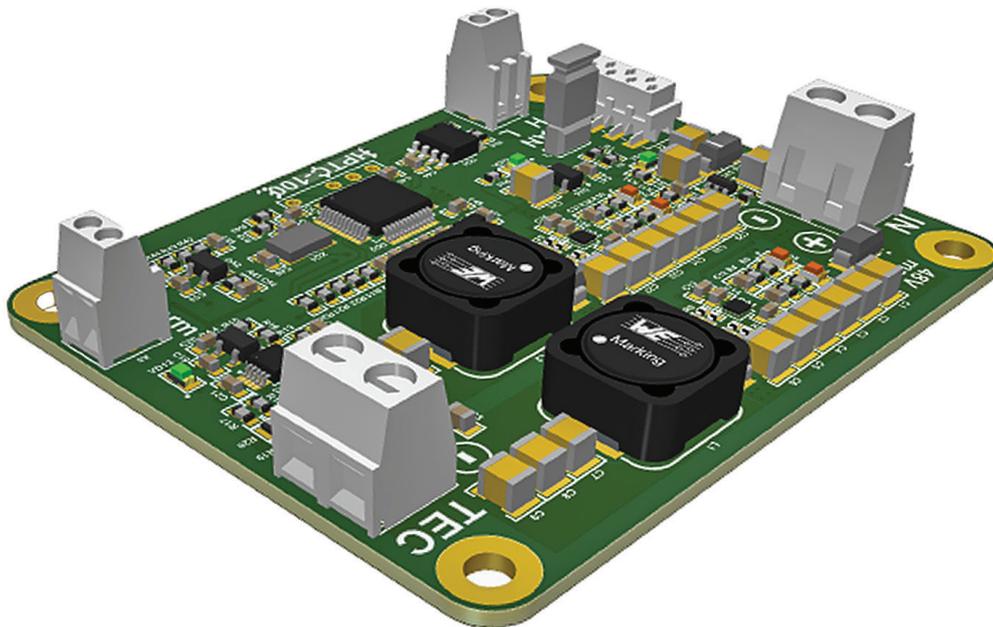


HPTC-100

HIGH POWER TEC CONTROLLER



Key Features

- Wide Input voltage range up to 48 VDC
- Output current up to 5 A
- Compliance voltage up to 20 V
- Efficiency up to 97 %
- CAN interface
- Compact size 70 × 56 × 14 mm

Description

The HPTC-100 is a Temperature Controller that are capable to control TEC elements in order to maintain a constant temperature of different loads e.g. laser diode.

The HPTC-100 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.

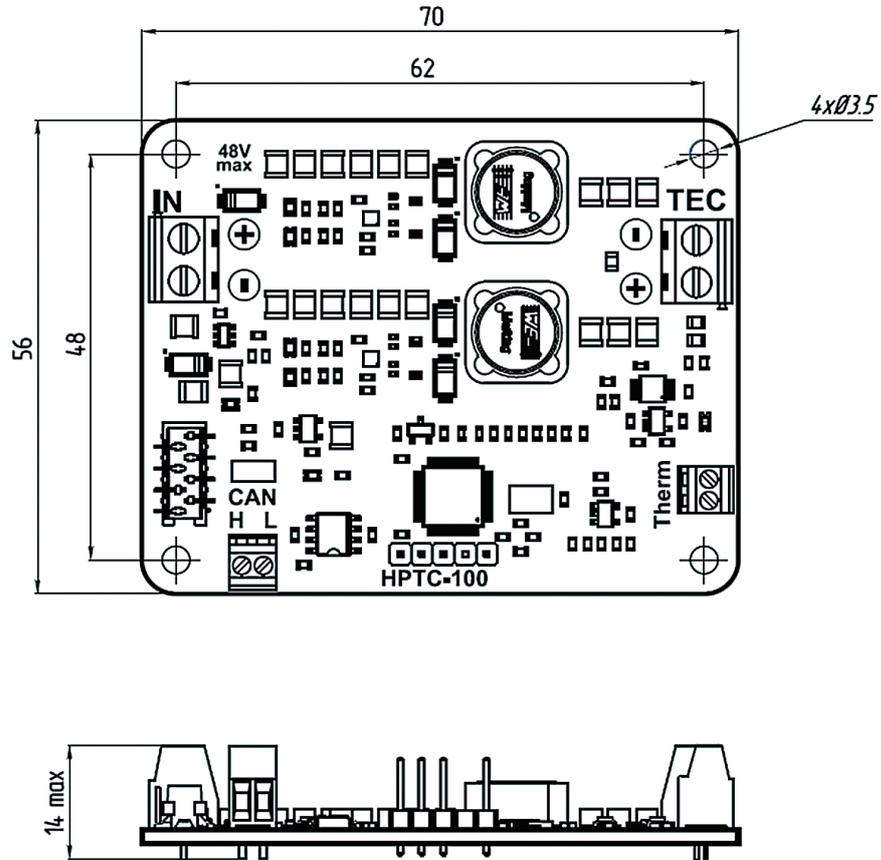
Controller is designed to maintain temperature based on feedback provided from a 10 k Ω NTC type thermistor sensor.

Specifications

Parameter	Min.	Typ.	Max.	Units
Input Voltage	12	-	48	Vdc
Power	-	-	100	W
Output voltage ¹⁾	-	-	± 20	V
Output current	-	-	± 5	A
Temperature set	5	25	50	$^{\circ}\text{C}$
Temperature step	-	0.1	-	$^{\circ}\text{C}$
Temperature accuracy	-	-	1	$^{\circ}\text{C}$
Efficiency	-	-	97	%
Operating temperature	+10	-	+40	$^{\circ}\text{C}$
Storage temperature	-20	-	+70	$^{\circ}\text{C}$
Humidity, Non-Condensing	-	-	95	%
Size	100 x 54 x 27 mm			
Wight	< 300 g			

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

Dimensions



Terminal functions

