

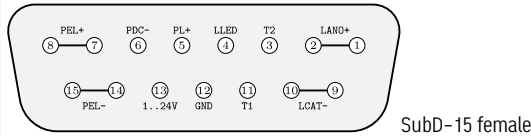
# Tabletop Laser & Peltier Controller

Type: ds11-la12v14-pa08v18-t8545-v5-026



- Laser max.: 12A – 14V
- TEC max.: 8A – 18V
- t-rise-fall <25µs (optional <2µs)
- 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

## Laser & Peltier Connector



PIN.No	Abbr.	Function
1;2	LANO+	Laser Diode Anode(+)
3	T2	Temperature Sensor 2 Input, default NTC10kΩ, 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 NTC10kΩ, 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 (-)

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-Imax[A]	BNC-Socket, current monitor 0-Imax[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)

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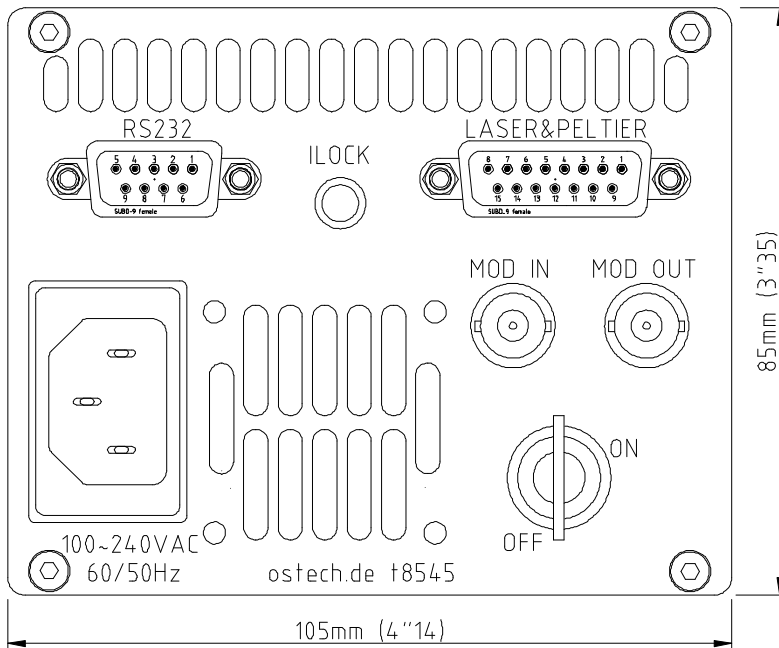


fig: ds11-o85-rear; length 200mm (7"8)

### Revision overview:

2008.10.10: "v0" new derived for ds11-t85 series  
 2009.02.05: "v1" synchronisation of housing t8535  
 2011.04.28: "v2" Photo Diode max. Current increased from 2mA to 4mA  
 2017.11.27: "v3" new sensor interface with 2 Temp. Sensor Inputs  
 2018.01.01: "v4" laser voltage increased to 14V (synchronous to OEM Type 294)  
 2022.08.03: "v5" tec voltage increased to 18V new key-switch

### 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