PicoLAS

FOCUSSING POWER TO THE POINT

PLCS-21

Rev. 1905

Control Unit and Interface for Short Pulse Drivers

- Control of pulse current, pulse width and repetition rate
- Microcontroller supervision of all pulser activity
- Provides USB interface for communication with PC and interface for PLB-21
- Several additional failsafe mechanisms to protect your laser diodes
- Standalone pulse generator capability

Product Description

Many PicoLAS driver modules for pulsed lasers can be upgraded with the PLCS-21 optional piggyback controller. This versatile pulse generator allows full control of pulse width, pulse current and repetition rate. Furthermore, the piggyback controller provides several internal trigger mechanisms. This eliminates the need for an external function generator as a trigger device. A square-wave signal with pulse width from 2 ns up to one second can be drawn from a coaxial 50 Ω output.

Priority is given to provide maximum safety for the expensive laser diodes. An on-board microcontroller monitors all pulser activities and cuts power to the diode if necessary.

The PLCS-21 provides a galvanically isolated USB interface. With this, the upgraded driver module can be connected to a PC. An additional interface can be used to connect the external operating unit PLB-21. This allows easy monitoring and manipulating the driver's behaviour.

The PLCS-21 automatically identifies the connected driver module. Maximum pulse width, output power etc. depend on the used laser diode driver.**

Technical Data*

Supply voltage	+15 V (supply voltage for LDP-V is fed through PLCS)
Min. pulse width	2 ns
Max. pulse width	1 s
Pulse width adjustment	in steps of 1 ns (<250 ns) in steps of 5 ns (>250 ns)
Min. repetition rate	1 Hz
Max. repetition rate	2.4 Mhz
Repetition rate adj.	in steps of 1 Hz
Coaxial 50 Ohm output	Generator voltage: 10 V Maximum load: 50 Ω
Trigger inputs	50 Ω, 5 V, SMC connector 500 Ω, 5 V, 2-Pin connector
Interfaces	USB 2.0, PLB-21
Dimensions in mm	67.7 x 42.3 x 22
Weight	26 g
Operating temperature	0 to +55 °C

 * Technical data is subject to change without further notice.
 ** See manuals for details.

Optional Accessories: PLB-21
Compatible Products: LDP-V 03-100
                                        LDP-V 50-100
                                        LDP-V 80-100
                                        LDP-V 240-100
                                        LDP-AV D06-N10
                                        LDP-AV D06-N20