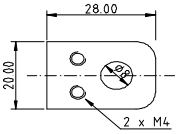
Laser Diode Controller

Type: ls11-la100v30-t19205g-v1-880

Laser max.: 100A, 30V
trise, tfall < 30µs
- supply voltage 110~230VAC - 50/60Hz
- max. power 3000W@220V and 2000W@120V input
- External, Internal, Analog and Digital Modulation
- Current Monitor
- Bias Current option
- Pilot Laser Supply
- External Fan Support
- optional additional TEC-stages

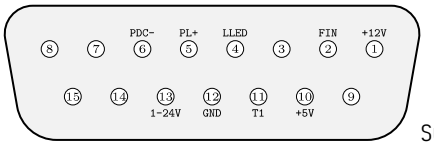
Laser Connector



Highcurrent contacts 3mm Cu-Ni plates

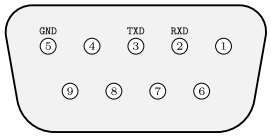
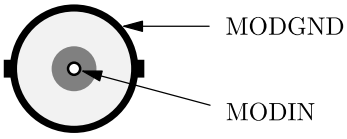
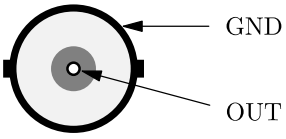
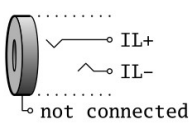
Contact No	Name	
1	ANODE	Laser Anode
2	CATHODE	Laser Cathode

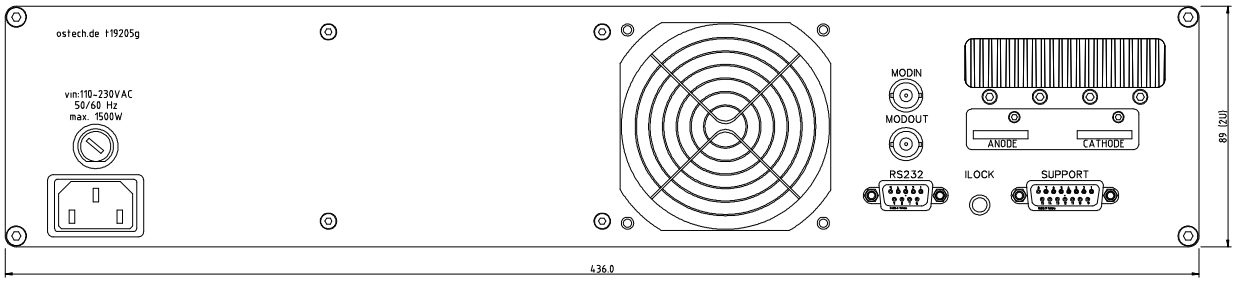
Support Connector

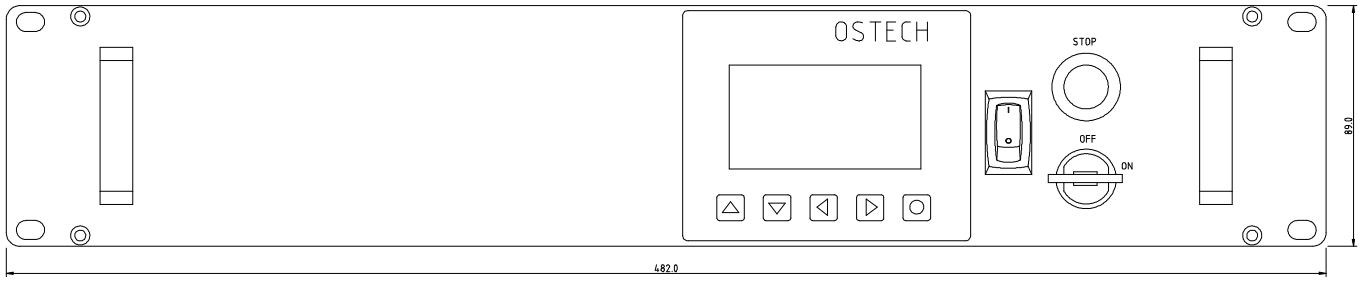


SubD-15 female

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.

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

- 2019-12-01 v0: first derivation from type 478
- 2019-12-01 v99: customized version with 105 instead of 100A Imax
- 2023-01-01 v1: change to ds01-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