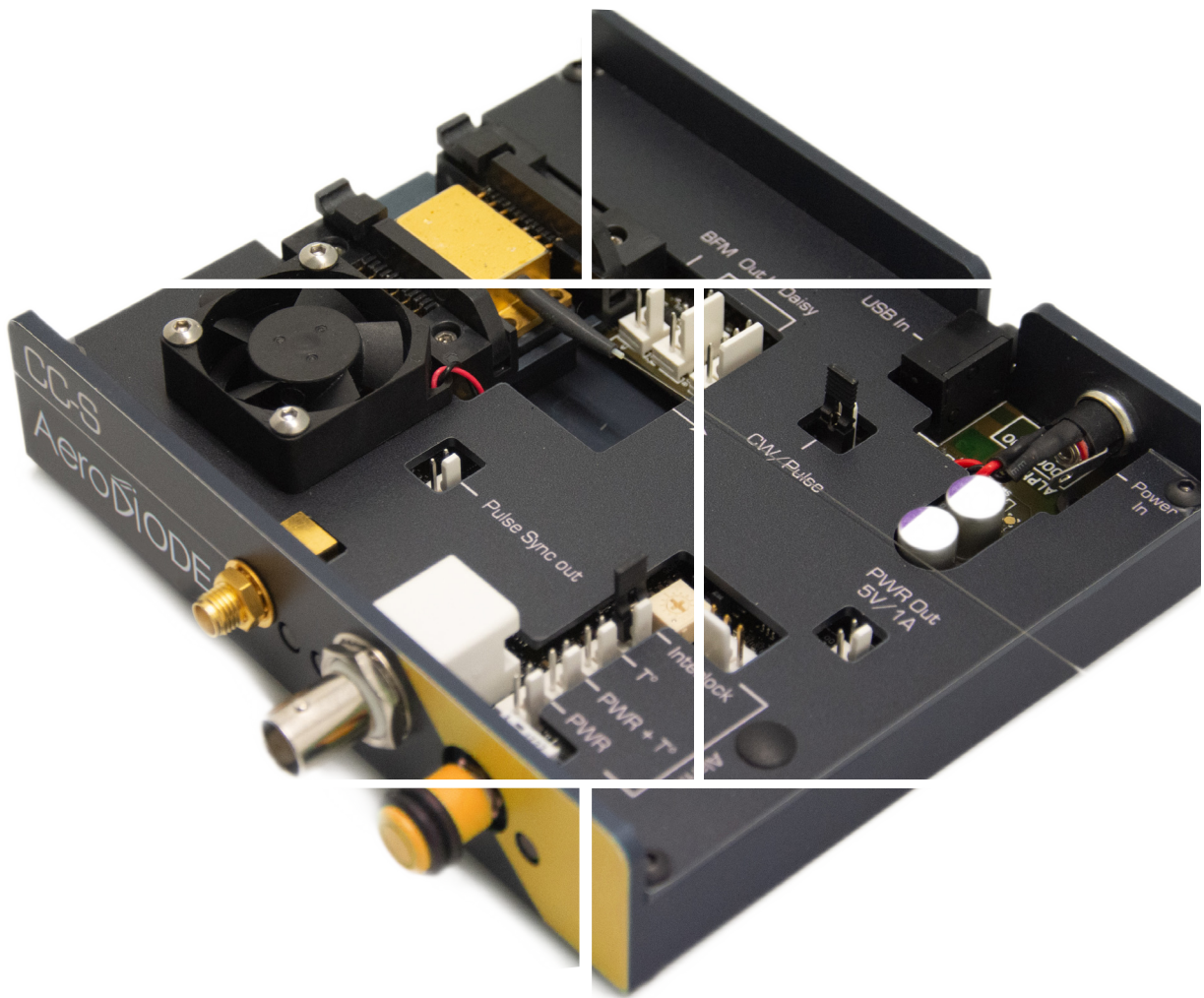


976 nm laser diode & turn-key solutions

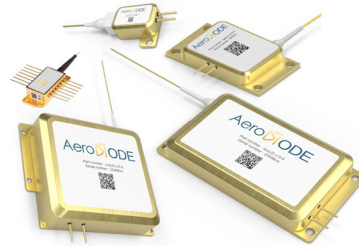


Aero **Di**ODE

976 nm laser diode

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

Standard singlemode or multimode laser diodes are offered as stock items or associated with a CW or pulsed turn-key laser diode driver. All modules have narrow emission linewidth.



1st

Choose your laser diode :

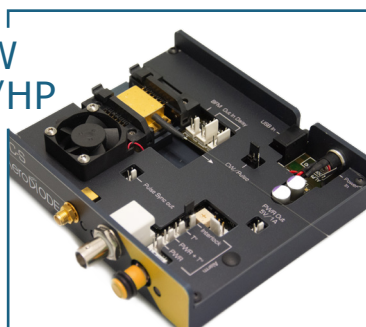
| | Power (CW) | Power (Pulse) | Technology | Wavelength (nm) | Fiber | Emission Bandwidth (typ) | Package (mm) |
|---|------------|---------------|--------------------------|-----------------|----------------|--------------------------|-------------------------|
| 1 | 300 mW | 1000 mW | Butterfly single mode | 976±0.5nm | SPM 980 | ~0.1 nm | 14 pin Butterfly-type 1 |
| 2 | 750 mW | 1200 mW | | | | | 25*43*11 |
| 3 | 10 W | 10 W | Multimode single emitter | 976±0.5nm | 106 μm NA=0.22 | ~0.5 nm | 17*14*6.1 |
| 4 | 30 W | 30 W | 80*48*16 | | | | |
| 5 | 60 W | 60 W | Multimode multi emitter | 976±1nm | | ~1.0 nm | 80*80*25 |
| 6 | 100 W | 100 W | | | | | |
| 7 | 140 W | 140 W | | | | | |

3rd

Choose your product form factor : OPEN-FRAME or INTEGRATED

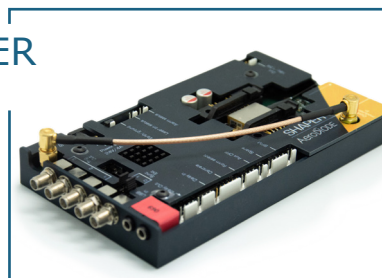
OPEN-FRAME VERSIONS :

CCS-CW
CCS-std/HP



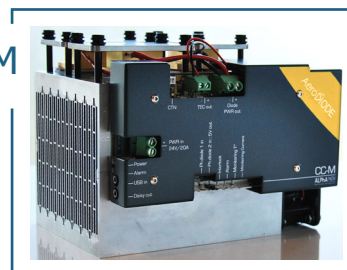
➤ Open-frame driver for CW, std and HP electronics Boards for single mode diodes

SHAPER



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

CCM



➤ «CCM» Open-frame driver for Multimode diodes (10-180W)

INTEGRATED VERSIONS :

CCSI-CW/
std/HP/HPP



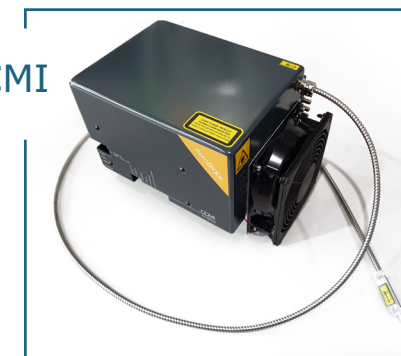
➤ Integrated version for CW, std and HP electronics Boards

SHAPER-I



➤ Integrated version for Shaper electronics Board

CCMI



➤ «CCMI» Open driver for Multimode diodes (10-180W)

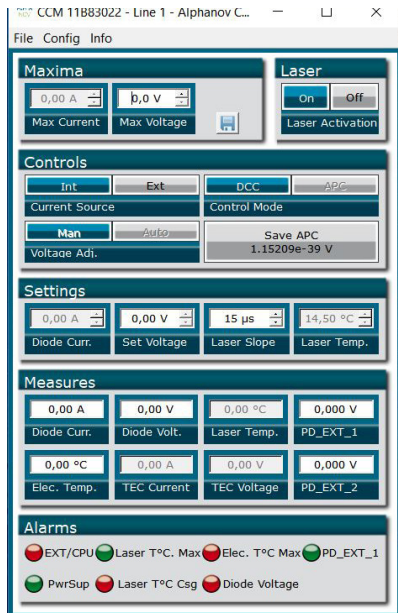
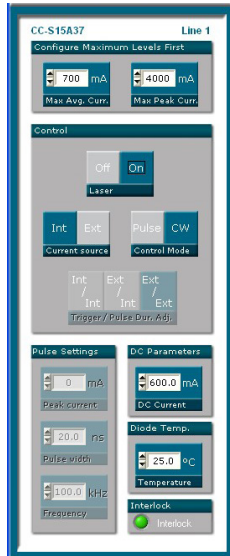
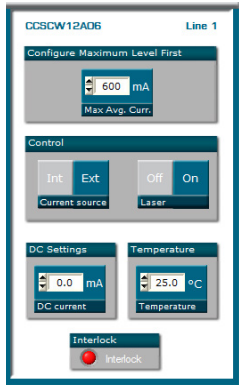
2nd

Choose your Driver performance :

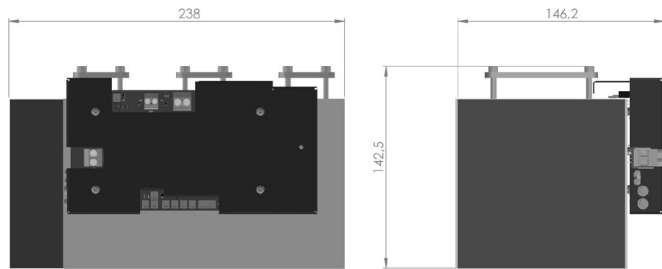
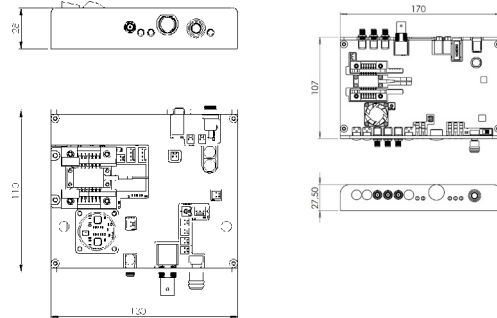
| | 808 nm Laser Diode version | LASER DRIVER VERSION : | | | |
|--|--|---|---|---|---|
| | | CW Driver (for singlemode diodes : «CCS-CW» is the open driver and CCSI-CW is the integrated version) | Pulse & CW Driver (from 1 ns to CW : «CCS» is the open driver and CCSI is the integrated version) | User design pulse shape Driver («SHAPER» open driver 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- single mode 300 mW | 300 mW / No | 300 mW / 1000 mW | No / 1000 mW | Not compatible |
| | 2- single mode 750 mW | 750 mW / No | 600 mW / 1200 mW | No / 1000 mW | |
| | 3-6: Multimode : 10 W / 30 W / 60 W / 100 W or 140 W | Not compatible | | | 10 W / 10 W 30 W / 30 W 60 W / 60 W 100 W / 100 W 140 W / 140 W |
| 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) | | 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 Pulse duration | | 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) | | Optional | | No | Yes (external mode) |
| Interface/GUI/libraries | | USB - Windows 7/10 - DLLs - Hexa/Linux - Labview - Python | | | |

Technical Specifications

GUI (examples)



Mechanical (examples) :



CCM (for Multimode diodes)



Classification :

| Name | 976LD : |
|----------------------|---|
| Diode type | 1: 300 mW Butterfly singlemode 2: 750 mW Butterfly singlemode 3: 10 W multimode 4: 30 W multimode 5: 60 W multimode 6: 100 W multimode 7: 140 W multimode |
| Driver Electronics : | 0 : No driver (Laser diode only) 1: CW (CW laser emission driver) 2: Pulse & CW (Pulse and CW driver) 3 : SHAPER (User design temporal pulse shape driver) 4 : High Power (for multimode diodes model 3 to 7) |
| Form Factor | 0 : No driver (Laser diode only) 1: Open frame 2: Integrated |

Ordering information :

