

The C300 is an ultra-short pulsed laser/LED driver that can generate pulses from 100ps to 200ns with a repetition rate of up to 3MHz.

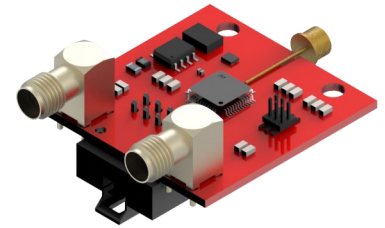
Peak currents of 500mA (5V compliance) or 300mA (10V) compliance can be achieved. This device can be configured and controlled via SCPI over USB or RS485.

This driver can be customized with a variety of compatible lasers/LEDs with optimization for their performance.

Over-current and over-temperature protection are provided to prevent damage to the laser/LED.

This driver can be LVTTTL externally triggered and two options are available for the synchronized output pulse, LVTTTL over SMA or LVDS via the multi-purpose connector.

A configurable delay is available for the synchronized output pulse from 0 to 1us in 100ns steps.



Specification

Features	Software-configurable laser diode and LED modulation (LED performance dependent on LED)
Applications	Spectroscopy, Laser, Precision Instrument, OEM applications
Pulse width	100ps to 200ns
Pulse width resolution	1ps (100ps to 5ns), 318ps (5ns to 200ns)
Pulse repetition	up to 3MHz
Safety features	Overtemperature and overcurrent safety laser/LED shutdown
Internal trigger	Internal trigger
External trigger	LVTTTL for pulses up to 200ns.
Peak laser/LED current	500mA (up to 5V compliance) or 300mA(up to 10V compliance)
Power supply	5V and 15V
Communication interface	SCPI (Standard Commands for Programmable Instruments) over USB and RS485 for configuration
Control	<p>GUI available for USB configuration. Configuration parameters include:</p> <ul style="list-style-type: none"> - Current amplitude (0.65mA to 300mA) - Pulse width (100ps to 200ns) - Pulse repetition frequency - Synchronized pulse delay
Synchronization output	LVTTTL and LVDS outputs available with programmable delay of 450ps - 950ps (1ps resolution) for Time-of-flight applications and an additional 0 to 1us delay feature in 100ns steps for fluorescence spectroscopy.

Dimensions

Parameter	Diameter (mm)	Length (mm)
Free beam	62	100
With fiber coupling	62	132

Spectral width

Wavelengths	Spectral width
< 900 nm	approx. 2 to 8 nm
> 900 nm	approx. 10 to 20 nm

Compatible Laser Diodes and LEDs

	LED types	Laser Diodes types
Best suited for	TO Can Unmounted LEDs Ball lens Pigtailed	any TO Can laser diodes
Supplier companies (examples)	