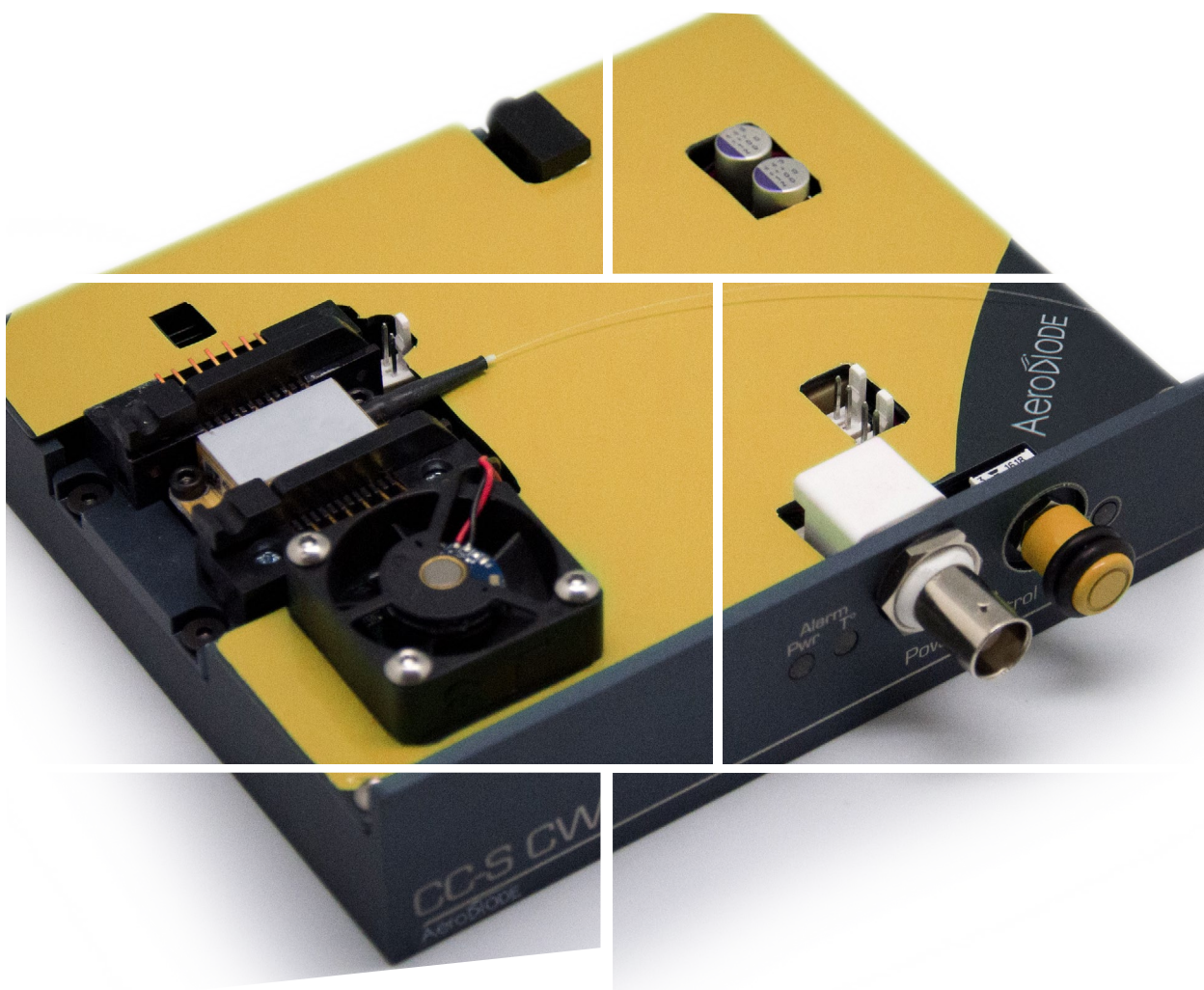# CCS-CW

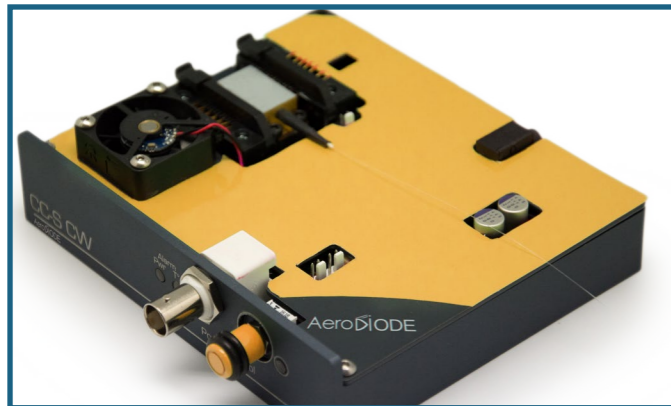## To drive Single-Mode butterfly laser diodes in CW regime

AeroDIODE

CW laser diode drivers

3 versions : Standard, HP & Ultra-low-noise

Current source with TEC controller, pre-configured mounting sockets, USB interface, Genuine User Interface and several libraries (Labview/Hexa/Python/DLLs etc.)
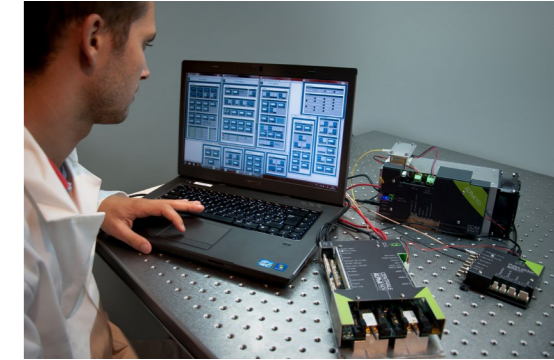

These fully integrated laser diode control and mounting modules are designed for precision control of single mode laser diode modules in research labs and for product integration. An ultra-low noise version is offered as a new precision solution with new perfromances.

Multiple layers of laser diode protection ensure that your device is protected at all times. The drivers can be delivered with or without butterfly mounting sockets. They are compatible with many other laser diode form-factors (TO, TOSA, VCSELetc.)
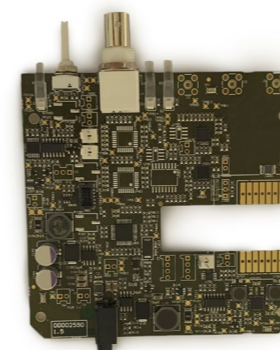
Features :

- Output current up to 800, 1500 and 2500mA (three versions)
- Adjustable compliance voltage : 0-18V range (see spec)
- Internal modulation over a CW setpoint with sin/sqr/triang adjsutable modulation (1 version)
- External modulation over a CW setpoint with adjustable tranfer function 0-20mA/V (1 version)
- Temperature stability : down to 1mK
- Available as electronics boards for cost saving OEM solution
- See RIN noise curve for impressive performances of low noise version
- USB, manual & analog (0-5 V) signal peak power adjustment
- Several Libraries for system integration : Labview, DLLs, Hexa, Python
- Smart control (USB interface to drive simultaneously several modules from ALPhANOV's laser electronics series)
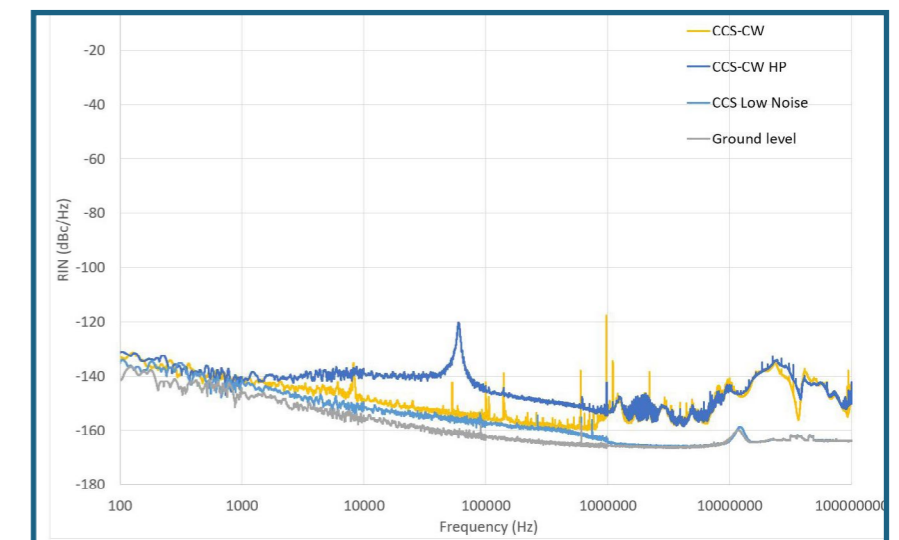
Technical Specifications :

Product Version	CCS-CW		CCS-Low Noise
	Standard	HP (High power)	
Output Current	0-800 mA	0-1500 mA	0-2500 mA
Set point resolution (@ 100 mA)	25 µA		
Current Modulation	External only : 0-5V ; Modulation bandwidth : 100 Hz		Internal : sin/sqr/triang External : 0-20mA/V (adjustable); Mod. bandwidth : 100kHz (500 kHz prov.)
Output compliance voltage	0 - 4.8 V	0 - 10 V	0 - 24 V
Laser diode T° regulation	15 - 50°C		0 - 90°C
Temperature stability (typ)	<10 mK		<1 mK
TEC current/voltage	±1.5 A/3.8 V		±3 A/4.6 V
BFM (Back Facet Monitor) / External photodiode monitoring	BFM output connector only		Yes/Yes (variable gain)
Interface/Compatibility/Libraries	USB / Win 7-10 / Hexa, DLLs, LabVIEW, Python		
Power Supply	12 V (220 V/110 V adapt. incl)		24V (adapt incl)
Dimensions (mm)	130*126.8*32.5		170*126.8*32.5

Also available at board level for OEM integration

Ultra-low noise RIN performances of CCS-Low noise close to ground level with no noise peak

AeroDIODE

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