS-CW, CCS-std and CCS-HP electronics Boards for single mode diodes

SHAPER



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

CCM



➢ «CCM» Open-frame driver for Multimode diodes

INTEGRATED VERSIONS :

CCSI-CW/
std/HP/HPP

➢ Integrated version for CW, std and HP electronics Boards

SHAPER-I

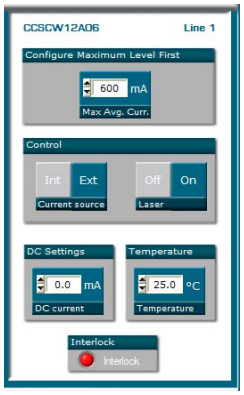
➢ Integrated version for Shaper electronics Board (single mode diodes)

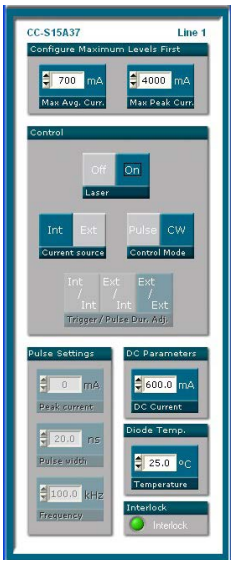
CCMI

➢ «CCMI» Integrated driver for Multimode diodes

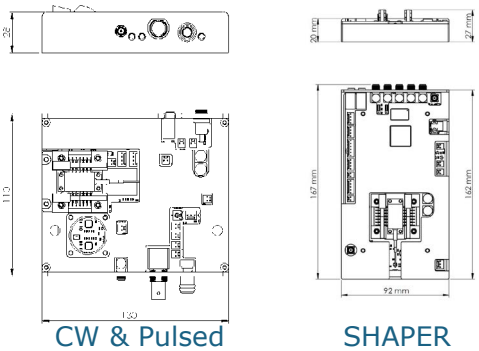
Technical Specifications

GUI (examples)





Mechanical (examples) :

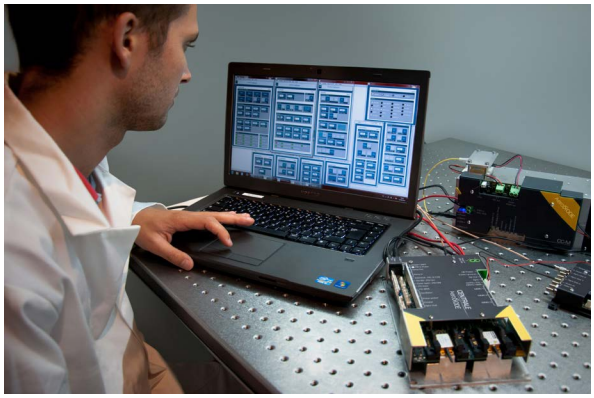


CW & Pulsed

SHAPER

OPTIONS (see all prices on the website product 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	1053LD :
Diode type	1: 120 mW Butterfly singlemode 2: 300 mW Butterfly singlemode 3: 70 mW Butterfly singlemode singlefrequency
Driver Electro-nics :	0: No driver (laser diode only) 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) LN : Ultra-low noise CW driver
Form Factor	0: No driver (laser diode only) 1: Open frame driver version 2: Integrated driver version

Ordering information :

1053LD - [_] - [_] - [_] - Options

Diode type
1
2

Driver type
0
1
2
3
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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