

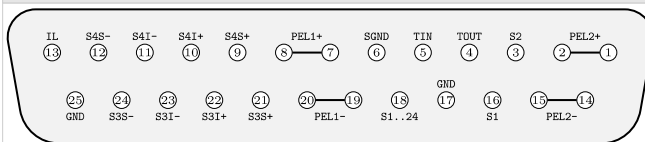
Tabletop Peltier Controller

Type: ps11-pa7.5v48-pa7.5v48-t9512-v1-977



- 1. TEC output max.: 7.5A, 48V
- 2. TEC output max.: 7.5A, 48V
- Vin: 100~240VAC, 50/60Hz
- The controller has 2 universal Temp. Sensor Inputs
- Temp. Sensors NTCs (standard 10 kΩ), PT100, PT1000 or others
- External Support can be configured freely between 1..24V
- Temperature Control Range: -25°C to 150°C
- Accuracy typ. ±0.01K
- Fast feedback loop P.I.D. temperature controller
- Temperature limits
- Current limits
- Interlock Temp. Controll active only when closed

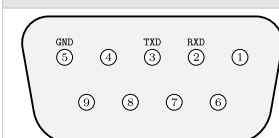
Peltier Connector



SubD25 female

| PIN.No | Abbr. | Function |
|--------|--------|--|
| 1,2 | PEL2+ | 2. Peltier element (+) |
| 3 | S2 | 2. Temp. Sensor Input (vs. GND) |
| 4 | TOUT | Analog Temperatur Output 0..10V (Actual Temperature) can also be used as Temp. OK Signal |
| 5 | TIN | Analog Temperature Input 0..10V (Temperature Target) |
| 6 | SGND | Supply Ground |
| 7,8 | PEL1+ | 1. Peltier element (+) |
| 9 | S4S+ | 4. Temp. Sensor Supply (+) (for 4-wire option, if not used connect to pin 10) |
| 10 | S4I+ | 4. Temp. Sensor Input (+) |
| 11 | S4I- | 4. Temp. Sensor Input (-) |
| 12 | S4S- | 4. Temp. Sensor Supply (-) (for 4-wire option, if not used connect to pin 11) |
| 13 | IL | Interlock Input has to by bypassed to GND |
| 14,15 | PEL2- | 2. Peltier element (-) |
| 16 | S1 | 1. Temp. Sensor Input (vs. GND) |
| 17,25 | GND | Common Ground |
| 18 | S1..24 | Universal Supply 1..24V, max. 800mA (vs. SGND) supports fan etc. |
| 19,20 | PEL1- | 1. Peltier element (-) |
| 21 | S3S+ | 3. Temp. Sensor Supply (+) (for 4-wire option, if not used connect to pin 22) |
| 22 | S3I+ | 3. Temp. Sensor Input (+) |
| 23 | S3I- | 3. Temp. Sensor Input (-) |
| 24 | S3S- | 3. Temp. Sensor Supply (-) (for 4-wire option, if not used connect to pin 23) |

RS232 Connector



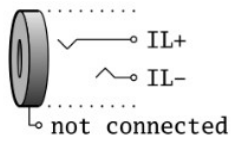
SubD-9 female

Standard RS232-Connector
(No Null-Modem Cable !)
9600-Baud-8N1

| PIN.No | Abbr. |
|--------|-------|
| 2 | RXD |
| 3 | TXD |
| 5 | GND |

Tabletop Peltier Controller

Interlock Connector



Jack Connector Stereo 3.5mm / Interlock – Laser can only run if Interlock is closed;
 (ca. 5mA over 2V → $R_{\text{Interlock}} \leq 400\Omega$)
 connect ILOCK- and ILOCK+ pin
 Warning: do not connect (SCR) common screen pin

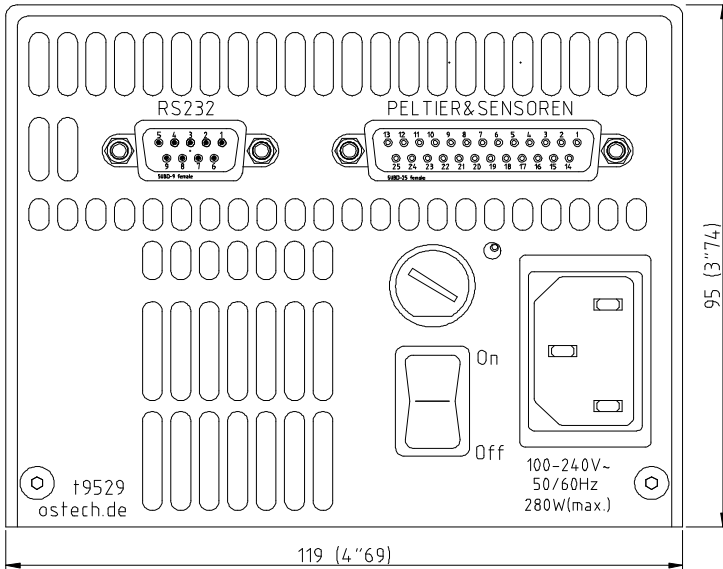


fig: ds01-Rear length 280mm (11")

Revision overview:

2019-10-10: "v1" – new derived from type 121

References:

<http://www.ostech.de/en/products/tec-controllers/ps11-t95>
<http://www.ostech.de/en/downloads/manuals/ds-en.pdf>
<http://www.ostech.de/en/downloads/labview>

Accessories optional

- acc-converter-usb-to-rs232-1m5-iso-417
 RS232 to USB converter optical isolated with FTDI-Chip cable 1m5
- kab-lpa08-16pol-subd15m-oe-1.5m-39
 cable 16x0.35qmm SUBD15-Gold-6,5A/Pin to open end length 1m5