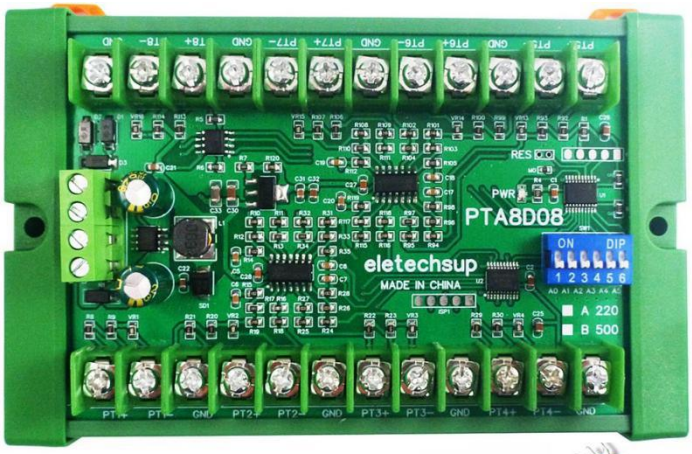
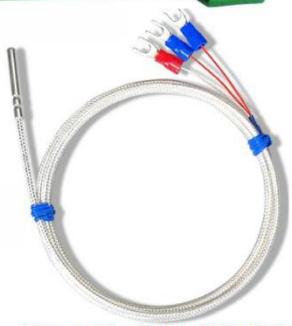
PTA8D08 8CH PT100 temperature sensor



Type A -200~550°C



Type B -50~200°C

Demo : https://youtu.be/suhoAk8Lt-8

PTA8D08 PT100 RS485 Acquisition module Description:

Working voltage: DC 8~30V
Working current: 14-25MA
MODBUS RTU protocol, 03 read command, 06 or 16 write command.
Serial port baud rate: 9600 (default), N, 8, 1
By modifying the 485 address, up to 247 modules can be cascaded (more than 16 please use R485 repeater)
Can read temperature and PT100 resistance value
Adapted sensor: PT100 3-wire or 2-wire sensor
Temperature measurement range: A version -40℃ to +220℃; B version -40℃ to +500℃. It is recommended to select a version with a smaller range within the range that meets the measurement.
Temperature measurement accuracy: 1%.
Size: 136 X 92 X 32MM
Weight: 166g

MODBUS RTU protocol please refer to : "PTA8D08 8CH PT100 RS485 sensor protocol "
Note: This is a low-cost PT100 temperature collector based on LM324, and some channels may have relatively large accuracy errors. In this case, you can replace the LM324 or give up this channel directly.

PT100 sensor specifications(Type A):

Type: PT100
Probe Diameter: 6.5mm
Probe Length: 30mm
Probe Material : Stainless steel
Cable Length: 0.5M
PTFE sheath 3-Wire type
Temperature -200~550° C degree
Nominal accuracy : 0.1%

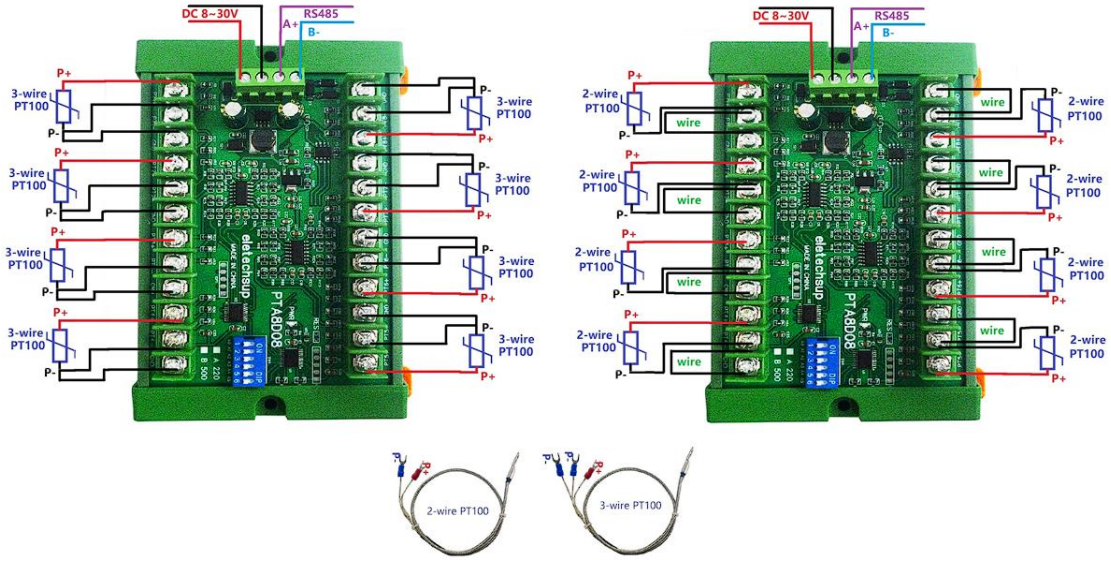
PT100 sensor specifications(Type B):

Type: PT100
Probe Diameter: 4mm
Probe Length: 30mm
Probe Material : Stainless steel
Cable Length: 0.5M
PTFE sheath 3-Wire type
Temperature -50~200° C degree
Nominal accuracy : 0.3%

DIN rail Box parameters:

Product model: UM80
Color: Green
Width: suitable for PCB board width UM80(80mm)
Insulation grade: flame-retardant VO grade
Backplane length: suitable for 117 mm PCB boards
Net weight: 89g
Installation: DIN35 and C45 rail

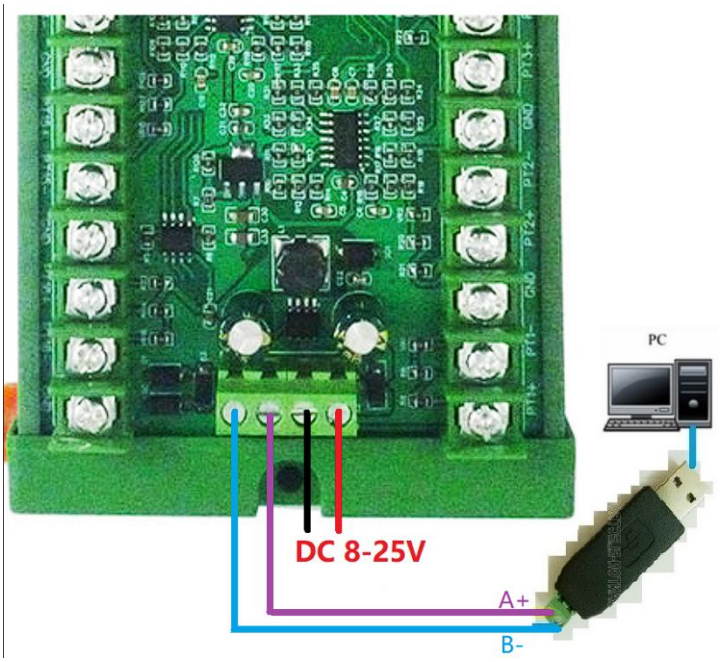
Wiring diagram:

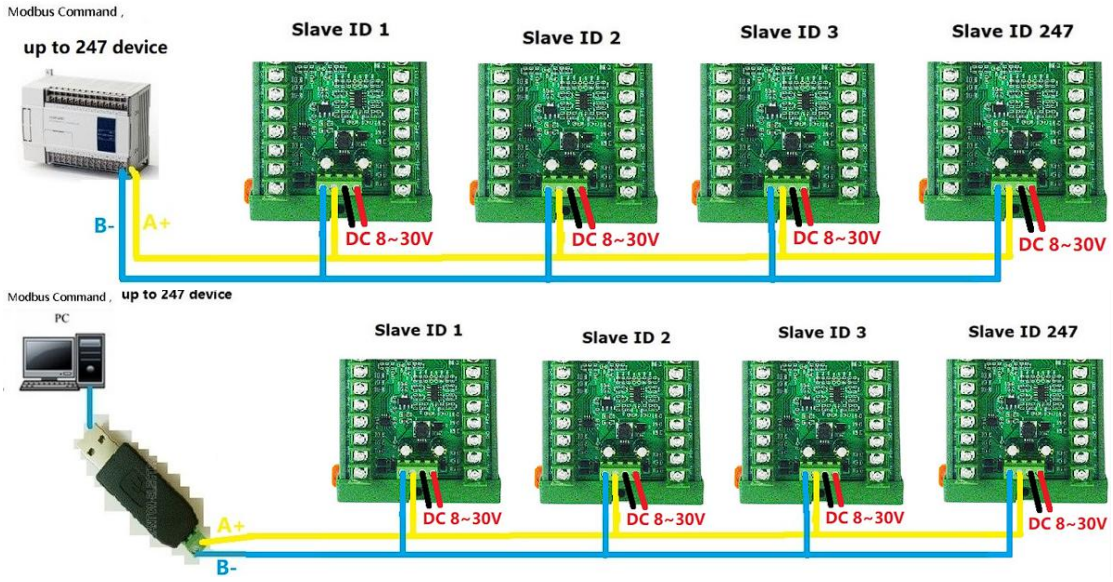


3-wire probe wiring mode: the red wire is connected to P+, and the other two wires of the same color are connected to P- and GND (the ports are not distinguished).

2-wire probe wiring mode: The red line is connected to P+, the blue line is connected to P-, and the P- and GND are connected with a wire.

RS485 bus wiring diagram:




Modbus Command ,
up to 247 device
Slave ID 1
Slave ID 2
Slave ID 3
Slave ID 247
B-
A+
DC 8~30V
DC 8~30V
DC 8~30V
DC 8~30V

Modbus Command ,
up to 247 device
PC
Slave ID 1
Slave ID 2
Slave ID 3
Slave ID 247
A+
B-
DC 8~30V
DC 8~30V
DC 8~30V
DC 8~30V