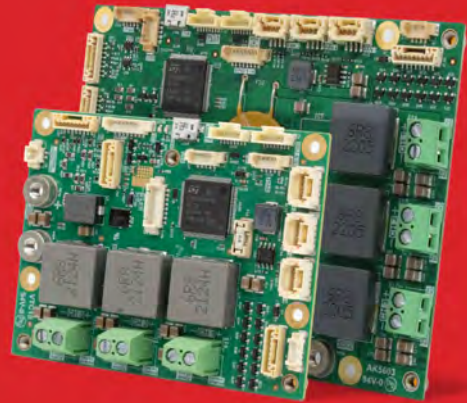


THERMOELECTRIC CONTROLLER

We offer a range of high performance and innovative precision thermoelectric (TEC) controllers for the most demanding thermal control applications.



TEC Controller Selections



1-Channel

VTC1501-A



2-Channel

VTC1502-A



3-Channel

VTC1503-A



6-Channel

VTC2016-A



**Superior Efficiency
and Stability**



Compact



**Configurable &
Flexible**

ABOUT OUR PRODUCT

Featuring our innovative patent pending technology, these thermoelectric controllers offer outstanding precision and stability to meet even the most demanding cooling/heating applications. It delivers the highest power efficiency, fits perfectly in tight spaces, and is highly configurable and flexible using supplied software.

Features

- DC bipolar output capability
- Excellent temperature stability
- Superior power efficiency without requiring a heatsink on the controller
- PID control with auto tuning capability
- Standalone operation or remote control via USB / RS485 / TTL UART
- Temperature control support; direct feedback (sensor) or indirect feedback (sensor + thermal model)
- Highly configurable and flexible using supplied software
- Support wide range of analog and digital temperature sensors
- Our 6-channel controller is no bigger than most competitors 2-channel model



Specifications

	1-Channel VTC1501-A	2-Channels VTC1502-A	3-Channels VTC1503-A	6-Channels VTC2016-A
Input Voltage V _{in}	12–36VDC			
Max input current, A	20	30		60
Output Voltage V _{max}	±V _{in}			
Output Current I _{max}	±16A per channel			
Typical Cooling Power Per Channel	288W			
Power Control Scheme	Configurable input current limit	Configurable input current limit, dynamic power allocation		
Temperature Stability	±0.002°C (1 hour duration @25°C ambient temperature)			
Power Efficiency	95% @ 50% load, 98% @ 100% load			
Analog Temperature Input	8x PT100, PT1000, NTC, TMP61, TMP63, TMP64			
Digital Input	3x I2C BUS (Digital temperature sensor TMP117, TMP1075 etc..)			
Fan Control	3x for speed control & detection			
GPIO (configurable for input / output)	6x			
PID Control	Auto-tune, Manual-tune			
Interface	USB / RS485 / TTL UART			
Dimensions, mm	90 x 70 x 15			120 x 90 x 15

Connector Types



Connector Type A

Terminal Block
AWG 14-28

VTC1501/1502/1503/2016-A



Connector Type B

Molex 2002411212
AWG 12-16

VTC1501/1502/1503/2016-B



Connector Type C

Molex 2002411112
AWG 12-16

VTC1501/1502/1503/2016-C



Accessories

TEC Controller Starter Kit

Temp Sensor Interconnection Cable x2
Fan Cable x3
Temp Sensor Extension Cable x10

VTC-SK-1

*Variant B & C are available on special order in larger quantity

