

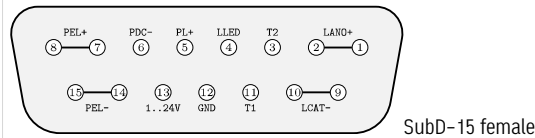
# Tabletop Laser & Peltier Controller

Type: ds11-la12v14-pa08v14-t8535-v4-026

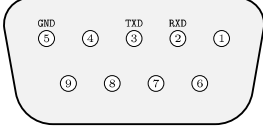
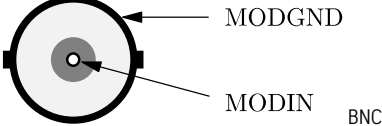
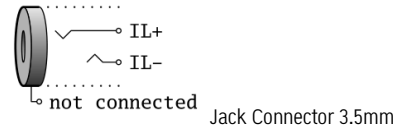


- Laser max.: 12A – 14V
- TEC max.: 8A – 14V
- t-rise-fall <25µs (optional <2µs)
- Supply Voltage: 100~230VAC – 50/60Hz
- External, Analog and Digital Modulation
- Internal Pulse Generator
- Continuouse Pulses, Single Pulse, Pulse Bursts,
- Internal or External Triggered
- Bias Current option
- Pilot Laser Support
- External Supply max. 1..22V – 800mA for Fan etc.
- Photo Diode Current Monitor max. 4mA
- optional additional TEC stage

## 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 Connector	Interlock Connector
 <p style="text-align: center;">SubD-9, female</p>	 <p style="text-align: center;">BNC</p>	 <p style="text-align: center;">Jack Connector 3.5mm</p>
Standard RS232-Connector connected to PC 9600-Baud-8N1(No Null-Modem Cable !)	Input-Impdanz 10kOhm Digital Modulation with TTL-Pegel Analog Modulation 0-4[V] => 0-Imax[A]	Interlock - Laser runs only if closed (ca. 5mA over 2V -> R <sub>Interlock</sub> <=400R)



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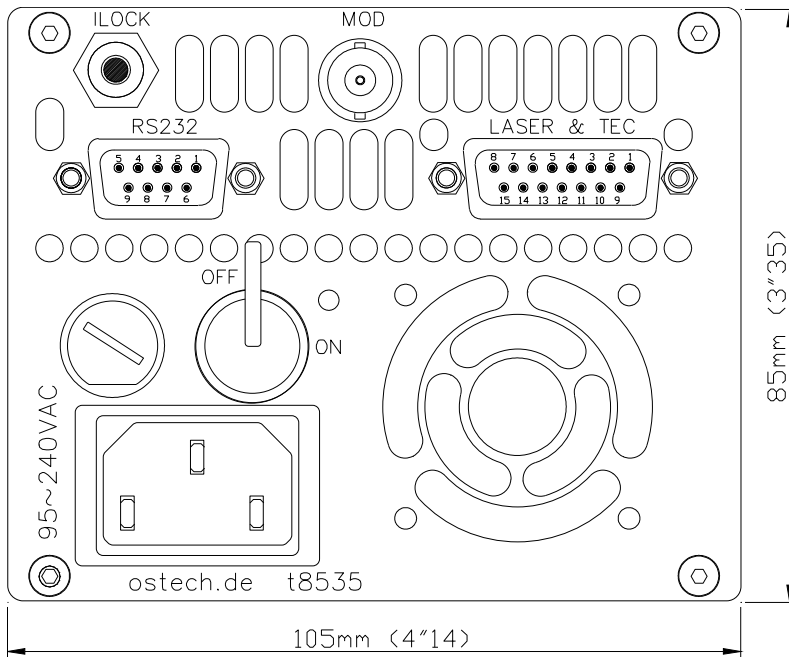


fig: ds11-o85-rear; length 200mm (7"8)

### 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 (synchronouse to OEM Type 294)

### 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-24pol-0,34qmm-subd25m-oe-1.5m-674  
cable 24polx0.34qmm, max-4A/pin, SUBD-25 to open ends, length-1m5
- acc-converter-usb-to-rs232-1m5-iso-417  
RS232 to USB converter optical isolated with FTDI-Chip cable 1.5m