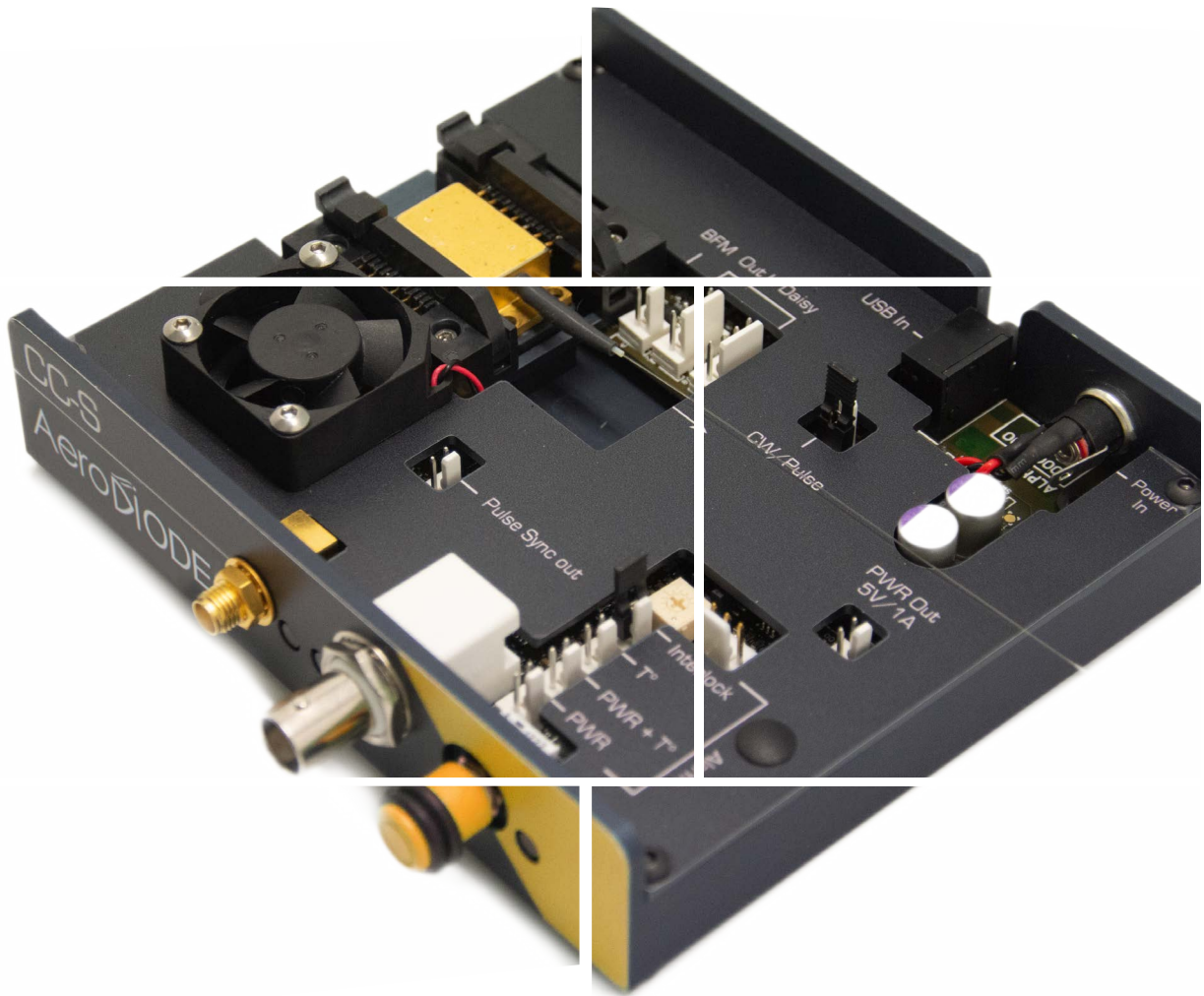


790-795 nm Laser diodes & Turn-key solutions

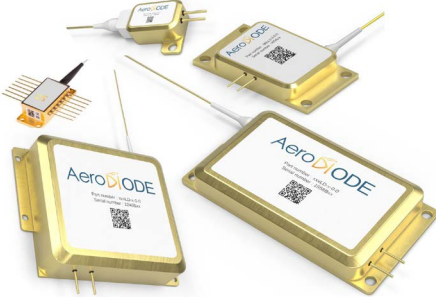


AeroDiODE

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.) | Emisison Band-width (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 | 10 W | 10 W | Multimode single emitter | 793 ± 3 nm | Multimode 105 µm NA=0.22 | ~ 3 nm | 21*55*9.2 |
| 3 | 30 W | 30 W | Multimode multi emitter | | | | 25*43*11 |
| 4 | 50 W | 50 W | | | | | 48*80*16 |
| 5 | 100 W | 100 W | | | | ~ 5 nm | 155*62.7*22 |
| 6 | 130 W | 130 W | | | | | 190*73*22 |
| 7 | 180 W | 180 W | 222*50*24.9 | | | | |

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)

2nd

Choose your Driver performance :

| | | LASER DRIVER VERSION : | | | |
|--|---|---|---|--|---|
| | 790-795 nm Laser Diode version | CW Driver (for singlemode diodes : « <u>CCS-CW</u> » is the open driver and <u>CCSI-CW</u> is the integrated version) | Pulse & CW Driver (from 1 ns to CW : « <u>CCS-std</u> » is the open driver and <u>CCSI-std</u> is the integrated version) | User design pulse shape Driver (« <u>Shaper</u> » open driver / « <u>Shaper-I</u> » inte- grated version) from 0.5 ns to 8 μs | Multimode diode Driver (High power driver for 10 to 150 W diodes : <u>CCM</u> is the open version, <u>CCMI</u> 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 : 10 W 30 W 50 W 110 W | Not compatible | | | 10 W / 10 W 30 W / 30 W 50 W / 50 W 110 W / 110 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 | | | |

INTEGRATED VERSIONS :

CCSI-CW/ std/HP/HPP

➤ Integrated version for CW, std and HP electronics Boards

SHAPER-I

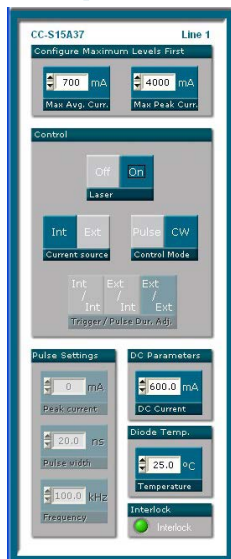
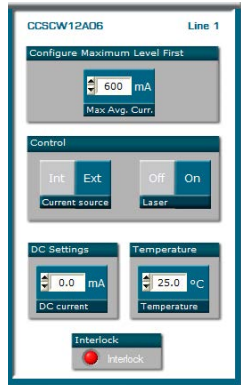
➤ Integrated version for Shaper electronics Board (single mode diodes)

CCMI

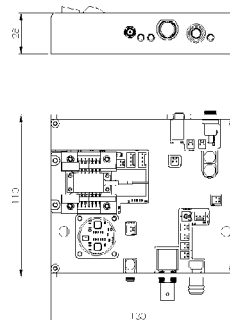
➤ «CCMI» Integrated driver for Multimode diodes (4-140 W)

Technical Specifications

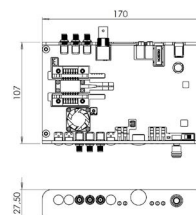
GUI (examples)



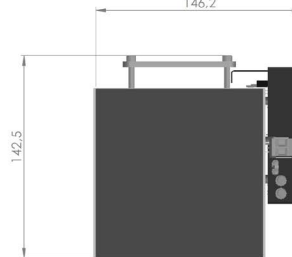
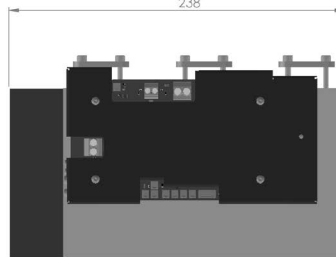
Mechanical (examples) :



CW & Pulsed



SHAPER

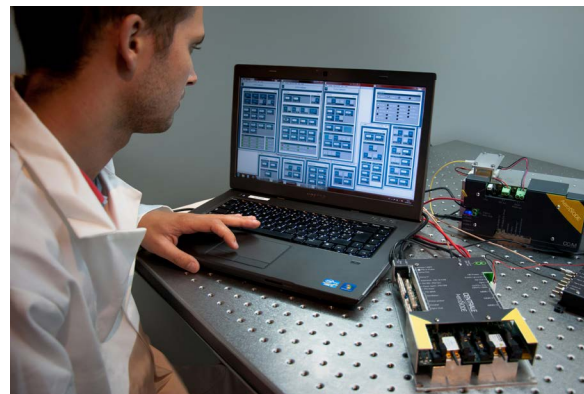


OPTIONS (see all prices on the website page) :

- * 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 | 790LD : | |
|----------------------|--|---|
| Diode type | 0: Laser diode only 1: 250 mW Butterfly singlemode 2: 10 W multimode 3: 30 W multimode 4: 50 W multimode | 5: 100 W multimode 6: 130 W multimode 7 : 180 W multimode |
| Driver Electronics : | 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 :

