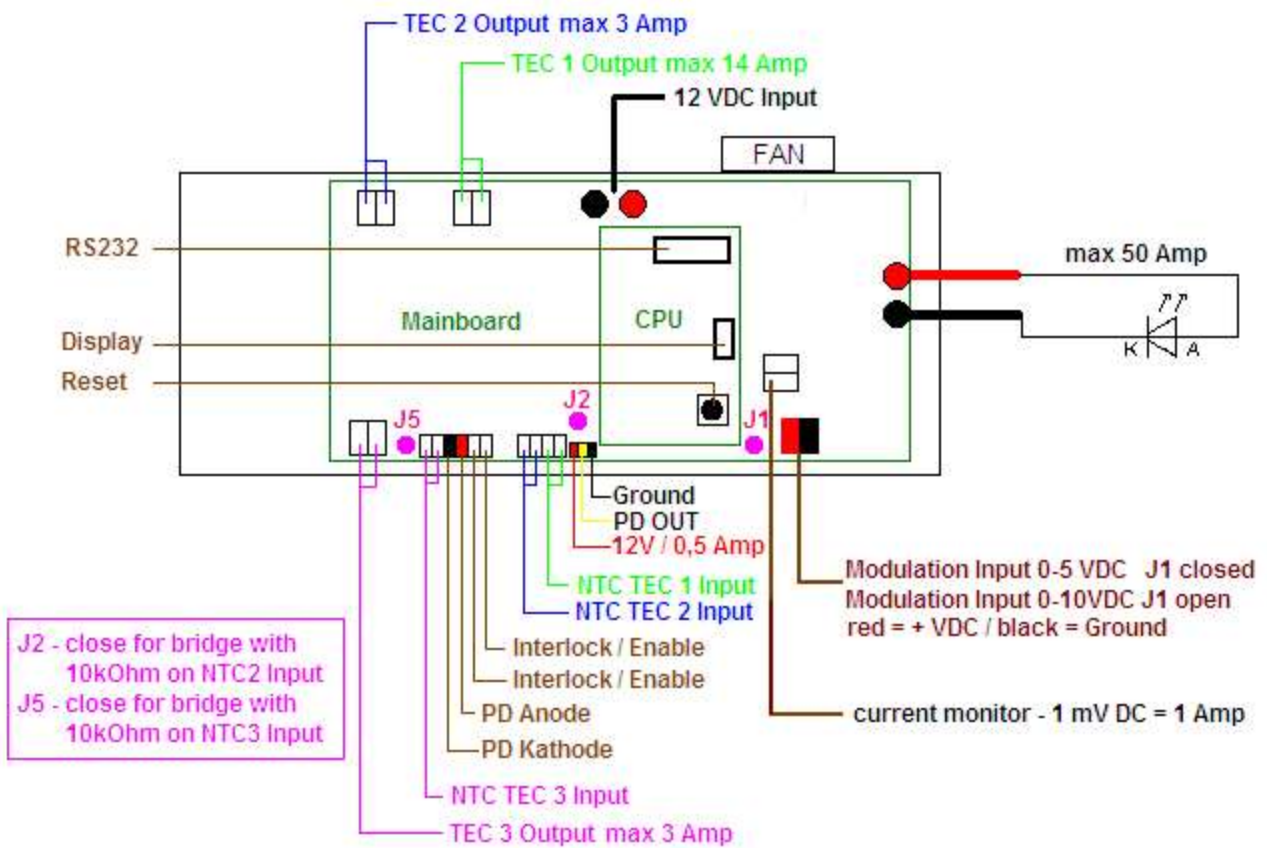


UDD2 Power Pack

Installation instruction

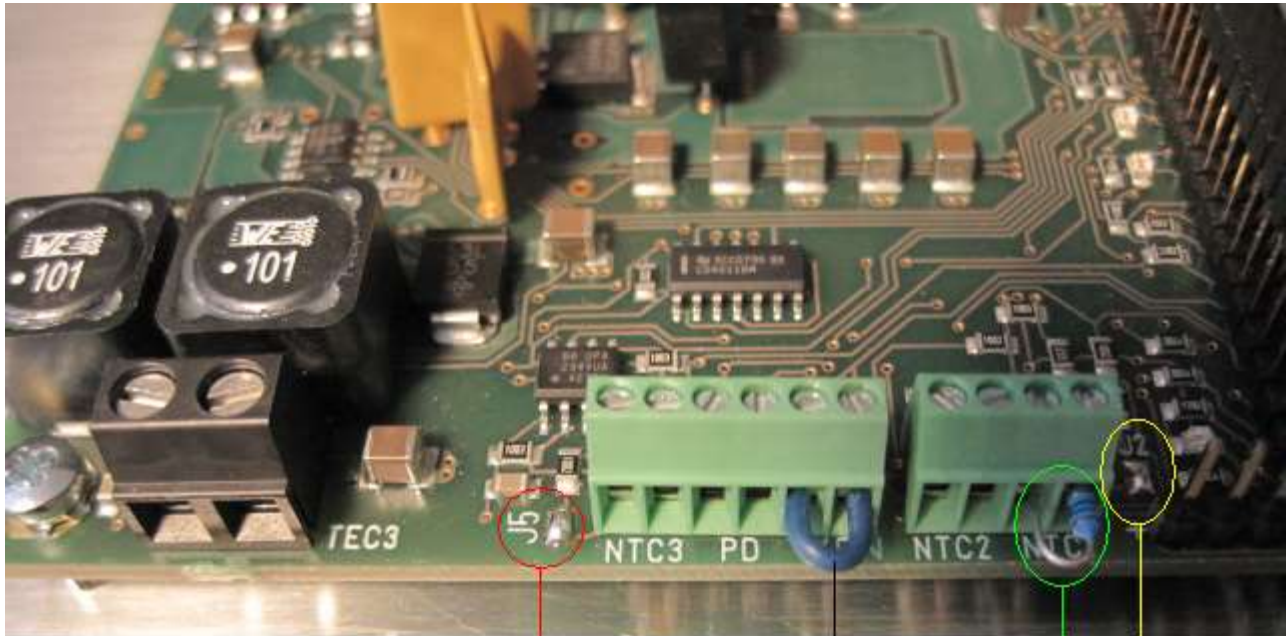


Connection assignment



Connection assignment

NTC Inputs



open this bridge for work with NTC 3

no laser current when bridge open (Interlock)

10 kOhm bridge for NTC 1

open this bridge for work with NTC 2

Modulation Input



optically isolated modulation input
J1 closed for Input 0-5VDC / TTL
J1 open for Input 0-10VDC
red = + VDC / black = Ground
J1

Note: When you will switching 2 UDD2 drivers parallel ,you do not need an isolation amplifiers for the modulation.

Connection assignment

Diode voltage



Set point for the diode output voltage 2,4 - 3,1 VDC

Connection assignment

AC Power connector

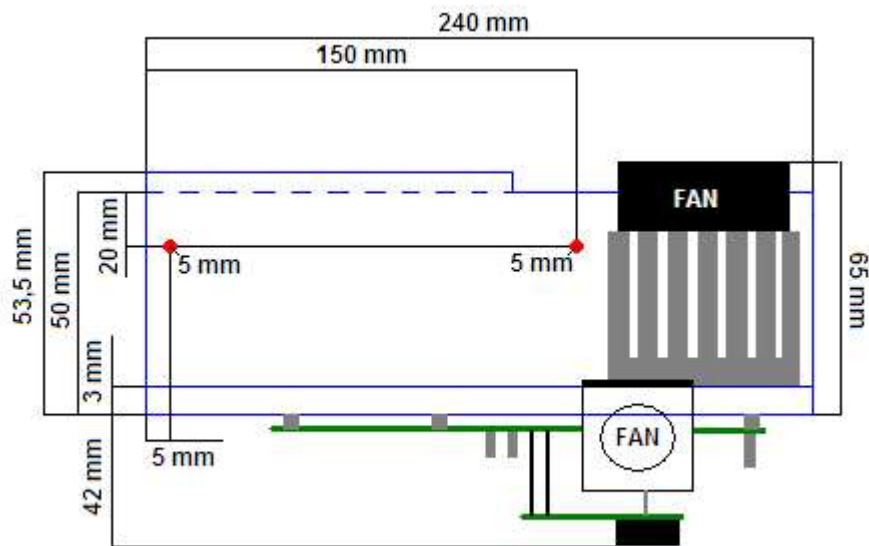


AC Power connector

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

Mechanical fastening

(View from above)



For mechanical fastening , you have two 5mm holes.
The system height (over the small fan) is 120 mm.

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 14 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