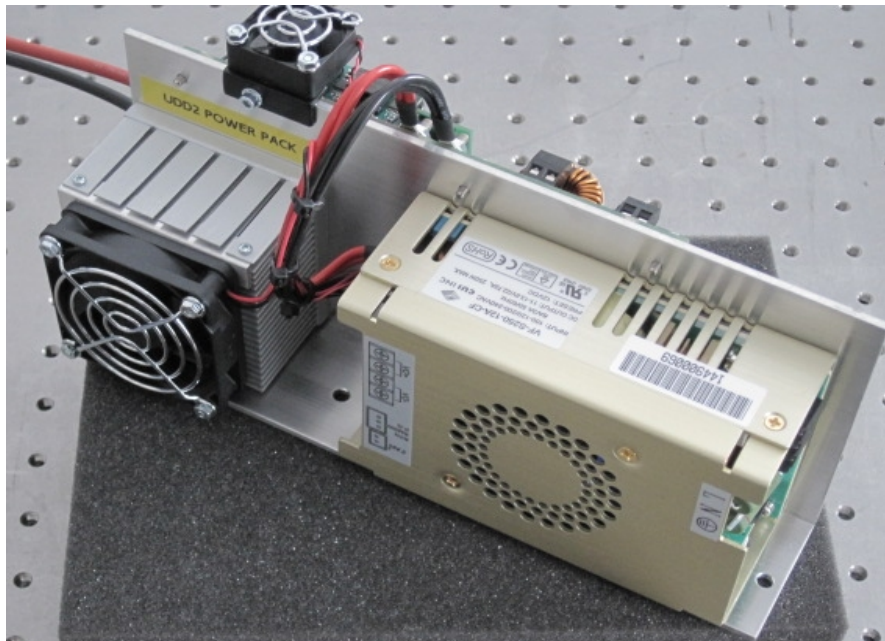
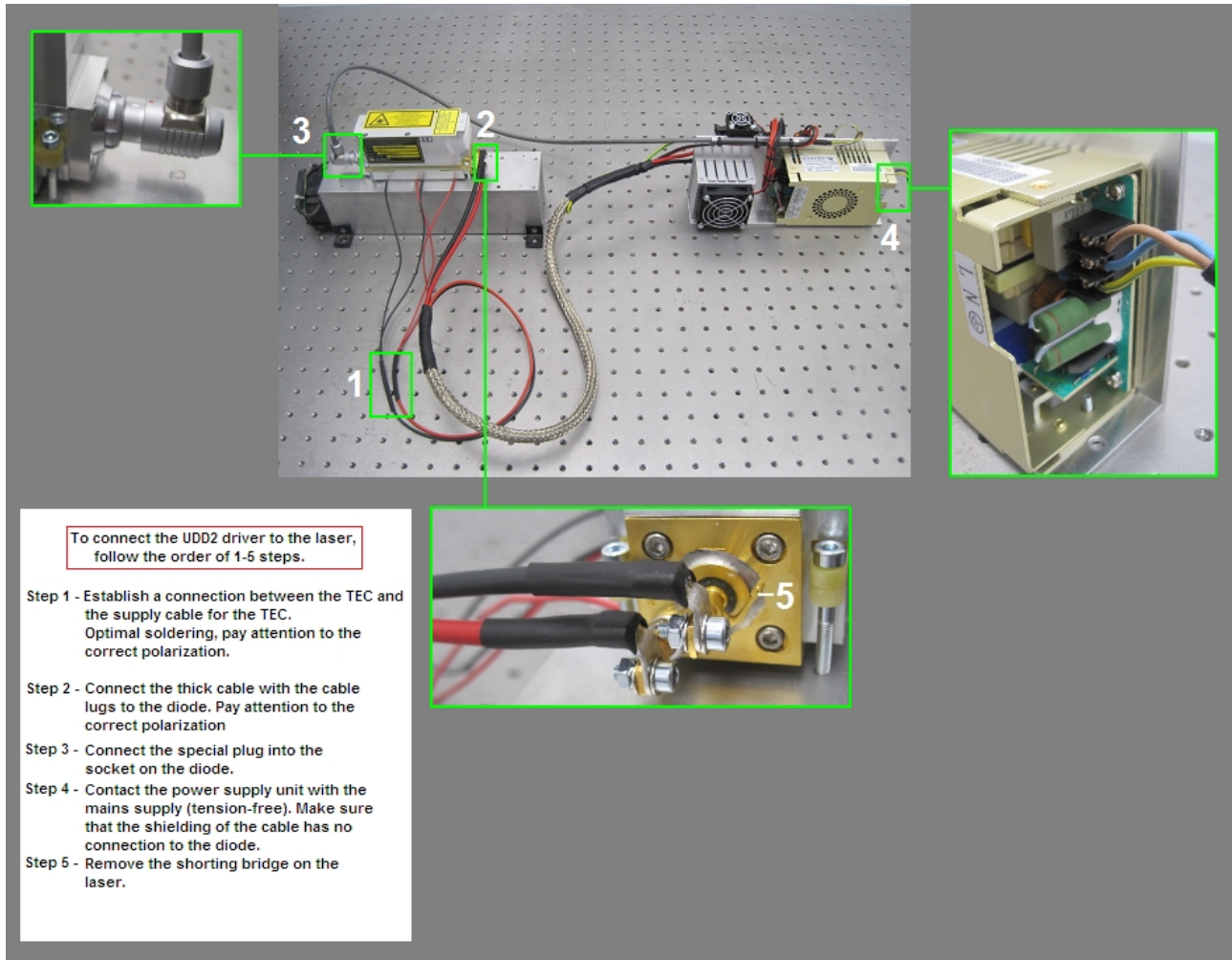


UDD2 Power Pack

Installation instruction

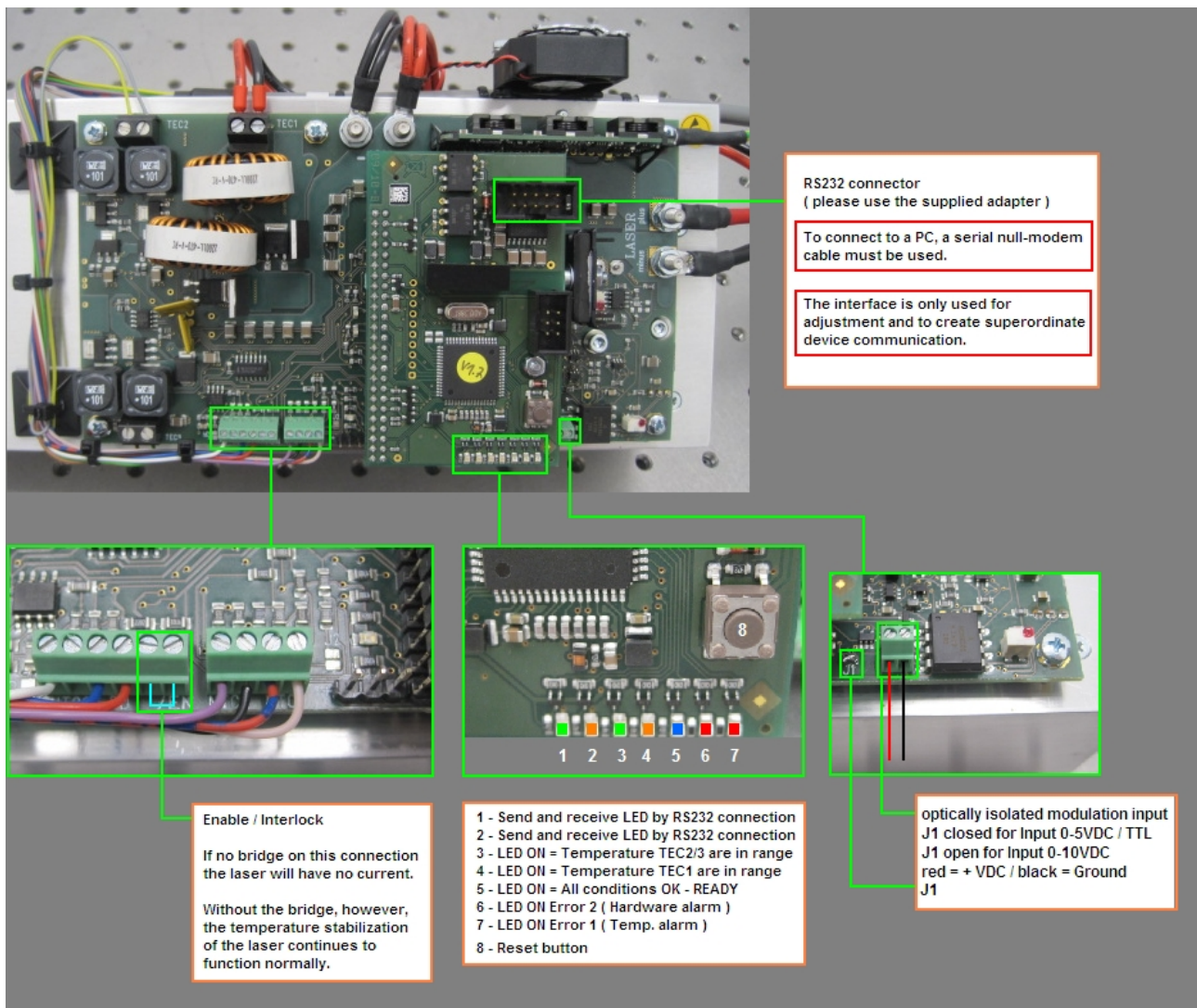


Short installation manual



After checking all connections for polarization and stable connection, check again that the diode is isolated.

Now you can bridge the interlock connection and connect the modulation signal.
See picture below.



The driver is adjusted and configured for the modulation voltage 0-5 VDC.

Then switch on the mains voltage - the driver first regulates the temperature of the laser in the required range. If everything is connected correctly, the blue LED lights up.

If the interlock bridge is closed, you can now put the laser into operation by applying the modulation signal 0-5V DC. Pay attention to the rules in force in your country for operating class 4 lasers.

AC Power connector

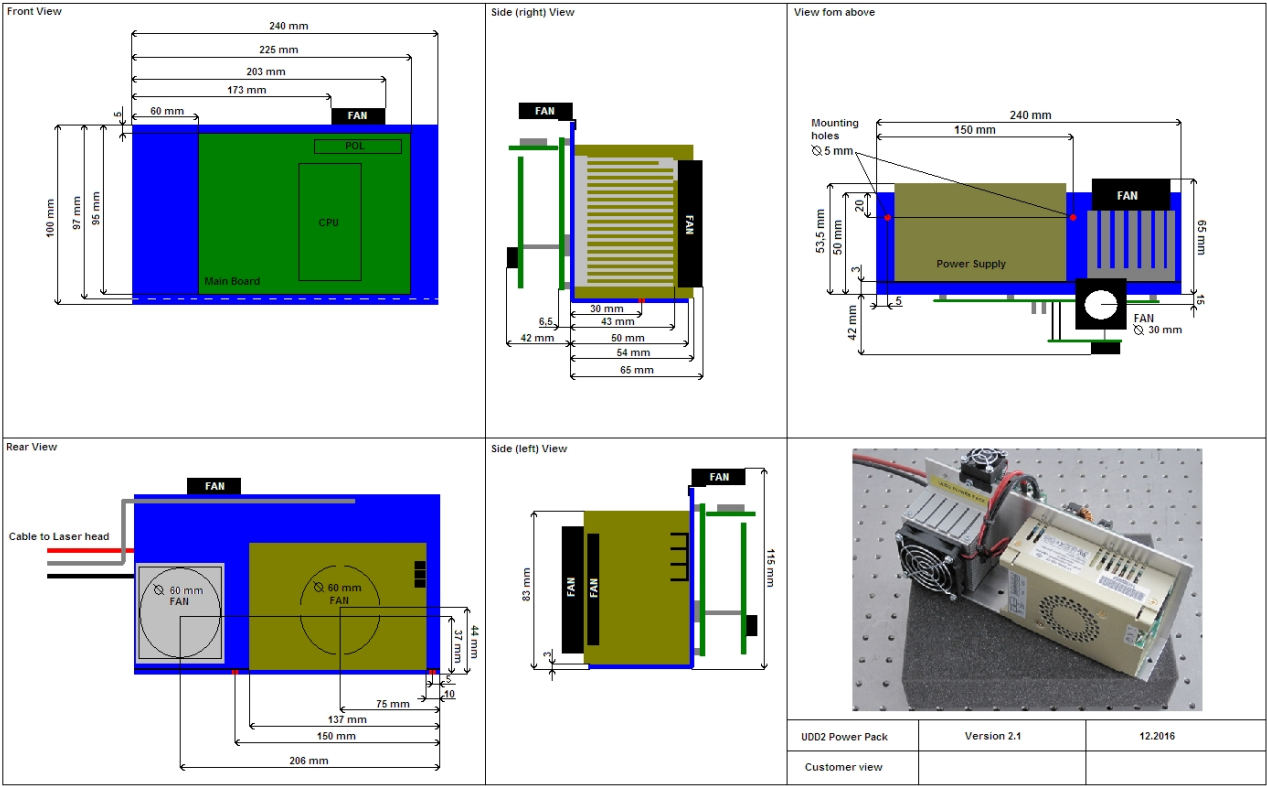


AC Power connector

brown - L1 90-240 VAC 50/60 Hz
blue - neutral
yellow / green - earth

Please observe the safety rules of your country when connecting the power supply line.

Mechanical fastening



For mechanical fastening , you have two 5mm holes.

Technical Data

Power Supply VF-S250-12A-CF

Input Voltage	90-132 VAC / 180-264 VAC auto ranging
Input Frequency	47-63 Hz
Input Current	6 A at 115 VAC, 3 A at 230 VAC
Earth Leakage Current	< 1,5mA at 264 VAC
Input Protection	Fitted with a T8A/250V fuse
Output Power	12V / 250W / 20,83A Peak 50A / Ripple & Noise 120mV
Minimum Load	1 %
Overload Protection	110-140 %
Overvoltage Protection	<130% Vnom on output V1
Overtemperature Protection	Measured internally with auto recovery
Fan Supply	12V / 300mA
Switching Frequency	29 kHz typical
Isolation	3000 VAC Input to Output 1500 VAC Input to Ground
Operating Temperature	0°C to 50°C (air cooled)
Operating Altitude	3000m
operating humidity	non-condensing min 5% max 90%
Vibration	5-50 Hz, acceleration 7.35 m/s ² on X,Y and Z axis
Safety approvals	UL 60950-1, CSA C22.2 No. 60950-1, TUV EN 60950-1 and CB

Driver UDD2

Input Voltage	12 – 13,5VDC
Input Current	max load 35 Amp
Diode-Voltage	2,5 – 3,1 VDC selectable
Diode - Current	min. 6 Amp
Diode - Current	max. 50 Amp
NTC TEC 1	10 kOhm EPCOS G560, / Vishay 10 kOhm selectable
NTC TEC 2	10 kOhm EPCOS G560, / Vishay 10 kOhm selectable
NTC TEC 3	10 kOhm EPCOS G560, / Vishay 10 kOhm selectable
Output TEC 1	max 16 Amp -Output voltage Software controlled(max 12VDC)
Output TEC 2	max 3Amp - Output voltage Software controlled(max 12VDC)
Output TEC 3	max 3Amp - Output voltage Software controlled(max 12VDC)
Scheme	PID
Connections	RS232 , optically isolated modulation input , display connector, laser current monitor connector, NTC TEC1, NTC TEC 2, NTC TEC 3, Enable (Interlock), TEC 1 output ,TEC 2 output ,TEC 3 output, Photo diode Input , Photo diode output ,Reset button , Status display with LED
Modulation Voltage	0-5VDC / 0-10 VDC analog selectable / TTL when J1 closed
Modulation Frequency	50kHz / 50% DC
Overheat Safty	Power shutdown at 56 °C FET temp.
DC Voltage Monitoring	Power shutdown at < 10,0 V Input Voltage
Current Monitor	1mV DC corresponds 1 Amp Diode Current
Temperature control accuracy	0,1 °C
RS232	automatic initialization
Software	UDD2 Service V1.13