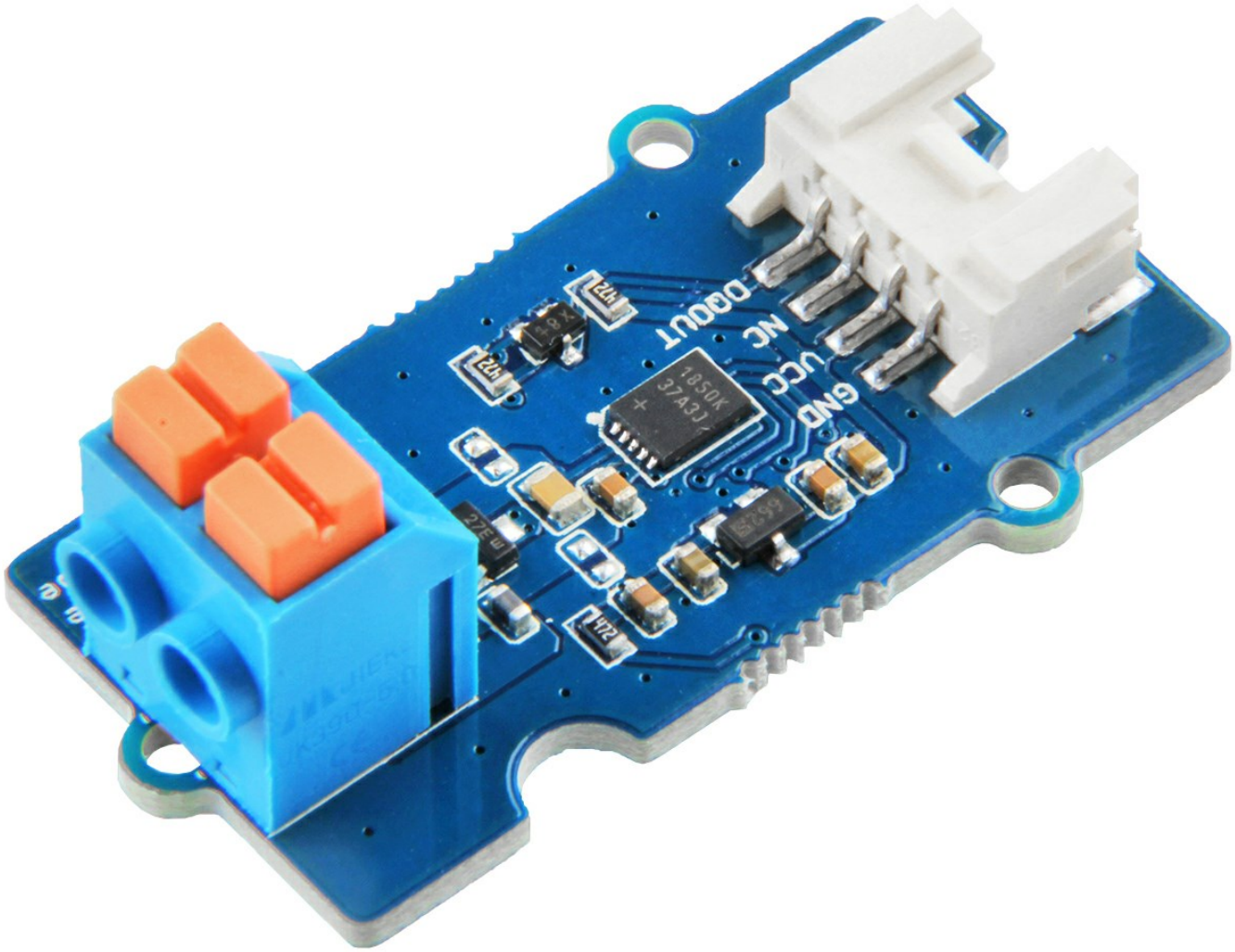
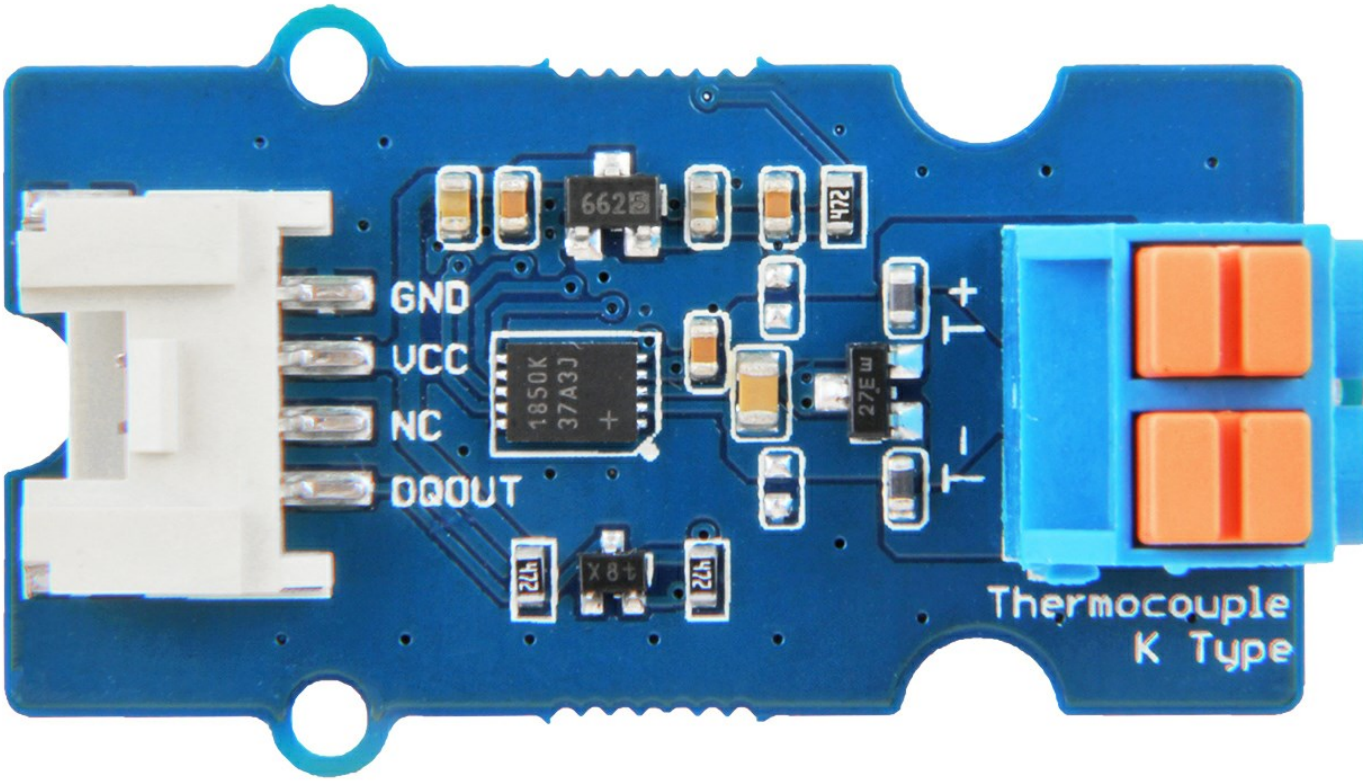
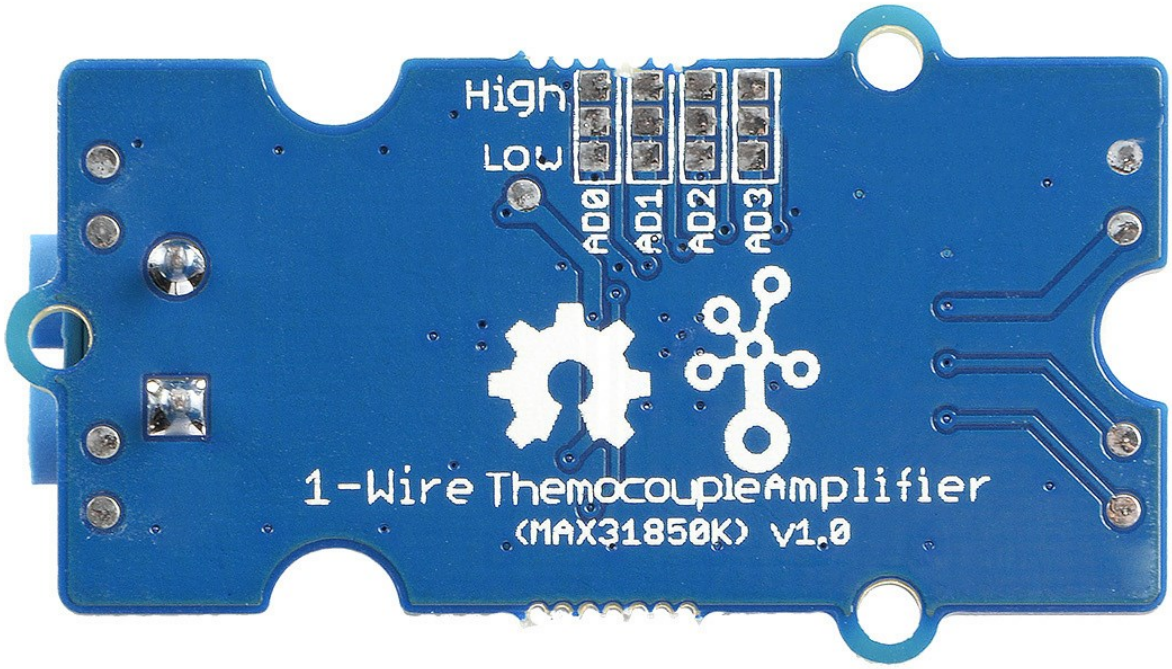
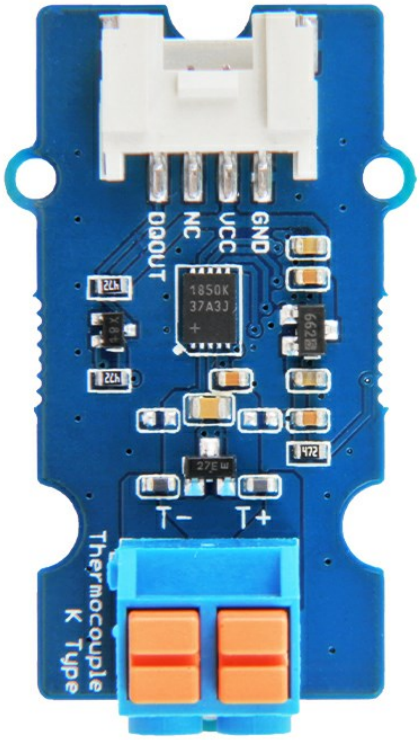
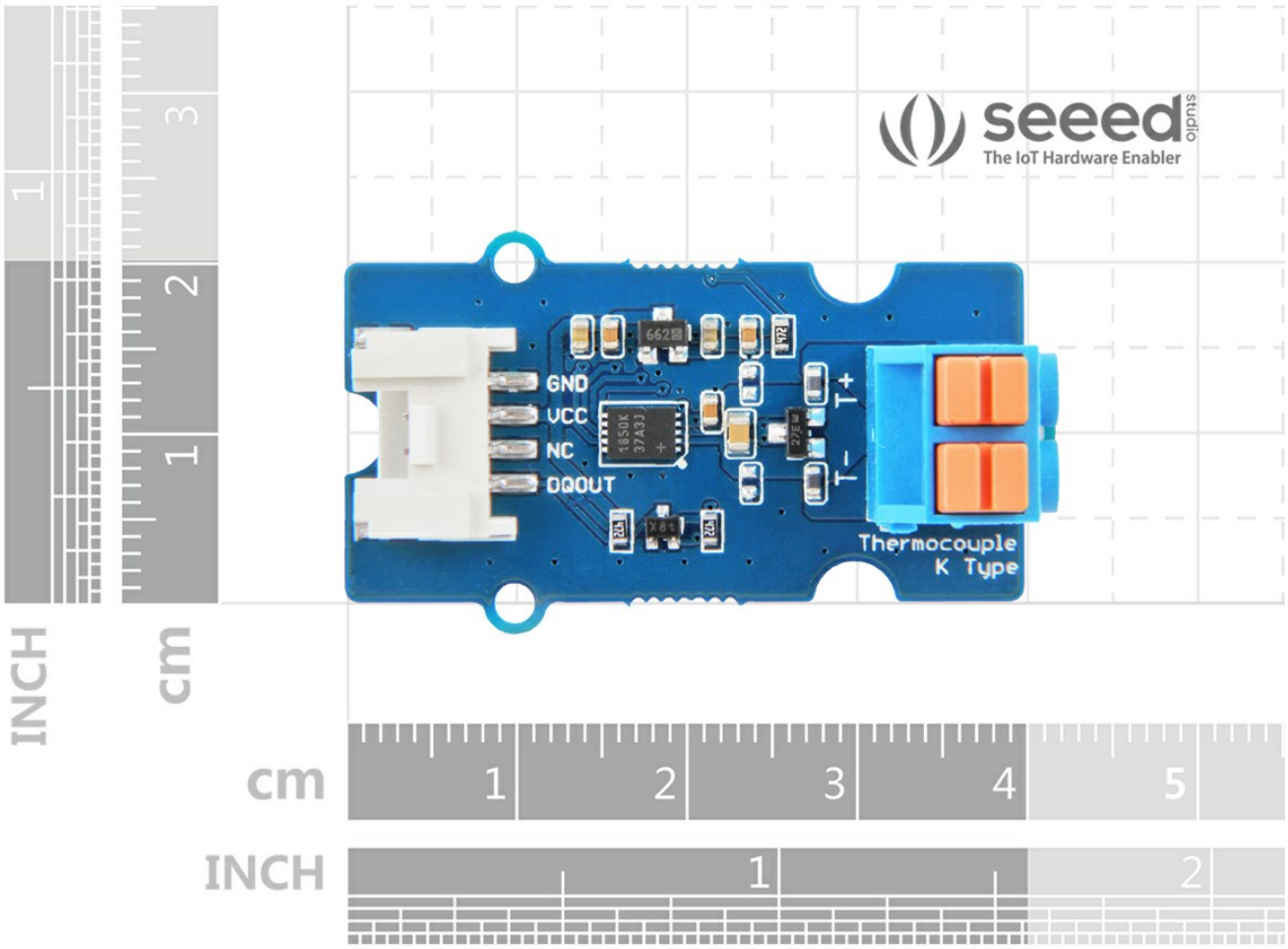
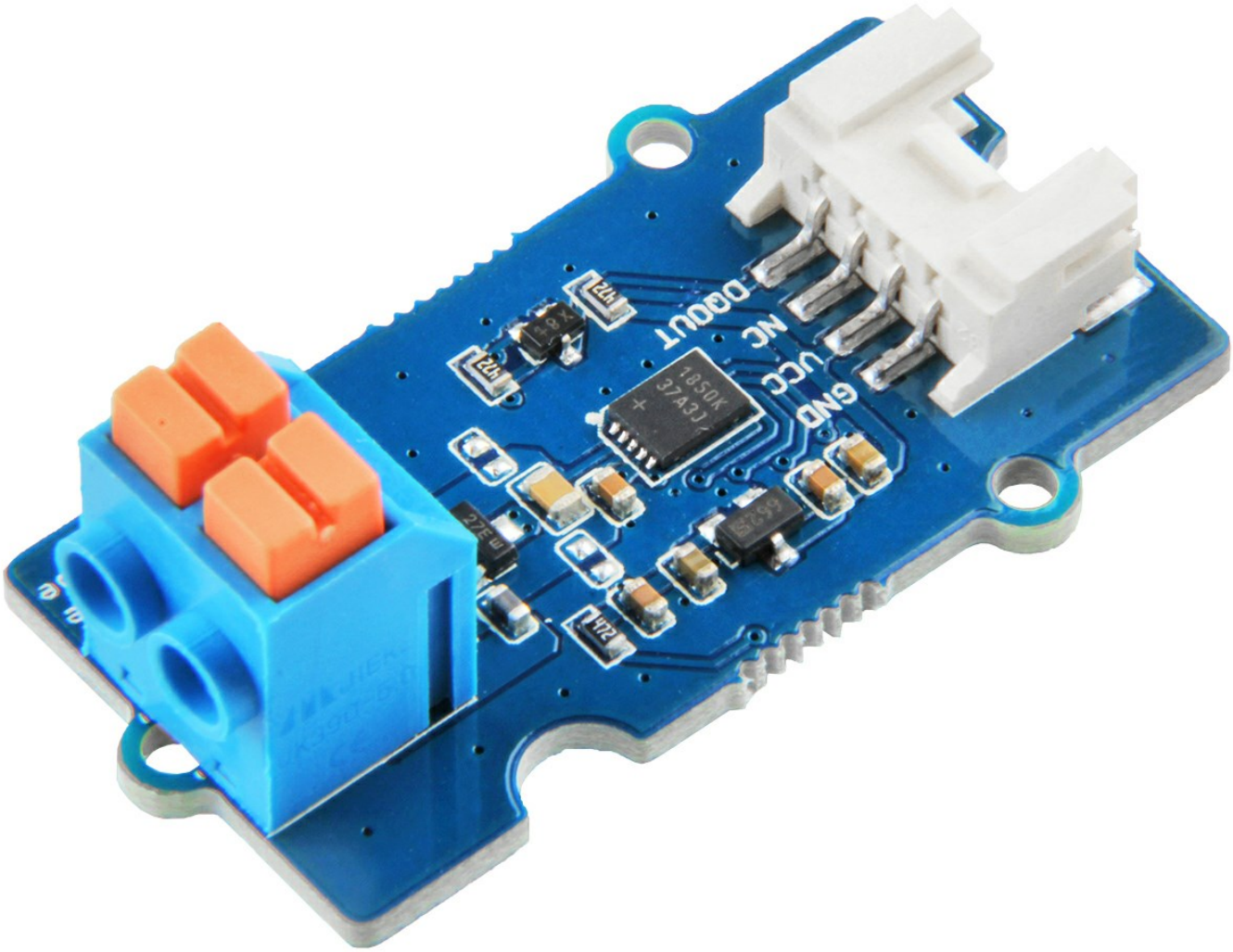










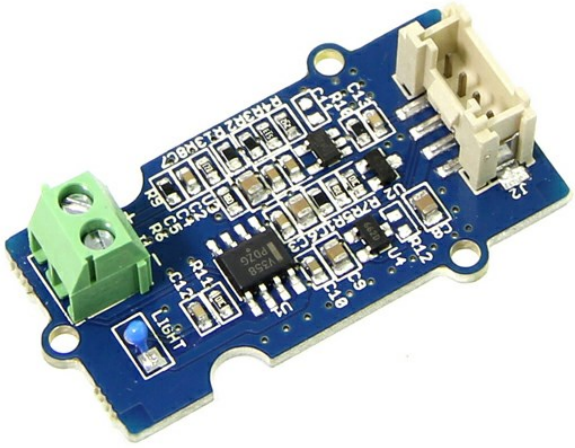


Grove - 1-Wire Thermocouple Amplifier (MAX31850K)

SKU 101020555

1

Related



Grove - High Temperature Sensor

Grove - High Temperature Sensor

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Thermocouple Temperature Sensor K Type-1M

Thermocouple Temperature Sensor K Type-1M

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Description

The Grove - 1-Wire Thermocouple Amplifier (MAX31850K) is a thermocouple-to-digital converters with 14-bit resolution and cold-junction compensation. This module is desig
used in conjunction with a k-type thermocouple. The thermocouples have a much larger measurement range than thermistors. For example, this k-type thermocouple on ou
a measurement range of -50℃ to +600℃.

This module is based on the MAX31850K, which integrates amplifier, ADC and 64-bit ROM. Thanks to the 64-bit ROM, each device has a unique 64-bit serial code, which allows
to function on the same 1-Wire bus. Therefore, it is simple to use one microcontroller (the master device) to monitor temperature from many thermocouples distributed ove

Again, this module can't work alone, it must work with a k-type thermocouple, if you do not have one, you can consider Thermocouple Temperature Sensor K Type-1M in our

Features

- Integrated Cold-Junction Compensation

- Wide Conversion Range: allow readings from -270℃ to +1768℃

- 14-Bit, 0.25℃ Resolution

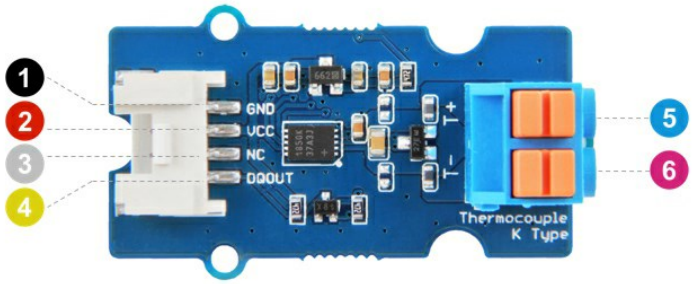
- Will not work with any other kind of thermocouple except K type

- Detects Open Thermocouple

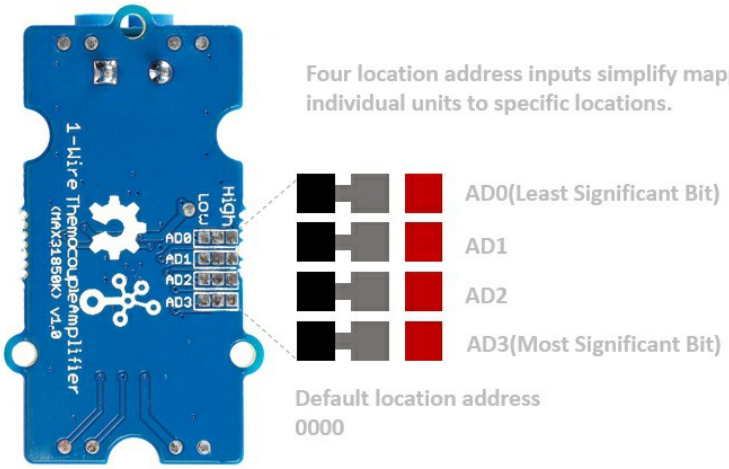
Typical Applications

- Medical
- Appliances
- Industrial
- HVAC(Heating, Ventilation and Air Conditioning)

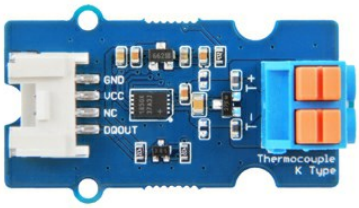
Pin Out

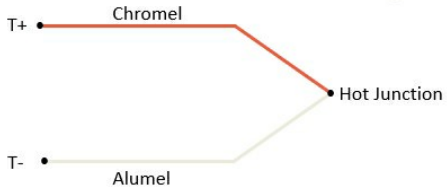


1. GND: connect this module to the system GND
2. VCC: you can use 5V or 3.3V for this module
3. NC: not connected
4. DQOUT: Data Input/Output. Open-drain 1-Wire interface pin.
5. T+: Thermocouple Input, positive pole.
6. T -: Thermocouple Input, negative pole



Assembly drawing





Attention:

Usually the positive pole of the K-type thermocouple is red and the negative is light white, but we can't guarantee that all K-type thermocouples are like this. So the above only for the K-type thermocouple purchased from our website. If your K-type thermocouple is obtained from other places, you need to use other methods to judge the positi negative.

Technical Details

Dimensions	40mm x 20mm x 18mm
Weight	G.W 11.10g N.W 4.90g
Battery	Exclude
Operating Voltage	3.3V / 5V
Temperature Resolution	14 bits
Temperature Accuracy	± 2℃
Operating Temperature Range	-40℃ to +125℃
Storage Temperature Range	-65℃ to +150℃
Allow Readings Range	-270℃ to +1768℃
Input Jack	DIP Female Blue-2Pin
Output Interface	1-Wire bus

Part List

Grove - 1-Wire Themocouple Amplifier (MAX31850K)	1
Grove Cable	1

ECCN/HTS

ECCN EAR99
HSCODE9025900090

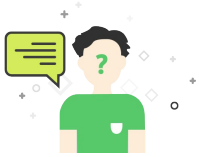
Learn

[Wiki] Grove - 1-Wire Thermocouple Amplifier(MAX31850K)

This is the wiki page for this product, which will show you how to use the product, as well as details about the software and hardware.

Questions and Answers

Have a question about this? Ask people who



Grove - 1-Wire Thermocouple Amplifier (MAX31850K)

SKU 101020555

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