

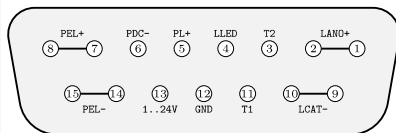
Tabletop Laser & Peltier Controller

Type: ds11-la08v20-pa08v16-t8545-v4-169



- Laser max. : 8A – 20V
- TEC max. : 8A – 16V
- t-rise-fall <2 μ s (optional <1 μ s)
- Supply Voltage: 100~230VAC – 50/60Hz
- External, Analog and Digital Modulation
- Internal Pulse Generator
- Continuouse Pulses, Single Pulse, Pulse Bursts,
- Internal or External Triggered
- Bias Current option
- Pilot Laser Support
- External Supply max. 1..22V – 800mA for Fan etc.
- Photo Diode Current Monitor max. 4mA
- optional additional TEC stage

Laser & Peltier Connector



SubD-15 female

PIN.No	Abbr.	Function
1;2	LANO+	Laser Diode Anode(+)
3	T2	Temperature Sensor 2 Input, default NTC10k Ω , v.s. GND
4	LLED	Laser Active LED – Anode (+), 5V over 470R, v.s. GND
5	PL+	Pilot Laser (+), v.s. GND
6	PDC-	Photo Diode Cathode (-), v.s. GND
7;8	PEL+	Peltier element (+)
9;10	LCAT-	Laser Diode Kathode (-)
11	T1	Temperature Sensor 1 Input, default NTC10k Ω , v.s. GND
12	GND	Common Ground
13	1-24V	1 to 24V Supply, max. 500mA, vs. GND, supports fan etc.
14;15	PEL-	Peltier element (-)

Annotation: The laser ignores by default the 2nd temp. sensor state. If you want to activate this you need to send "2SMC4" command over the RS232.

RS232 Connector	AMOD/DMOD-IN Connector	MOD-OUT Connector	Interlock Connector
SubD-9 female Standard RS232-Connector 9600-Baud-8N1 (No Null-Modem Cable !)	BNC-Socket Input-Impdanz 10kOhm Digital Modulation with TTL-Pegel Analog Mod. 0-4[V] => 0-I _{max} [A]	BNC-Socket, current monitor 0-I _{max} [A] -> 0-4[V] Take care for laser isolation if you connect GND potential to an oscilloscope f.e.	Jack Connector 3.5mm Laser runs only if closed (ca. 5mA over 2V -> R <= 400R)

Tabletop Laser & Peltier Controller

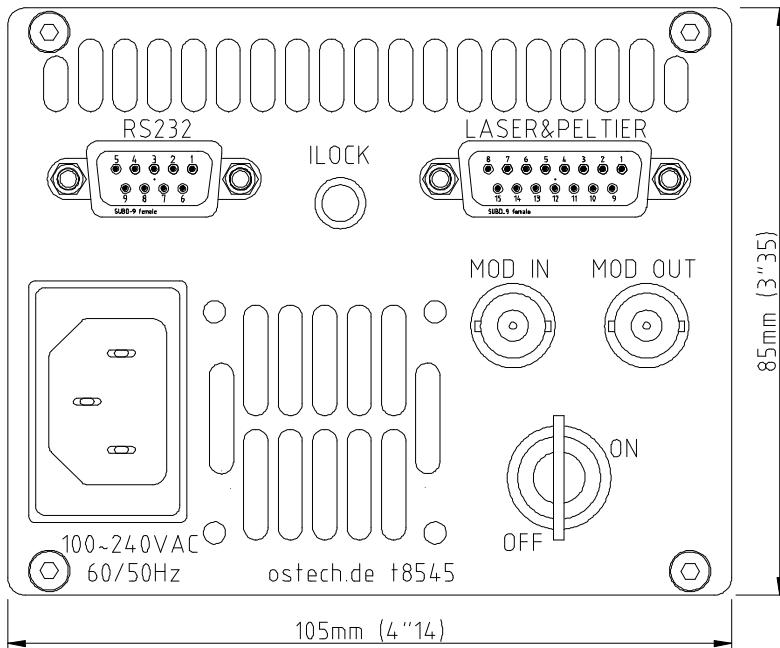


fig: ds11-t85-rear; length 200mm (7"8)

Revision overview:

- 2011.04.28: "v1" Photo Diode max. Current increased from 2mA to 4mA
- 2015.10.30: Housing changed from t8611 to t8535
- 2015.11.13: "v2" Laser Voltage Increased to from 6 to 14V and 8A at Laser& TEC
- 2018.11.13: "v4" Laser Voltage Increased to from 14V to 20V and TEC Voltage from 14V to 16V

References:

- <http://www.ostech.de/en/products/laser-drivers/ds11-t85>
- <http://www.ostech.de/en/downloads/manuals/ds-en.pdf>
- <http://www.ostech.de/en/downloads/labview>

Accessories

- kab-lpa08-16pol-subd15m-oe-1.5m-39
cable 16x0.35qmm SUBD15-Gold-6,5A/Pin to open end length 1m5
- acc-converter-usb-to-rs232-1m5-iso-417
RS232 to USB converter optical isolated with FTDI-Chip cable 1.5m