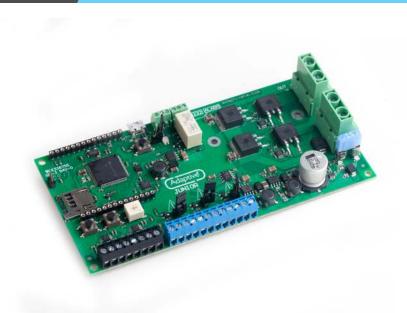
Adaptive® JUNIOR Controller ADJ-48-450-UR



Features

- High efficiency load driver
- 4 external thermocouple inputs
- 3 independent programmable fan outputs
- Alarm output
- USB 2.0 and RS232 communication interfaces

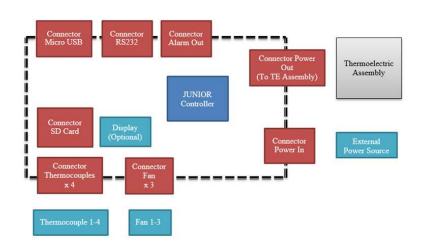
Description

The Adaptive® JUNIOR is a PID controlled pulse width modulator (PWM), intended for thermoelectric cooler or heater applications that require a uni or a bidirectional drive source for accurate temperature control. The controller is capable of operating in a standalone mode, it is also supported by user-friendly PC software. There are additional quick set-up options for manual setpoint adjustment and a selectable fan voltage available.

Optional extras -

- System parameters can be monitored through an LCD.
- Large number of datapoints can be logged on a micro SD card
- New features will be added (HVAC extension, executable user code)

System Architecture



PC Software

Download the user-friendly PC software from: adaptivete.com/downloads

For more information visit: www.AdaptiveTE.com



Adaptive® JUNIOR Controller ADJ-48-450-UR

Specifications

Input voltage range (TEG harvester)	11V to 48V DC
Maximum load (Natural convection)	15A or 250W
Maximum load (Forced convection)	15A or 450W
Control temperature	-50°C to +250°C
Operating temperature	-25°C to +85°C
Compatible fans	2, 3 and 4 wire fans
Fan output voltage range	12V, 24V, 48V
Thermocouple type	K (More types to come)
Communication interface	USB, RS232
Storage	Micro SD, EEPROM
Temperature control accuracy	+/- 0.5°C
Protection	Overcurrent, temperature, fan speed

Further information

- Application type Fans & thermal management
- · Application sub type Electronics heating & cooling
- Contents: 1x controller board (heatsink and LCD display are optional extras)

Adaptive Thermal Controllers - Part Numbers

ADJ = Adaptive Junior Controller 24 / 48 = Voltage 450 = Wattage

Connection type

U – USB connection, R – RS232 connection

Suffix

No additional number - standard

Additional number: 001 - 999 - custom option

Adaptive Thermal Management

For more information visit: www.AdaptiveTE.com