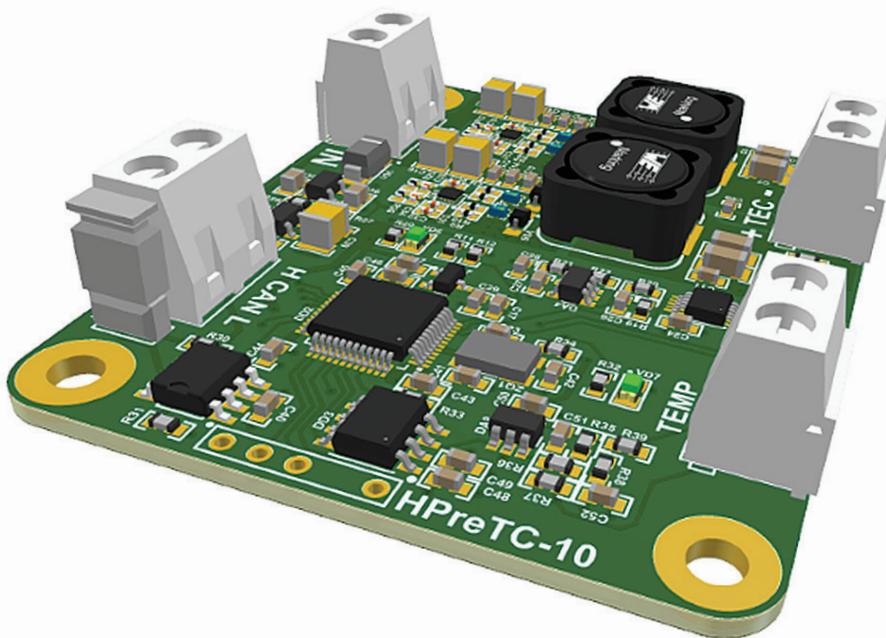


HPreTC-10

HIGH PRECISION TEC CONTROLLER



Key Features

- Wide Input voltage range up to 5 VDC
- Output current up to 5 A
- Compliance voltage up to 2 V
- Efficiency up to 97 %
- CAN interface
- Compact size 50 × 60 × 14 mm

Description

The HPreTC-10 is a high precision Temperature Controller that are capable to control TEC elements in order to maintain a constant temperature of different loads e.g. laser diode.

The HPreTC-10 is a compact non-isolated DC/DC switch mode power supply with bidirectional current output. Controller contain a closed loop amplifier with adjustable settings P (proportional), I (integral) and D (differential) share for providing optimal temperature regulation.

HPTC-100 can be controlled by CAN interface with PC software.

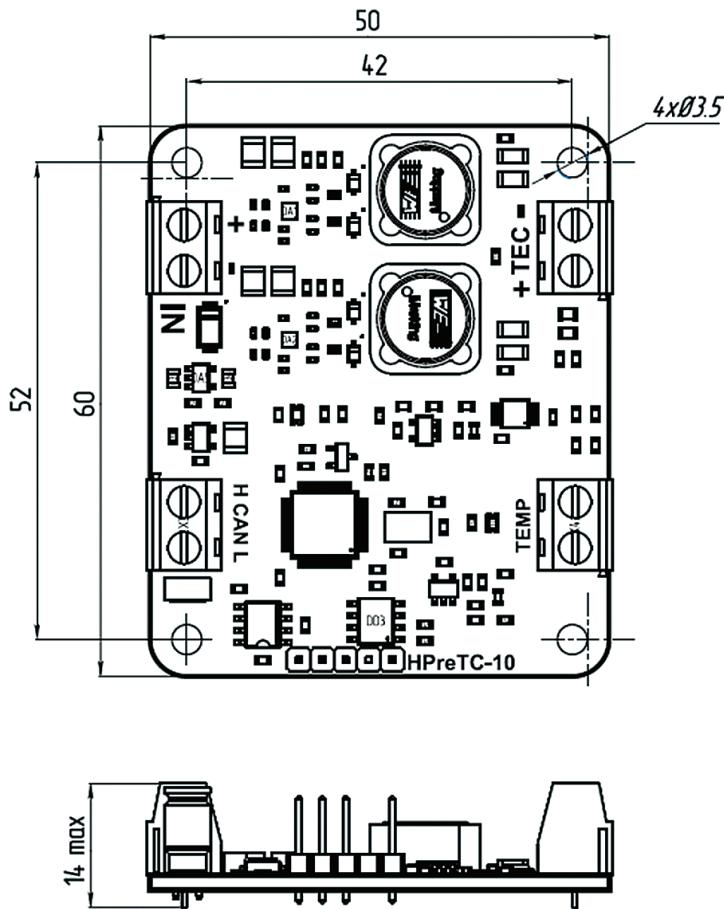
Controller is designed to maintain temperature based on feedback provided from a 10 k Ω NTC type thermistor sensor.

Specifications

Parameter	Min.	Typ.	Max.	Units
Input Voltage	4.8	5	5.2	Vdc
Power	-	-	10	W
Output voltage ¹⁾	-	-	± 2	V
Output current	-	-	± 5	A
Temperature sensor	-	10	-	k Ω
Temperature set	5	25	50	°C
Temperature step	-	0.01	-	°C
Temperature accuracy	-	-	0.1	°C
Efficiency	-	-	97	%
Operating temperature	+10	-	+40	°C
Storage temperature	-20	-	+70	°C
Humidity, Non-Condensing	-	-	95	%
Size	50 x 60 x 14 mm			
Weight	< 30 g			

1. Output voltage cannot be more than $0.83 \times V_{in}/2$

Dimensions



Terminal functions

