



## Features:

Working voltage : DC 5-40V(6.5-28V recommended)

Working current: Digital tube turn off is 5MA(12V), Digital tube turn on is 18MA(12V)

MODBUS RTU protocol, 03 Read, 06 Write.

Serial baud rate: 9600 (default), N, 8, 1

By modifying the RS485 address, up to 247 module s can be connected (More than 16 devices, it is recommended to use RS485 repeater)

Temperature and humidity sensor is AM2320

The voltage conversion module is DD4012SA,a High-efficiency and Low-heat voltage Converter

Size: Module is 59 X 30 X 18MM,Shell is 73 X 37 X 23MM, External sensor(only R444A01\_B) is 60 X 26 X 13

Weight: Module is 16g, Shell is 16g, External sensor is 15g

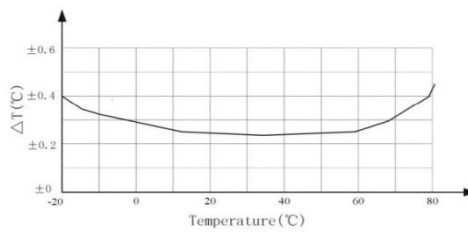
Use Please refer to : "R444A01 modbus rtu protocol"

## Note:

With the built-in sensor version (R444A01\_A), turn on the display for a long time will Will let the temperature rise 1-2 degrees Celsius. It is recommended to turn off the digital tube, or use a version with an external sensor (R444A01\_B)

**R444A01 relative temperature performance table**

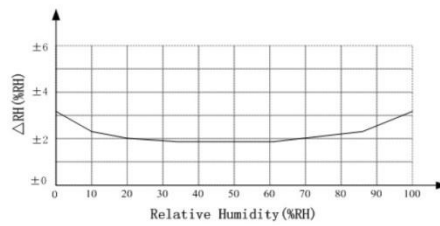
parameter	condition	min	typ	max	unit
resolution			0.1		°C
			16		bit
Accuracy			±0.5		°C
Range		-40		80	°C
Repeatability			±0.2		°C
Interchangeability					
Response time	1/e(63%)		<5		S
Drift			±0.1		°C/yr



**The maximum error of the temperature sensor**

**R444A01 relative humidity performance table**

parameter	condition	min	typ	max	unit
resolution			0.1		%RH
Range		0		99.9	%RH
Accuracy	25°C		±3		%RH
Repeatability			±0.1		%RH
Interchangeability		Completely interchangeable			
Response time	1/e(63%)		<5		S
Sluggish			±0.3		%RH
Drift	Typical values		<0.5		%RH/yr



**relative humidity of maximum error**



**Show "Error" after power-on**

If "Error" is displayed for a long time, it indicates that the sensor is not connected or damaged.

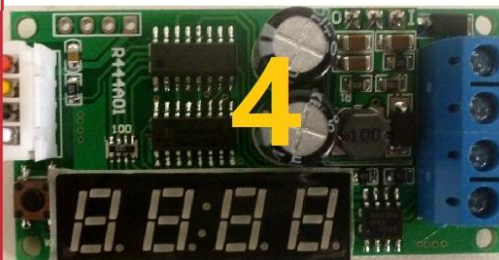


**After 5 seconds, display the temperature or humidity**



**Trigger "" KEY "button to switch the display temperature and humidity.**

(This parameter is powered down memory)



**Press and hold the "KEY" button for 3 seconds to turn off or turn on the display.**

(This parameter is also powered down memory)

How to use:

1 Display "Error" after power-on

If "Error" is displayed for a long time, it indicates that the sensor is not connected or is damaged

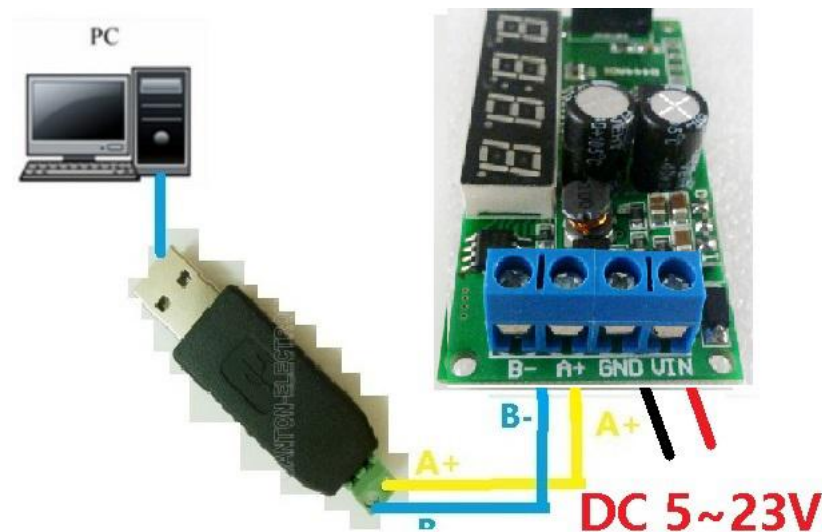
2 After 5 seconds, display the temperature or humidity

3 Trigger "KEY" button to switch the display temperature and humidity. (This parameter is powered down memory)

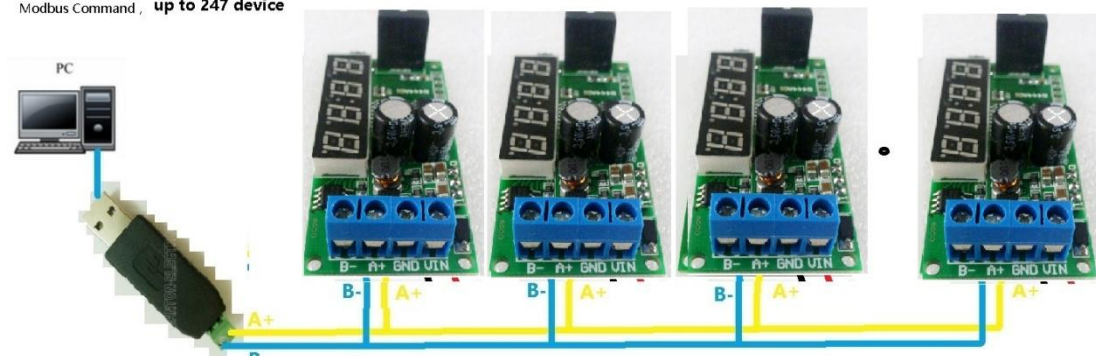
4 Press and hold the "KEY" button for 3 seconds to turn off or turn on the display. (This parameter is also powered down memory)

Note: If the digital tube is turn off after power-on, press and hold the "KEY" button until the digital tube is turn on

Wiring diagram:



Modbus Command , up to 247 device



Modbus Command , up to 247 device

