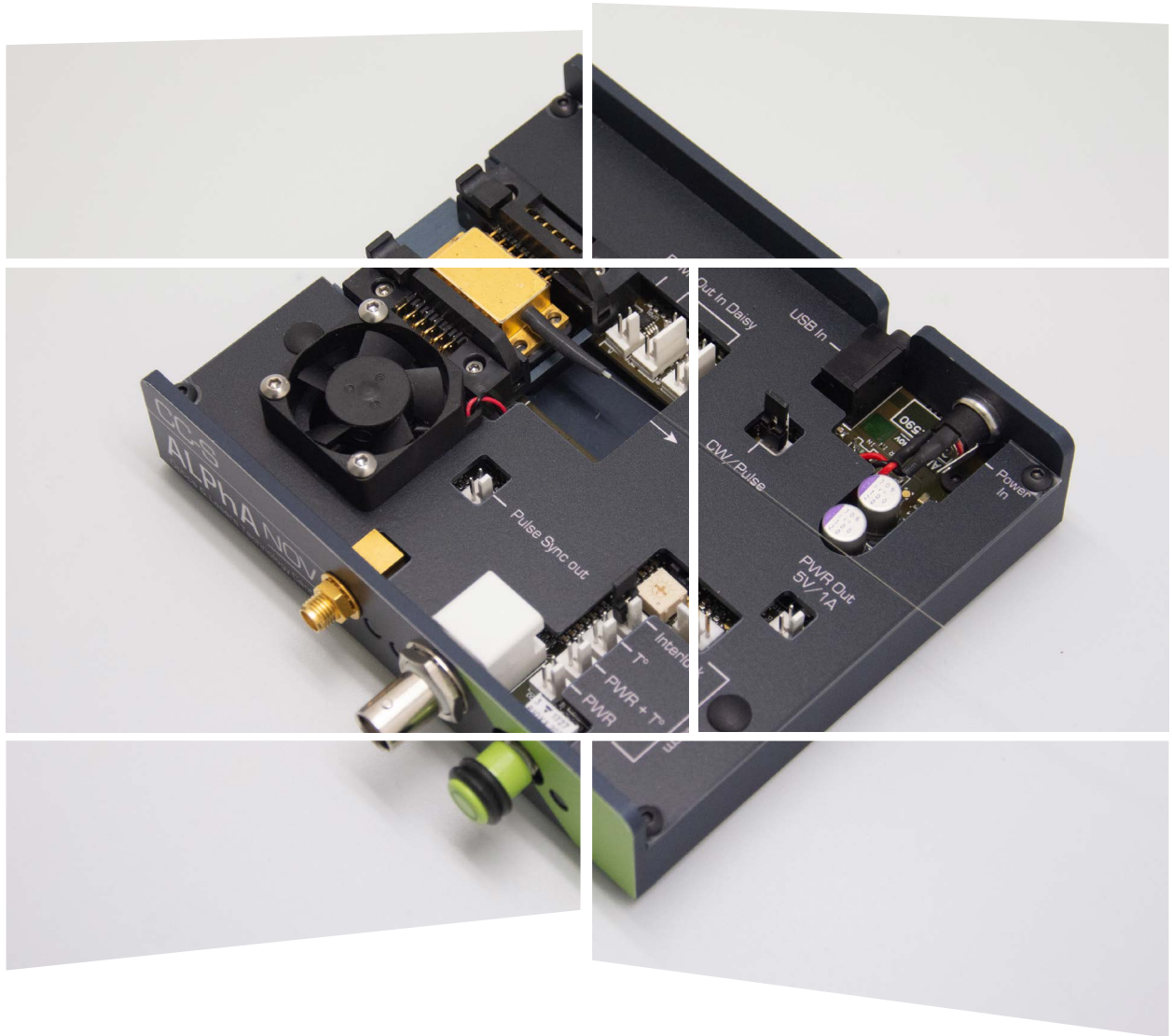


# CC-S

## Precision Pulsed Laser Diode Driver with TEC Controller



**ALPhA** **NOV**

Optics & Lasers Technology Center

# CC-S

## Precision pulsed laser diode driver and TEC controller

with Integrated Butterfly Mounting Sockets and USB

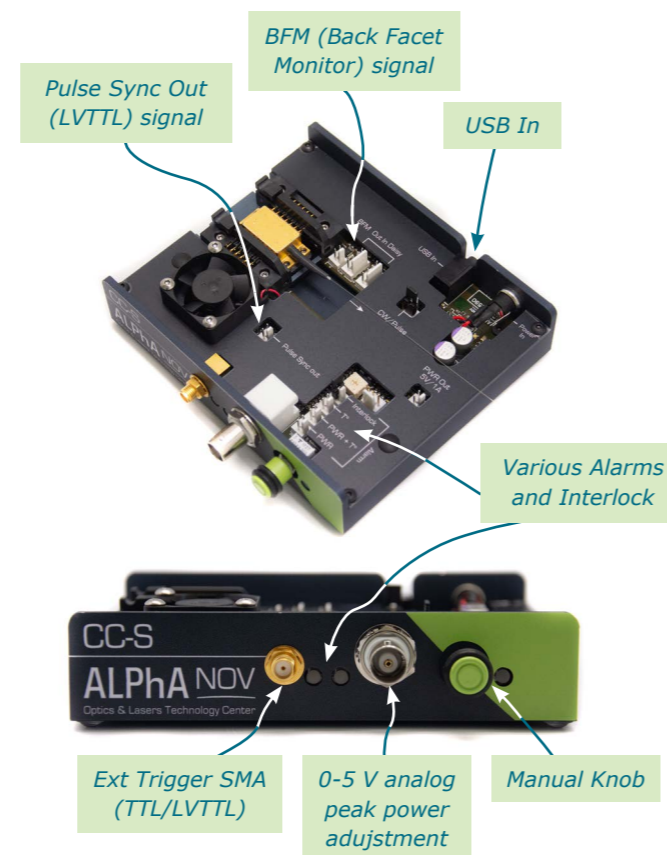


CC-S module

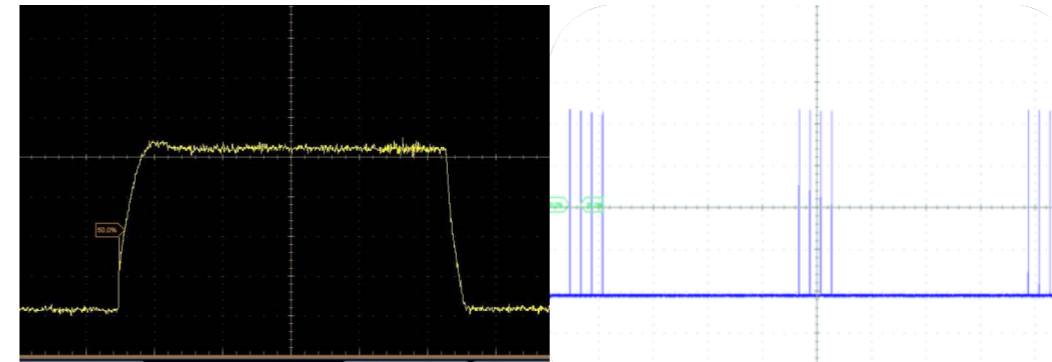
Designed for precision seed pumping applications, ALPhANOV butterfly packaged laser diode pulsing control electronics and mounting modules are optimized for single-shot to CW performance with pulse width lengths down to 1 ns. These complete control electronics and mounting modules deliver precision pulses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

### Key features:

- Integrated TEC controller
- User set pulse width from 1 ns to CW
- Up to 4 MHz repetition rate (250 MHz with optional HPP - High Pulse Performance technology)
- Down to 500 ps risetime
- Up to 1200 mA peak current (3500 mA with HPP technology)
- 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)
- Preconfigured butterfly mounting socket for Type-1 or Type-2 laser diodes



## Technical Specifications



Typical ns pulse shape

Burst mode

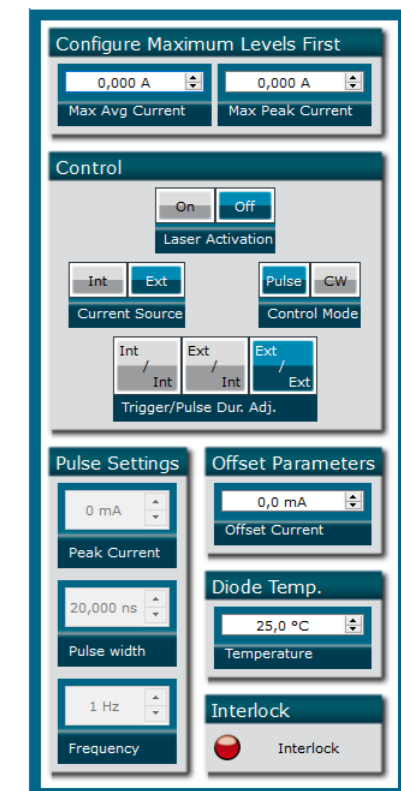


### Electronic and Optical

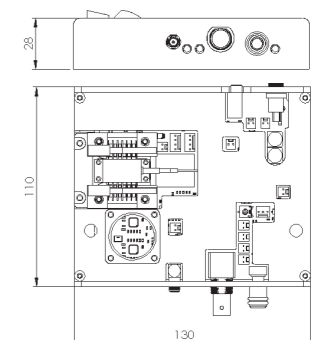
	Standard version	HPP <sup>(1)</sup> technology
Output current - CW regime	800 mA	
Output current - pulse regime	1200 mA	3500 mA <sup>(2)</sup>
Output voltage	4.8 V	
Laser diode T° regulation	15-50 °C	
External pulse duration adjustment	1 ns - CW	
Internal pulse duration adjustment	1 ns - 500 ns	
Temporal Jitter	< 30 ps	< 8 ps
Internal repetition rate adjustment	1 Hz - 4 MHz	1 Hz - 250 MHz
Adjustable CW current offset in pulse regime	No	Yes
Compatibility & libraries	Windows XP/7/10 - DLLs - Hexa - Labview	
Interface	USB	
Power supply	12 V (110 V/220 V adapter included)	

(1) High Pulse Performance  
(2) 9A HP (High Power) version available on demand

### GUI control software



### Mechanical





# ALPhA NOV

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