

Tabletop Peltier Controller with Thermocouple k-type Support

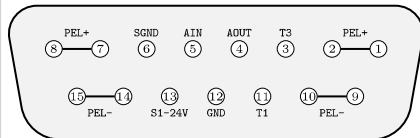
Type: ps11-pa15v24-t8539-v1-thcpl-180



TEC max. : 15A, 24V

- Vin: 100~240VAC, 50/60Hz
- The controller has 2 universal Temp. Sensor Inputs and 1-Thermocouple K-Type Input
- These Sensors can freely be related to the TEC stages
- The Analog Input maps the applied voltage in a range of 0..10V to a temperature range LTL..LTLU and sets the target temperature value TT of the control loop (LTEL is the laser temp. lower and LTEU is the upper range limit)
- The Analog Output maps the range LTEL..LTEU to 0..10V and gives the TA actual temperature back also mapped between the LTEL and LTLU edges
- With the LTXAR command the Analog Temperature Mapping can be activated and it's deactivated by LTXAS
- External Fan Support can. be configured freely between 1..24V max. 800mA

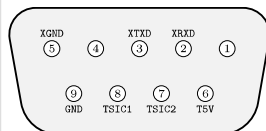
Peltier Connector



SubD-15 female

PIN.No	Abbr.	Function
1,2,7,8	PEL+	Peltier element (+)
3	T3	3. Temp. Sensor, vs. GND
4	AOUT	Analog Output 0..10V (Actual Temperature)
5	AIN	Analog Input 0..10V (Temperature Target)
6	SGND	Supply Ground
9,10,14,15	PEL-	Peltier element (-)
11	T1	1. Temp. Sensor, vs. GND
12	GND	Common Ground - for Temp. Sensors
13	S1-24V	Supply 1..24V, max. 800mA (vs. SGND) supports fan etc.
	SCR	Common Screen

RS232 Connector



SubD-9 female

Standard RS232-connector, No Null-Modem Cable ! 9600-Baud-8N1

¹⁾ Optional in Version "v99" pin 6,7,8,9 only. For 2 additional TSic-sensors!

PIN.No	Abbr.
2	RXD
3	TXD
5	GND
6	T5V Supply for TSiC ¹⁾
7	TSIC2 ¹⁾
8	TSIC1 ¹⁾
9	GND ¹⁾

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Thermocouple connector Type-K, 2. Temp. Sensor



NKU 1200 0 from Greisinger (+NiCr -NiAl)

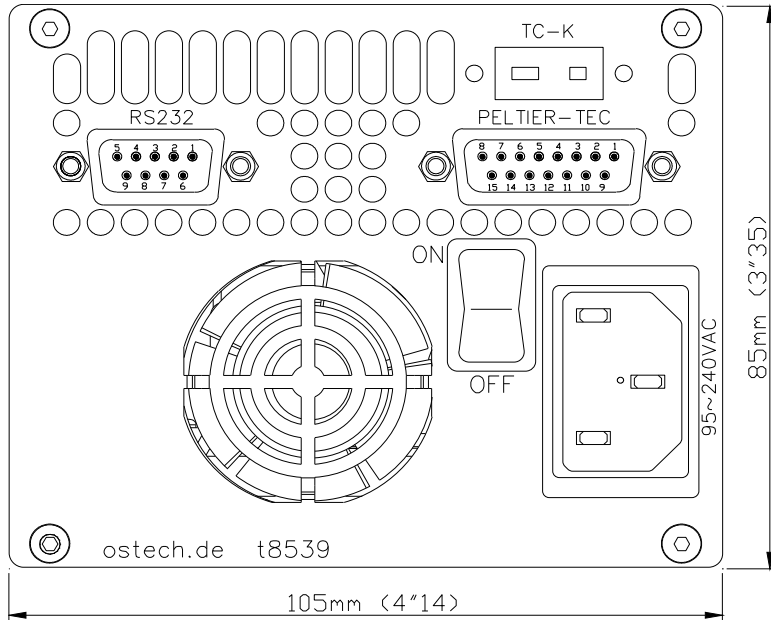


fig: ps11-t8539-rear length 200mm

Revision overview:

2017.02.20: "v0" - revision
 2017.04.07: "v1" - software version 2031 with extended Sensor interface

References:

<http://www.ostech.de/en/products/tec-controllers/ps11-t85>
<http://www.ostech.de/en/downloads/manuals/ds-en.pdf>
<http://www.ostech.de/en/downloads/labview>

Accessories

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