

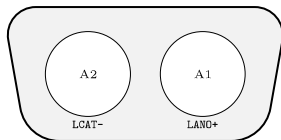
# Tabletop Laser Controller

Type: ls11-la31v24-t12787-v3-283



- Laser max.: 31A, 24V
- trise-tfall < 25us (optional < 5us)
- Supply Voltage: 90~230VAC - 50/60Hz
- External, Analog and Digital Modulation
- Internal Pulse Generator
- Pulses and Bursts internally and externally triggered
- Bias Current option
- Pilot Laser Supply
- External Fan Support
- Photo Diode Current Monitor max. 4mA
- Laser Current Monitor
- optional additional TEC-stages

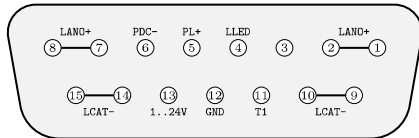
## Laser Connector



SubD2W2-female

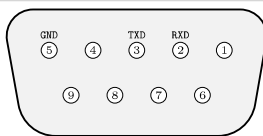
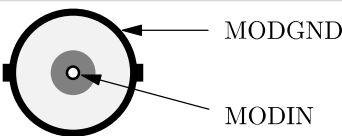
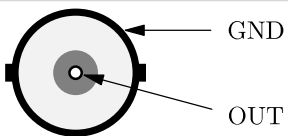
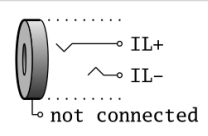
PIN. No	Abbr.	Function
A1	LANO+	Laser Diode Anode (+)
A2	LCAT-	Laser Diode Cathode (-)

## Laser & Support Connector

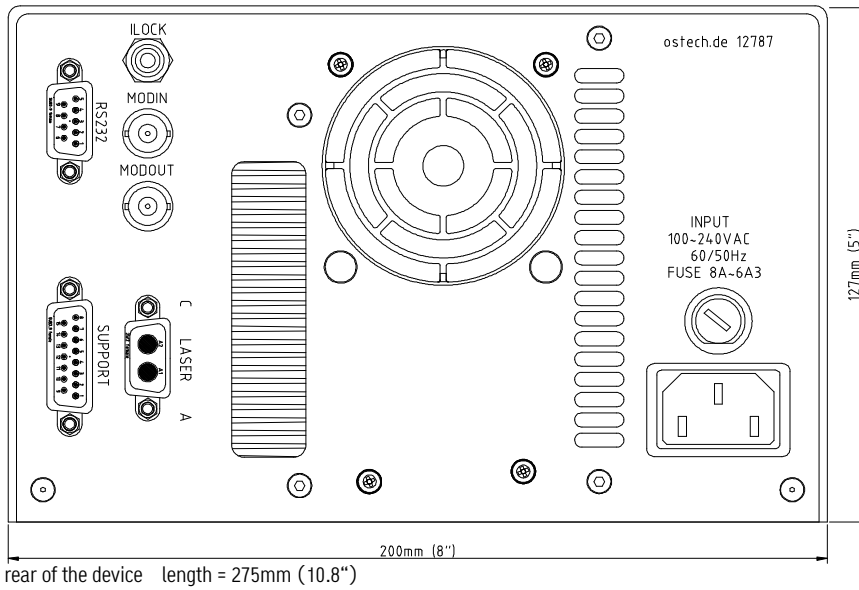


SubD-15 female

PIN.No	Abbr.	Function
1;2;7;8	LANO+	Laser Diode Anode(+) this Pins can be used up to 25A!
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
9;10;14;15	LCAT-	Laser Diode Kathode (-) this Pins can be used up to 25A!
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.

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-Imax[A]</p>	<p>BNC-Socket, current monitor 0-Imax[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>

## Tabletop Laser Controller



### Revision overview:

- 2015.01.16: "v1" - only 1 pin interface for temp. sensor
- 2017.07.20: "v2" - according max. ratings of Supply we increased current up to 31A
  - Laser Pins parallel supported on SubD-15 Connector up to 24A max. current
  - BNC-socket for MODOUT integrated (analogue current output 0V=0A, 4V=Imax=31A)
- 2020.01.17: "v3" - extend laser electrodes to Support Connector

### References:

- <http://www.ostech.de/en/products/laser-drivers/ds11-t127>
- <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