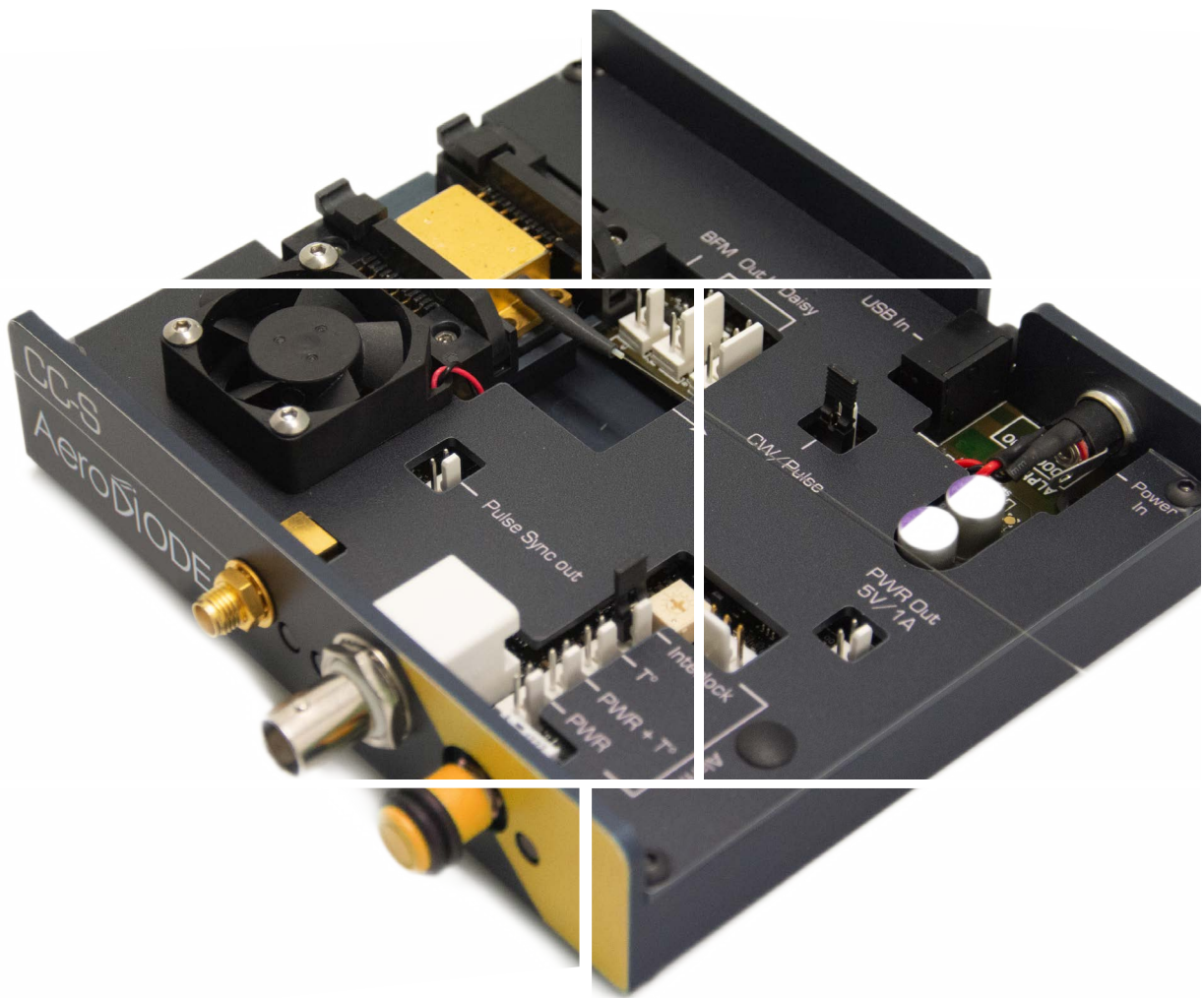


# 976 nm laser diode & turn-key solutions

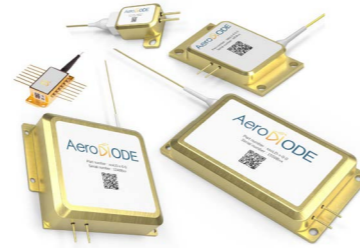


Aero **Di**ODE

# 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

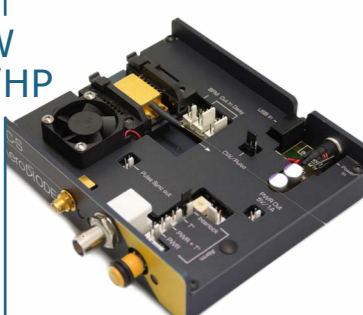
Choose your laser diode :

Diode type	Power (CW)	Power (Pulse)	Technology	Wavelength (nm)	Fiber	Emission Bandwidth (typ)	Package (mm)
1	500 mW	1000 mW	Butterfly single mode	976±0.5nm	SPM 980	~0.1 nm	14 pin Butterfly-type 1
2	1000 mW	1500 mW					
3	10 W	10 W	Multimode single emitter		106 μm NA=0.22	~0.5 nm	17*14*6.1
4	30 W	30 W					25*43*11
5	60 W	60 W	Multimode multi emitter		976±1nm	~1.0 nm	80*48*16
6	100 W	100 W					
7	140 W	140 W					80*80*25

### 3rd

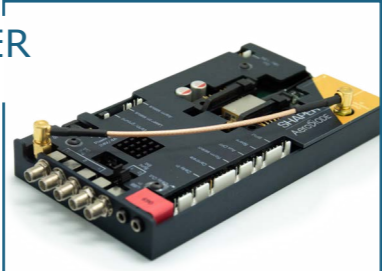
Choose your product form factor : OPEN-FRAME or INTEGRATED

#### OPEN-FRAME VERSIONS :



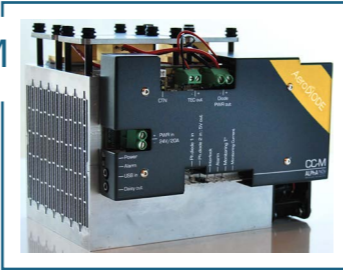
CCS-CW  
CCS-std/HP

➤ 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)

### 2nd

Choose your Driver performance :


	976 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 500 mW	500 mW / No	500 mW / 1000 mW	No / 800 mW	Not compatible
	2- single mode 1000 mW	900 mW / No TDLAS : 1000 mW / No	450 mW / 1500 mW	No / 900 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			

#### INTEGRATED VERSIONS :




CCSI-CW/  
std/HP/HPP

➤ Integrated version for CW, std and HP electronics Boards



SHAPER-I

➤ Integrated version for Shaper electronics Board

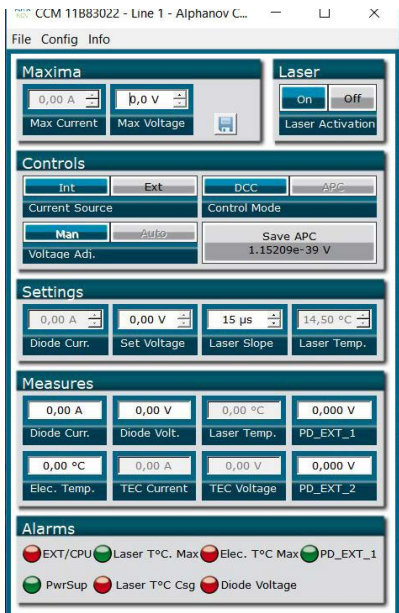
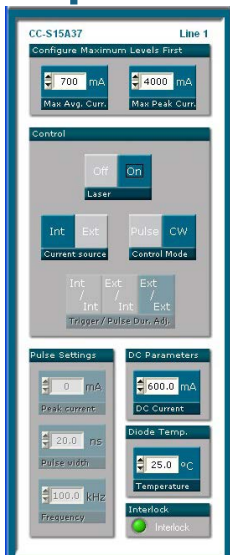
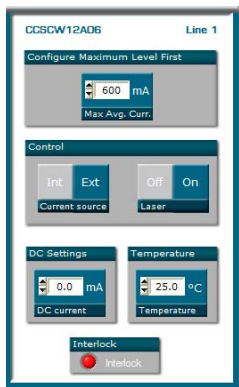


CCMI

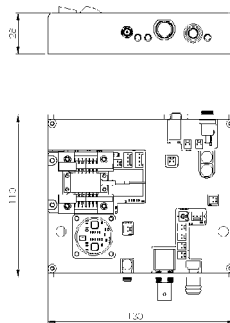
➤ «CCMI» Open driver for Multimode diodes (10-180W)

# Technical Specifications

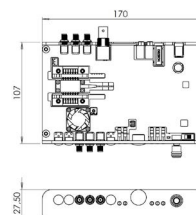
## GUI (examples)



## Mechanical (examples) :



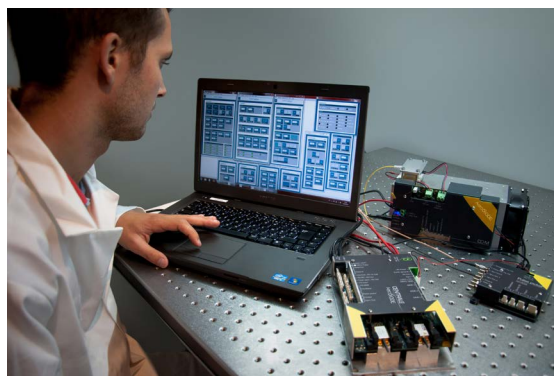
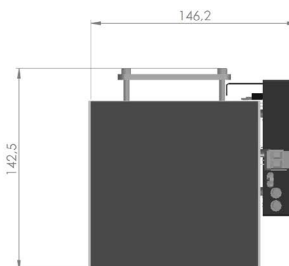
CW & Pulsed



SHAPER



CCM (for Multimode diodes)



## Classification :

Name	976LD :
Diode type	1: 500 mW Butterfly singlemode 2: 1000 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) «TDLAS» : High end CW driver for high power and low noise 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 :

