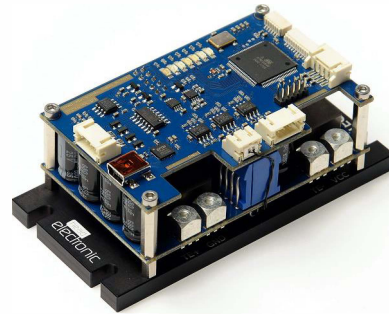# TEC16-32

High Power TEC Driver

Product features:

- output power up to 480 W
- efficiency up to 97 %
- ultra fast step response
- H-bridge for combined heat/cool operation
- USB- and RS485-interface
- operating with Pt1000 sensor
  or NTC 10k

Product description:

The TEC16-32 is a very compact and powerful current source for Peltier elements. The device operates as a bidirectional regulated current source for the gentle operation of Peltier elements. We have deliberately avoided the use of pulse width modulation in order to keep the noise emission very low.
The device is therefore also suitable for tempering tasks in sensitive laboratory applications. The high efficiency makes additional cooling unnecessary in most cases. The robust base plate made of black anodized aluminum serves as a heat sink and allows a very easy installation for your application.
The TEC16-32 can be easily programmed and operated via the included "Config Utility" software. A plugin for LabVIEW is also available for free. The operation as a stand alone device is also very easy. The optionally available TEC display informs the user about interesting values such as temperature, current and operating status. The setpoint temperature can be conveniently set via pushbuttons and the TEC16-32 can be switched on and off.

Technical data:

Supply voltage	+32V
Supply current	max. 15.5A
Output voltage	-30 ... +30V
Output current	-16 ... +16A
Output current limit	cooling 0 ... -16A
	heating 0 ... +16A
Temp. range	-50°C ... 150°C
Temp. stability	up to 0.01°C
Temp. sensor ch1	Pt1000
Temp. sensor ch2	Pt1000
Temp. sensor ch3	NTC10k

interfaces:

ENABLE_IN	5V, TTL
TEMP_SET_IN	0 ... +4096mV
TEMP_OK_OUT	5V, TTL
FAN_PULSE_IN	5V, TTL, max 500Hz
FAN_PWM_OUT	5V, 25kHz
DISPLAY	for TECdisplay
AUX1 I/O	5V, TTL
AUX2 I/O	5V, TTL
AUX3 I/O	5V, TTL
operating temperature	-20 ... +85°C
Weight	205g
Dimensions	100x50x40mm

TECdisplay (optionaly available)