

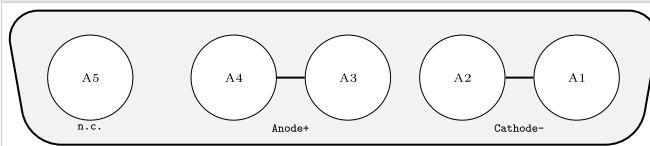
Laser Controller

Type: ls11-la35v60-t19205c-seq-v1-853



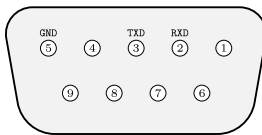
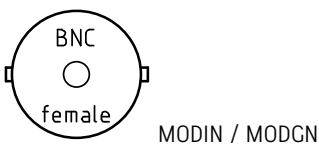
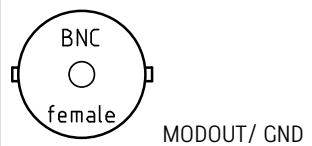
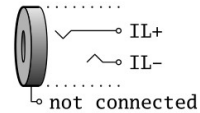
- Laser max.: 35A, 60V
 trise, tfall < 30µs
 supply voltage: 100~230VAC - 50/60Hz
- External, Internal, Analog and Digital Modulation
 - Current Monitor
 - Bias Current option
 - Pilot Laser Supply
 - External Fan Support
 - optional additional TEC-stages
 - including current sequencer

Laser Connector

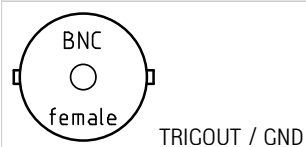


SubD-5W5 female

PIN.No	Abbr.	Function
A3; A4	LDA+	Laser Diode Anode (+)
A1; A2	LDC-	Laser Diode Cathode (-)
A5	n.c.	

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

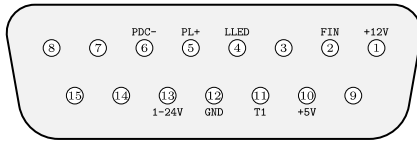
TRIG-OUT



TTL-Output / during internal or external Modulation
 LOW-HIGH-transition
 when Laser switches ON

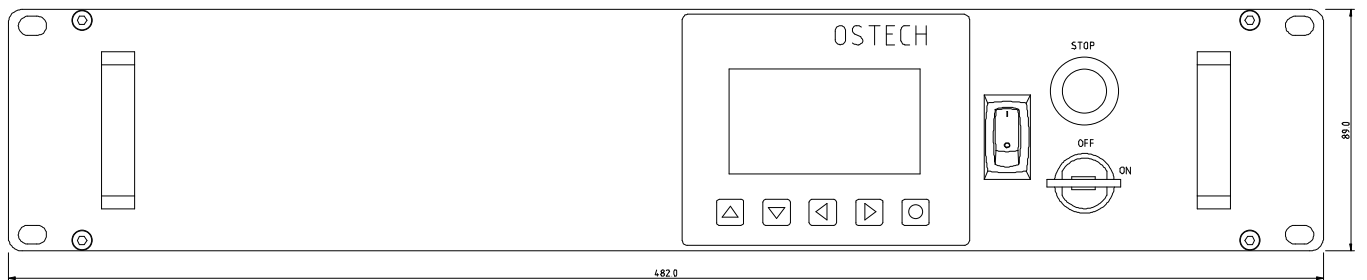
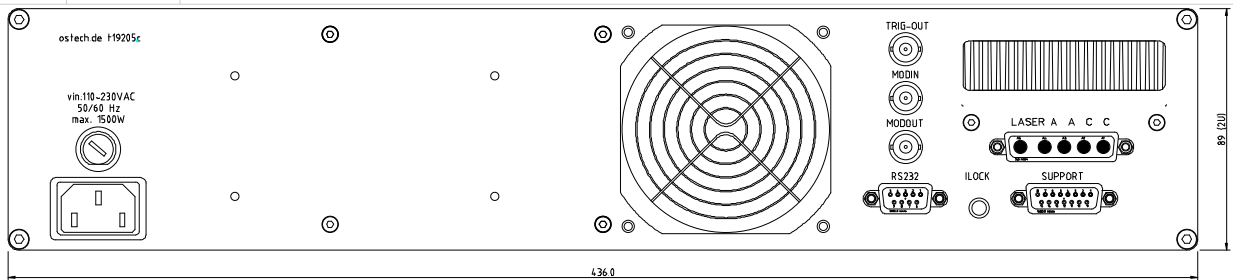
Laser Controller

Support Connector



SubD-15 female

PIN.No	Abbr.	Function
1	n.c.	(optional) +12V – Fibre Sensor Supply
2	n.c.	(optional) FIN – Fibre Sensor Input
4	LLED	Laser ON LED Anode (+) ILED ca.5mA, vs. GND
5	PL+	Pilot Laser (+), vs. GND
6	PDC-	Photo Diode Cathode (-) Input
10	n.c.	(optional) +5V – Photo_Amp Supply 5V
11	T1	Temperature Sensor Input, vs. GND (default NTC10k)
12	GND	Common Ground
13	S1-24V	1-24V adjustable Supply, max. 500mA, vs. GND, for fan etc.



Revision overview:

- 2019-05-27: "v0"- first derivation setup
- 2024-01-01: "v1"- power stage improved / new plugs

References:

- <http://www.ostech.de/en/products/laser-drivers/ds11-t192>
- <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-la60-2x6qmm-5w5-oe-1m3-298 / cable 2x6qmm lmax 60A SUBD-5W5 to open ends
- kab-lpa08-16pol-subd15m-oe-1.5m-39 / cable 16x0.35qmm - SUBD15-Gold-6,5A to open end - length 1m5