

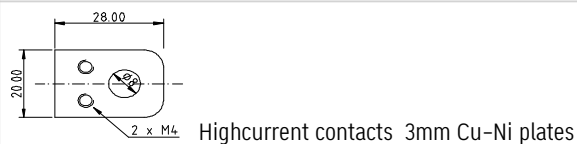
Laser Diode Controller

Type: ls11-la110v12-t19203g-v3-477



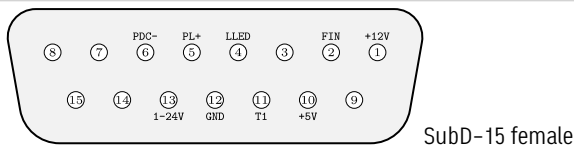
Laser max.: 110A, 12V
 trise, tfall < 40µs
 - supply voltage 110~230VAC - 50/60Hz
 - External, Internal, Analog and Digital Modulation
 - External triggered Pulses
 - Current Monitor
 - Bias Current option
 - Pilot Laser Supply
 - External Fan Support
 - optional additional TEC-stages
 - optional Trig-Out for Q-switch controll

Laser Connector

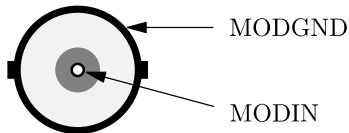
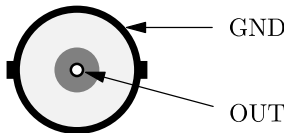
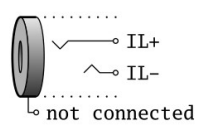


Contact#	Name	
1	ANODE	Laser Anode
2	CATHODE	Laser Cathode

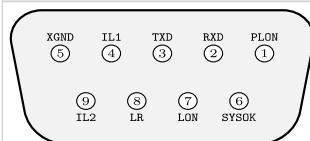
Support Connector



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.

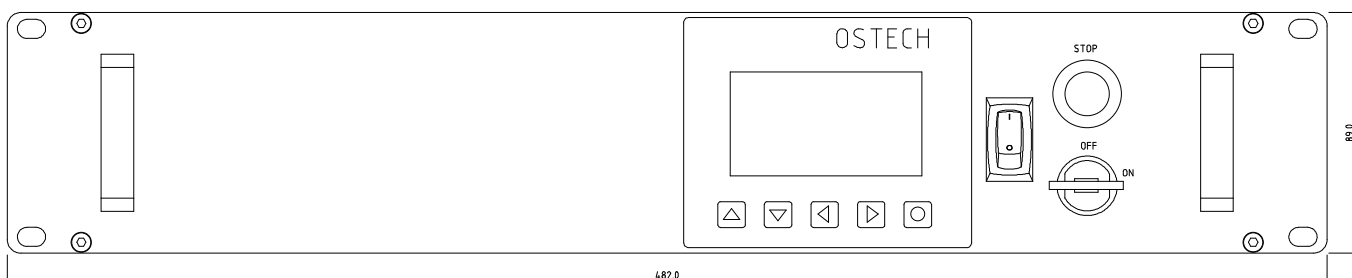
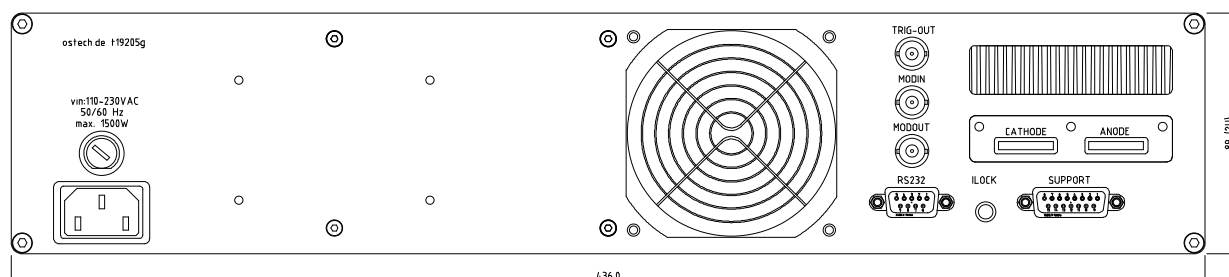
AMOD/DMOD-IN Connector	MOD-OUT Connector	Interlock Connector
 BNC-Socked Input-Impdanz 10kOhm Digital Modulation with TTL-Pegel Analog Mod. 0-4[V] => 0-Imax[A]	 BNC-Socked, current monitor 0-Imax[A] -> 0-4[V] Take care for laser isolation if you connect GND potential to an oscilloscope f.e.	 Jack Connector 3.5mm Laser runs only if closed (ca. 5mA over 2V -> R <= 400R)

Control and RS232 (isolated Interface)



SubD-9 female

PIN.No	Abbr.	Function
1	PLON	Pilot Laser ON if TTL-High
2	RXD	RS232 RX
3	TXD	RS232 TX
4	IL1	Interlock 1 has to be closed to XGND
5	XGND	External GND
6	SYSOK	System OK output +5V over 4k7
7	LON	Laser ON (ready signal) TTL High
8	LR	Laser Run (start signal) TTL High
9	IL2	Interlock 2 has to be closed to XGND



Revision overview

- 2025-01-01 v3: change to ds0112-board and new high current contacts

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-1m