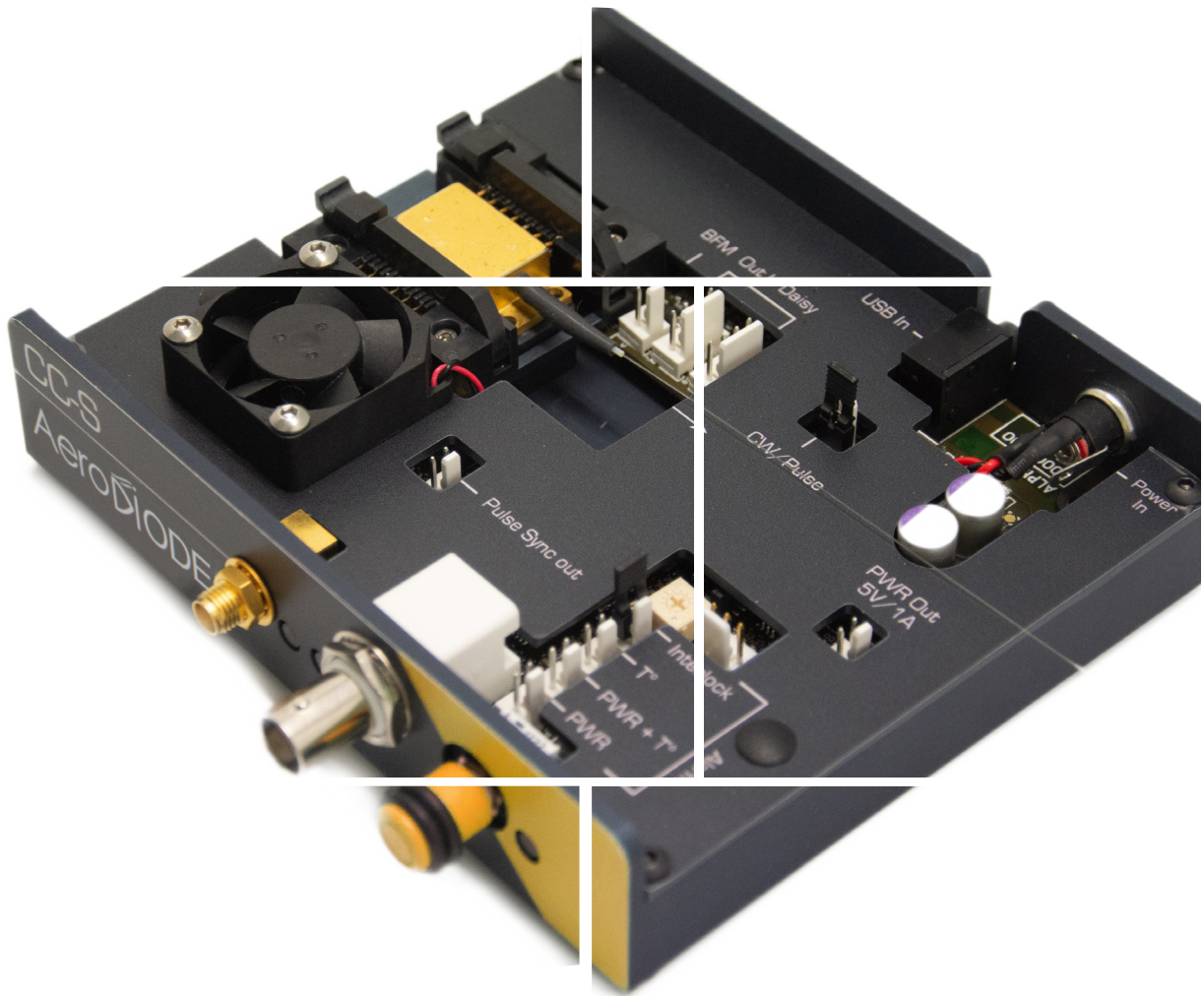


# 1053 nm Laser diodes & Turn-key solutions

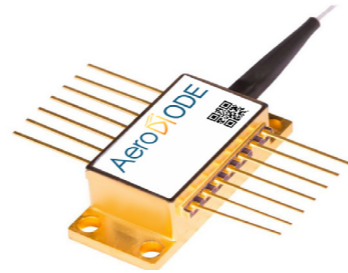


Aero  ODE

# 1053 nm laser diode

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

Standard singlemode or multimode 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 :

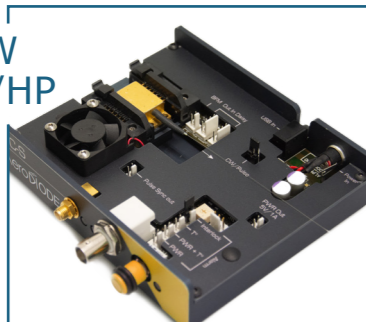
| Diode model | Power (CW) | Power (Pulse) | Technology            | Wavelength (nm) (Chip Temperature @ 15°C)    | Fiber (or eq.)  | Emission Bandwidth (typ)       | Package (mm)            |
|-------------|------------|---------------|-----------------------|--|-----------------|--------------------------------|-------------------------|
| 1           | 120 mW     | 600 mW        | Butterfly single mode | 1053 ± 5 nm (1053 nm ± 1 nm with FBG option) | Hi 1060         | ~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) | PM 980 (option) |                                |                         |

### 3rd

Choose your product form factor : OPEN-FRAME or INTEGRATED

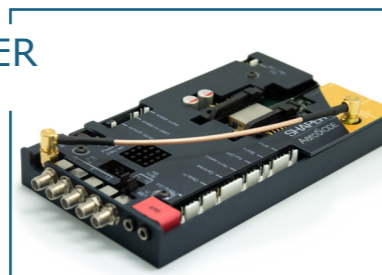
## OPEN-FRAME VERSIONS :

CCS-CW  
CCS-std/HP



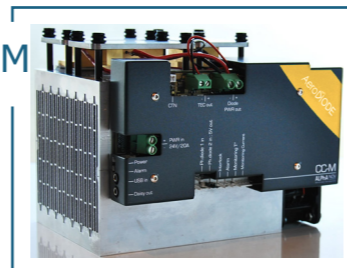
➤ Open-frame driver for CCS-CW, CCS-std and CCS-HP electronics Boards for single mode diodes

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

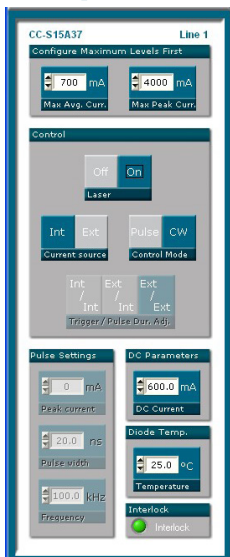
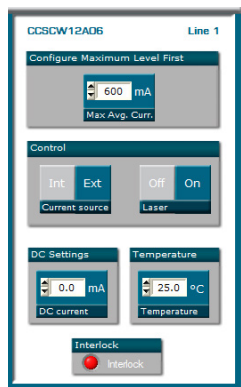
## 2nd

Choose your Driver performance :

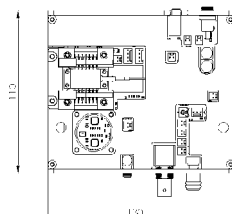
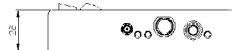
|  | 1053 nm Laser Diode version                               | LASER DRIVER VERSION :  |   |   |
|--|---|---|---|---|
|  |   | CW Driver (for singlemode diodes : «CCS-CW» is the open driver and CCSI-CW is the integrated version) | Pulse & CW Driver (from 1 ns to CW : «CCS-std» is the open driver and 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 |
| 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   |
| Laser diode T°   | Any   | 15 - 50 °C  |   |   |
| Pulse duration (Ext. trigger)  |   | 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 |   |   |   |

# Technical Specifications

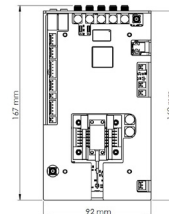
## GUI (examples)



## Mechanical (examples) :



CW & Pulsed



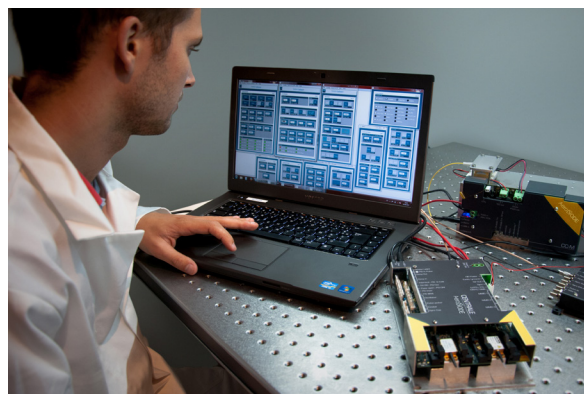
SHAPER

## 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)



## CCM (for Multimode diodes)



## Classification :

| Name                 | 1053LD :  |
|----------------------|---|
| Diode type           | 0: Laser diode only<br>1: 120 mW Butterfly singlemode<br>2: 300 mW Butterfly singlemode   |
| Driver Electronics : | 0: No driver (laser diode alone)<br>1: CCS/CCSI-CW (CW laser emission only - for singlemode laser diodes)<br>2: CCS-CCSI-std (Pulsed and CW Driver - for singlemode laser diodes)<br>3: SHAPER (User design temporal pulse shape - for singlemode laser diodes) |
| Form Factor          | 0: No driver (laser diode alone)<br>1: Open frame driver version<br>2: Integrated driver version  |

## Ordering information :

