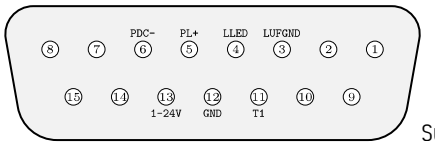
Laser Controller

Type: ls11-la70v05-t19220-v1-607

Laser max.: 70A, 5V
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
- from software > version 2031, laser current sequencer on board

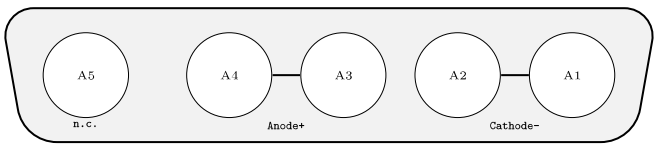
Support Connector



SubD-15 female

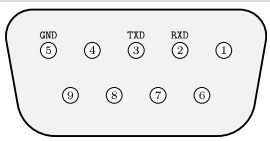
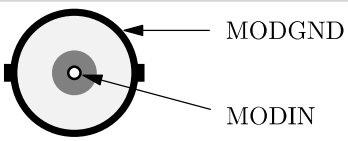
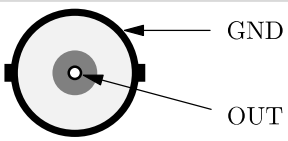
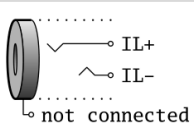
PIN.No	Abbr.	Function
3	LUFGND	Fan Ground
4	LLED	Laser ON LED Anode (+) ILED ca.5mA, vs. GND
5	PL+	Pilot Laser (+), vs. GND
6	PDC-	Photo Diode Cathode (-) Input, vs. GND
11	T1	Temperature Sensor Input, vs. GND (default NTC10k)
12	GND	Common Ground
13	S1-24V	1-24V adjustable Supply, max. 800mA, for fan etc., vs. LUFGND

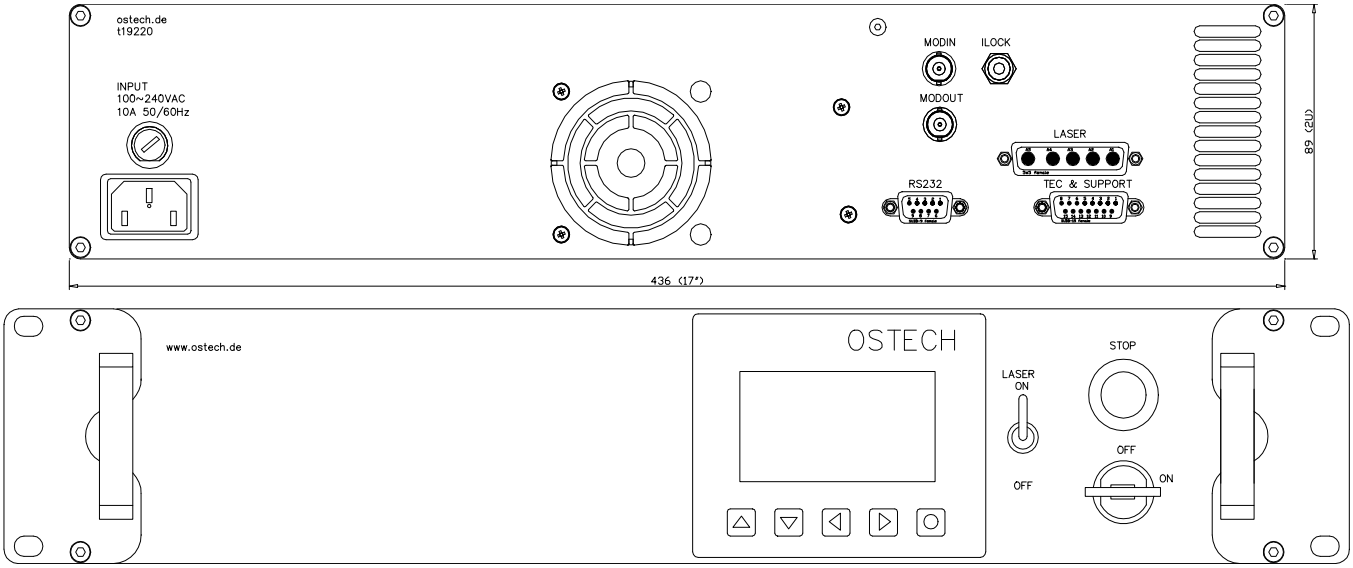
Laser Connector



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 (No Null-Modem Cable !)	BNC-Socked Input-Impdanz 10kOhm Digital Modulation with TTL-Pegel Analog Mod. 0-4[V] => 0-Imax[A]	BNC-Socked, 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)



Revision overview:

2007.10.10: "v0" – derived
2015.01.16: "v1" – temp. sensor input over pin 11 only vs. GND, Photo Diode max. Current increased to 4mA, MOD-OUT BNC socket added

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-lpa08-16pol-subd15m-oe-1.5m-39
  cable 16x0.35qmm / subd15-Gold-6,5A per pin to open end / length-1m5
- kab-la80-2x10qmm-5w5-oe-1.3m-141 / 2.5m- 657 / 5.0m- 660
  cable 2x10qmm coaxial imax 80A SUBD-5W5 to open ends length 1m3 / 2m5 / 5m0