- **Output for Peltier-modules and resistive Heaters**
- **pt100 / pt1000 or customized sensors, user programmable**
- **2-or 3 wire system**
- **PID-Regler, programmable**
- **Control input, optional with „switch on",„switch off" of „setvalue-select"-function**
- **Signal output, optional with alarm- or temperature O.K. - function**
- **Two pt1000 auxiliary sensors usable for monitoring heatsink temperature, Fan control, or Dead-Zone-Control of output stage**
- **Swiss Product**

The Peltier- and Heating-Controller TC3212-RS232 operates in two configurable modes. The Peltier-Controller-Mode is specially optimized for driving peltier devices. In Heating-Controller-Mode the device drives electric resistive heaters. In this mode the device can be set up to drive solid-state-relays, to allow the control of large mains-supplied loads.

The TC3212-RS232 is programmable via the front keys or with the supplied software via its serial RS232-interface.

Supply voltage	12 to 32V DC, Output optionally separated from the controller supply
Operating Temperature	0..50°C
Output current	up to 12A permanent, PWM-Output with semiconductor H-Bridge, wearless, switching automatically into cooling- or heating mode.
Controller	PID-Controller, Parameters freely programmable
Sensor input	pt100 or pt1000 (configurable), low measuring current, customized sensor programmable via serial Interface, characteristic curve to be specified via base points in 25-degree steps
	2- or 3-wire system plus additional shield connection for longer lead lengths
Auxiliary Sensors	2x pt1000, 2-wire system
Reading- and Control range	-50.0 to +150.0 degree Celsius nominal, monitoring -75.0 to + 175.0°C
Readout resolution	0.1 degree for monitoring, 0.05 degree for internal use
Display	bright and large 7-segment-LED Indication
Process indication	one LED for heating and cooling each, plus one when in programming mode
Control input	12 to 32V, isolated with opto coupler
Signal output	max. 32V, NPN, isolated with opto coupler, load current max. 100 mA
Fan output	max. 32V, Solid State Switch against 0 V, load current max. 1.0 A, on/off
RS232-Interface	as standard, connection via terminal block, software included
Parameter	all Parameters will be permanently stored in the flash memory
Dimensions	see drawing below, panel cutout: 92.5 mm x 43 mm

96.0 mm   48.0 mm   111.0 mm   134.0 mm
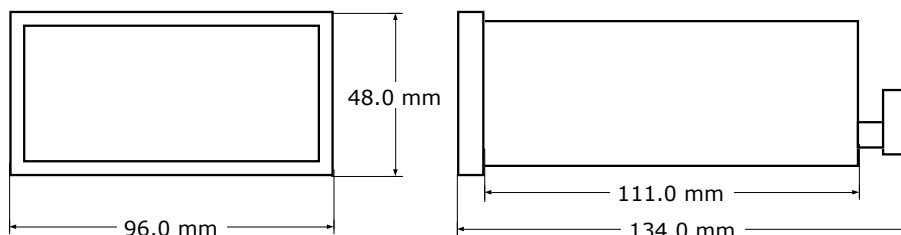
May be subject to technical changes without notice, 16.09.2021