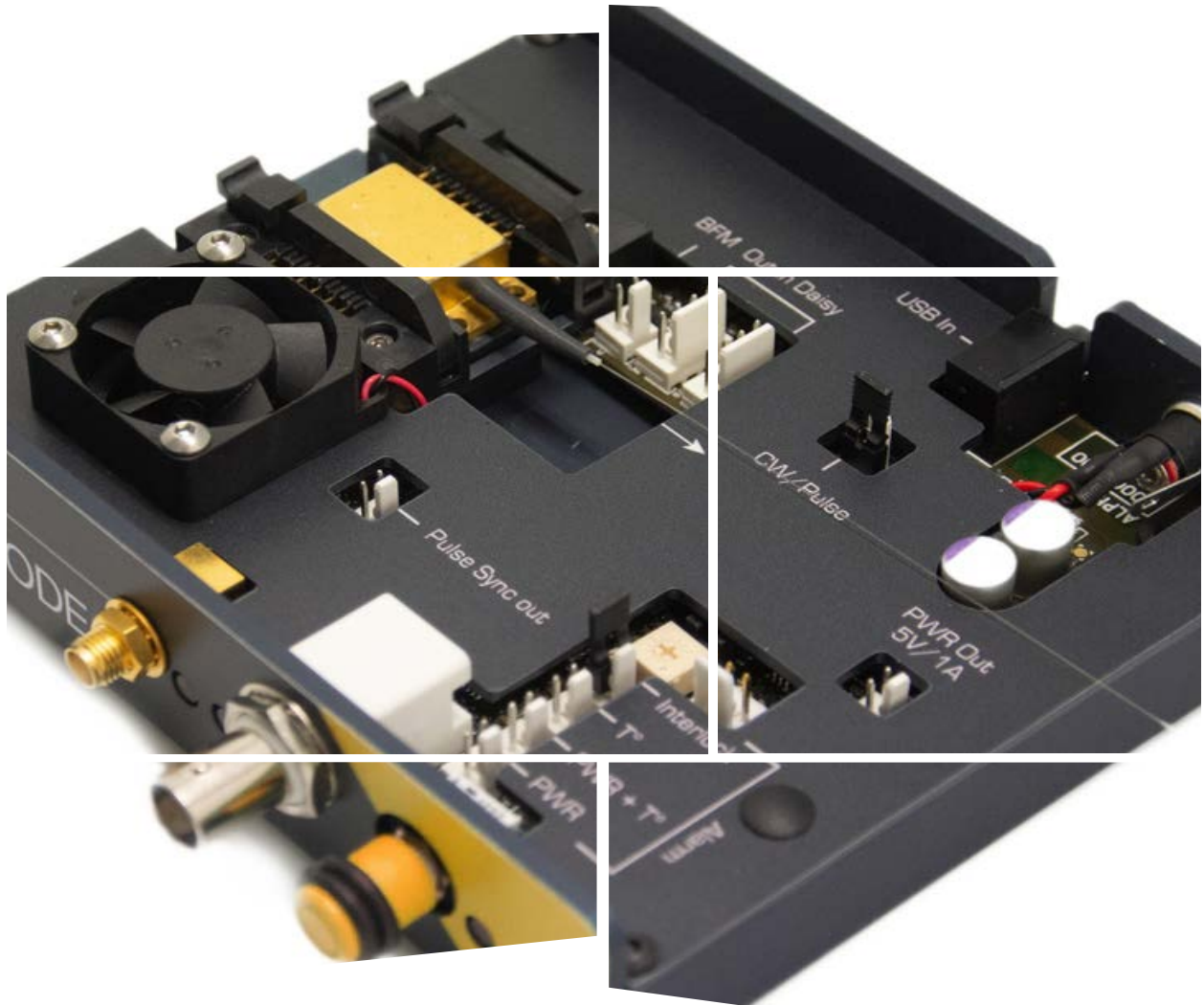


SLD

Precision Pulsed Superluminescent
Diode Driver with TEC Controller



AeroDiODE

SLD

Precision pulsed superluminescent diode driver and TEC controller

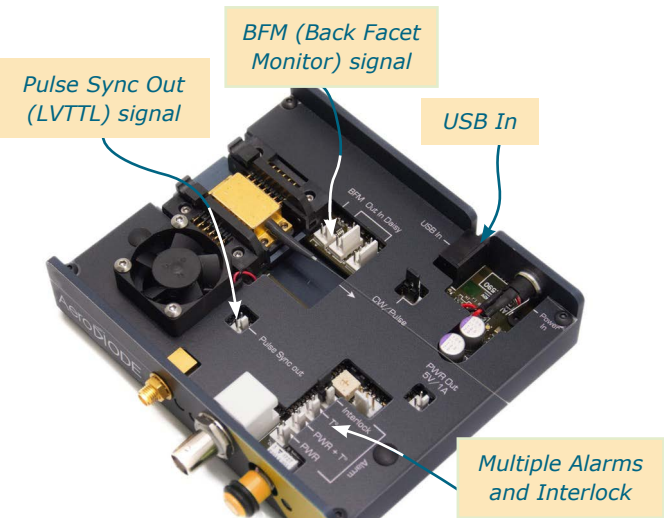
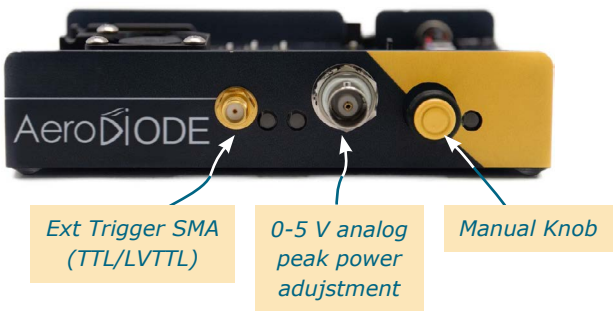
with Integrated Butterfly Mounting Sockets and USB



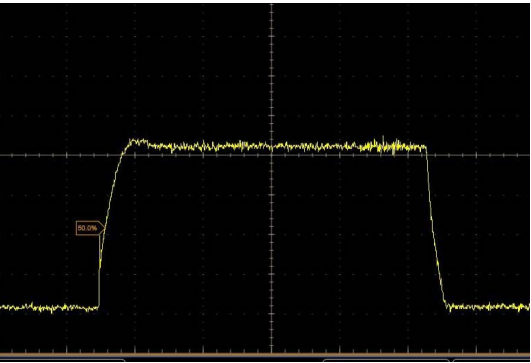
Designed for precision seed pumping applications, AeroDIODE superluminescent diode pulsing control electronics and mounting modules are optimized for single-shot to CW performance with pulse width down to <1 ns. These complete control electronics and mounting modules deliver precision pulses which are generated internally by an on-board pulse generator, or on demand from an external TTL signal.

Key features:

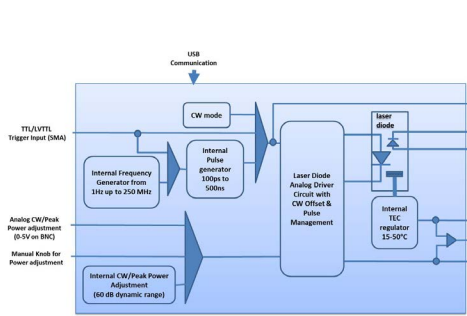
- Up to 3500 mA peak current
- User set pulse width from 500 ps to CW (internal pulse generator - optical pulse width depends on laser diode)
- Up to 4 MHz repetition rate (optional 10 MHz / 60 MHz)
- Integrated TEC controller
- Down to < 500 ps rise/fall time
- USB, manual, & analog (0-5 V) signal peak power adjustment
- Smart control (USB interface to drive simultaneously several modules from ALPhANOV's laser electronics series)
- Compatible with butterfly superluminescent diode (with ou without mounting sockets).



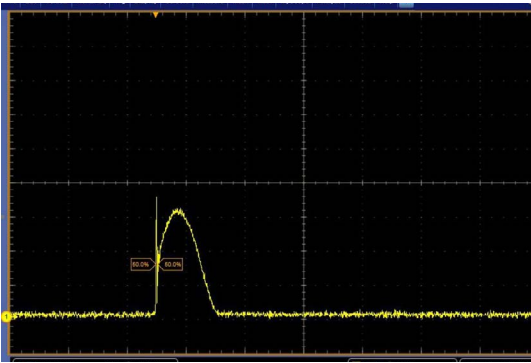
Technical Specifications



100 ns pulse / 1064 nm FP / SLDstd



Synoptic / SLD-std



3 ns pulse / 1064 nm DFB / SLD-std

Electronic and Optical

	SLD-std	SLD-HPP (High Pulse Performance)	SHAPER (User-design Pulse Shape)
Output current - Pulse regime (up to)	1,5 A	3,5 A	1.6 A
Output current - CW regime (up to)	0.8 A		no
Output Voltage range	up to 4.8 V		up to 24 V
Laser diode T° range	15 - 50 °C		
Pulse duration (Ext pulse trigger)	0.5 ns - CW		0.5ns - 8 μsec
Pulse duration (Internal pulse generator)	0.5 ns - 500 ns		
Typ rise/fall time (TO/Butterfly/VCSEL) ⁽¹⁾	1 / 3 / 0.5 [ns/A]		0.5 / < 1 / < 0.5 [ns/A]
Typ min pulse duration (Butterfly) ⁽¹⁾	1,5 ns		1 ns
Internal rep rate adjustment	1 Hz - 4 MHz	1 Hz - 10 MHz	1 Hz - 60 MHz
Temporal Jitter (rms)	< 25 ps		< 1.5 ns
Adj. CW offset in pulse regime	No	Yes	No
User design pulse shape	No		Yes
Interface/GUI/libraries	USB - Windows XP/7/10 - DLLs - Hexa - Labview - Python		
Dimensions (mm)	130*119*28		167*92*27

[1] All version can be provided without sockets for laser diode direct soldering - contact us for more information



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