

# Temperature & Humidity Controller

## 1. General

Our controllers accept the digital T&H sensors and display the values on the panel. They have the fan contact, the heater contact and the alarm of detection of heater and sensor.

They can be equipped with RS485 port or alarm output to realize transmitting data or controlling in the long distance. The users can program the points of alarm, the display and communication by the keys.

And they have good advantages of anti-jamming and reliability. They comply the standard of GB/T 15309-1994. (Note: Because they use the digital T&H sensor, they have a better cost than other sensor. But they measure and control in the air, such as computer room, warehouse, room of electricity distribution etc..)



## 2. Technical feature

Technical parameter		Value
Sensor		Digital Temperature and Humidity Sensor
Range	Temperature	-40°C~99.9°C
	Humidity	1%~99%
Precision	Temperature	±1°C
	Humidity	±4%
Programmable control range	Heater (raise °C)	-40°C~40°C
	Fan (decrease °C)	0~100°C
	Humidity control	1%~99%
Capacity of relay		AC 250V/5A
Communication		RS485 Port, Modbus-RTU protocol
Power supply		85V~265V AC, 100~350V DC
		Consumption:<0.8W+0.7W (relay)
Test voltage		supply/input/output/connector 2kV/1 min 50Hz
ENVIRONMENT	Temperature	Work:-10°C~55°C
		Storage:-20°C~+70°C
	Humidity	≤93% relative
	Altitude	≤2500m

### 3. Specification

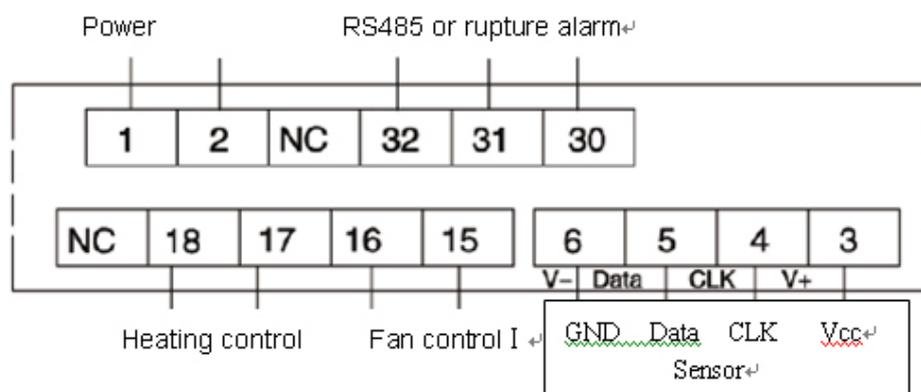
Model	Photo	Panel Size	Measurable parameters	Option
WHD72TH-11		72 x 72	1 channel T&H	/C RS485 port (Modbus-RTU)
WHD96TH-11		96 x 96	1 channel T&H	
WHD96TH-22		96 x 96	2 channels T&H	
WHD46TH-11		120 x 60	1 channel T&H	
WHD46TH-22		120 x 60	2 channels T&H	
WHD46TH-33		120 x 60	3 channels T&H	

### 4. Note:

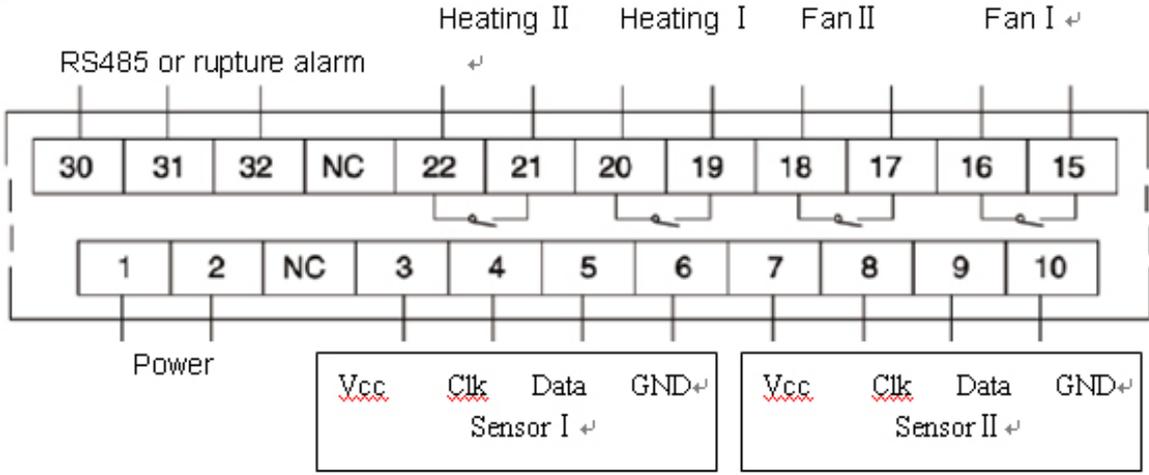
- 1). Number of temperature, humidity(or temperature) sensor to be connected with WHD72, WHD96, WHD 46 is up to 1,2, 3 respectively;
- 2). Every sensor matches with two dry contacts that are connected with heater and fan respectively. (The heater is for rising temperature or removing moisture, the fan is for decreasing temperature)
- 3). Between RS485 and alarming output, only one can be selected, "-C" for RS485"-J" for alarming.
- 4). The length of wire between sensor and controller  $\leq 10m$ .

### 5. Wiring diagram

#### • WHD72



• **WHD96**



• **WHD46**

