

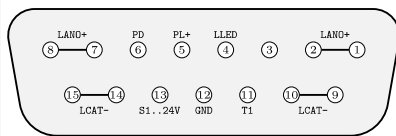
# Tabletop Laser & Peltier Controller

Type: ls11-la7.6v56-t9527-v6-208



- Laser: 0 .. 7.6A – 1..56V
- trise-tfall < 25us (optional < 5us)
- Supply Voltage: 100~230VAC – 50/60Hz
- External, Analog and Digital Modulation
- Internal Pulse Generator
- Continuous Pulses, Single Pulse, Pulse Bursts, Internal or External Triggered
- Bias Current option
- Pilot Laser Supply
- External Supply max. 1..22V – 800mA for Fan etc.
- Photo Diode Current max. 4mA
- optional additional TEC-stages

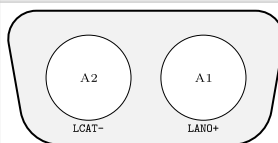
## Laser Connector



SubD15-female

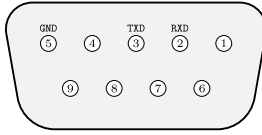
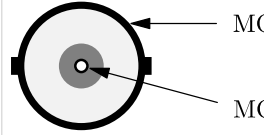
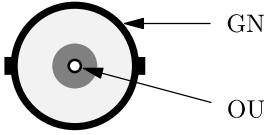
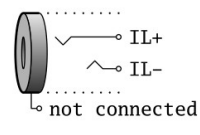
PIN.No	Abbr.	Function
1;2;7;8	LANO+	Laser Diode Anode (+)
4	LLED	Laser Active LED – Anode (+), ILED ca.5mA, vs. GND
5	PL+	Pilot Laser (+), vs. GND
6	PD	Photo Diode Cathode (-), vs. GND
9;10;14;15	LCAT-	Laser Diode Kathode (-)
11	T1	Temperature Sensor 1 Input, default NTC10kΩ , vs. GND
12	GND	Common Ground
13	S1..24V	1 bis 22V Supply, max. 800mA, vs. GND, supports fan etc.

## Laser Connector



SubD2W2-female

PIN. No	Abbr.	Function
A1	LANO+	Laser Diode Anode (+)
A2	LCAT-	Laser Diode Cathode (-)

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

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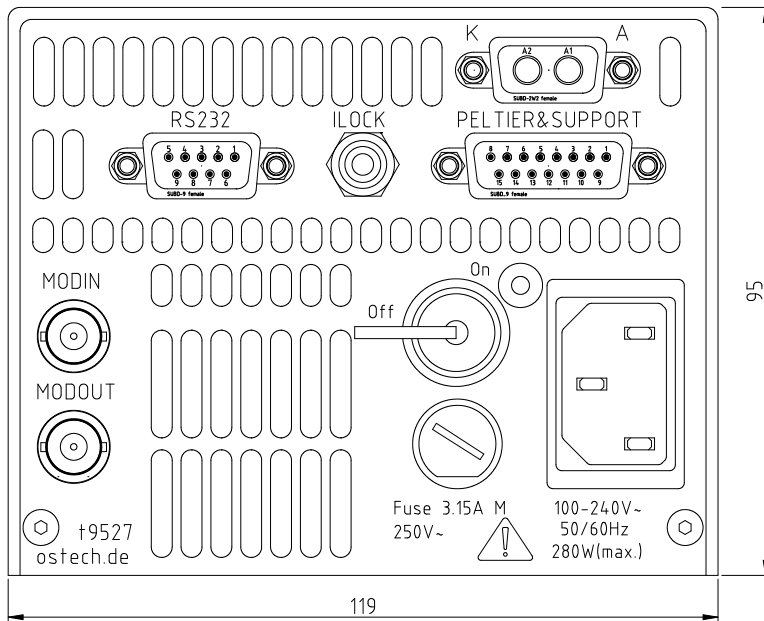


fig: ds01-Rear length 280mm (11")

## Rsevision overview:

- 2006.10.10: "v0" - base derivation in ds11-t95 series
- 2011.04.28: "v1" - Photo Diode max. Current increased from 2mA to 4mA
- 2015.01.16: "v2" - only 1 Pin for temperature sensor (2nd temp. sensor optional)
- 2016.05.19: "v3" - Software-v2026
- 2017.02.09: "v4" - additional laser current support over SubD15 socket
- 2019.04.01: "v5" - MODOUT signal at rear supported
- 2021.01.01: "v6" - Laser Voltage max. from 48V to 56V, Laser Current from 6A to 7.5A max.

## References:

- <http://www.ostech.de/en/products/laser-drivers/ds11-t95>
- <http://www.ostech.de/en/downloads/manuals/ds-en.pdf>
- <http://www.ostech.de/en/downloads/labview>

## Accessories

- acc-converter-usb-to-rs232-1m5-iso-417
- RS232 to USB converter optical isolated with FTDI-Chip cable 1.5m
- kab-lpa08-16pol-subd15m-oe-1.5m-39
- cable 16x0.35qmm / subd15-Gold-6,5A per pin to open end / length-1m5
- kab-la40-2pol-2W2male-oe-1.5m-286
- cable 2x4qmm / imax-40A subd-2W2m-male to open-ends / length-1m5