



### Overview:

**CTH21** Temperature and Humidity Transducer is specifically designed for indoor temperature and humidity detection and control. It features a compact design, easy installation, and user-friendly operation. With built-in protection against lightning surges, electrostatic discharge, group pulse, and voltage fluctuations, it offers strong anti-interference capabilities and includes an alarm function. This transducer is ideal for use in computer rooms, buildings, warehouses, and other environments requiring temperature and humidity measurement and control.

### Feature:

- Standard switch box installation for easy setup.
- Sleek and lightweight design with an LCD backlight displaying both temperature and humidity.
- High precision imported sensors ensure long-term stability and strong anti-interference.
- Optional passive temperature output available.
- Adjustable temperature and humidity offset for convenient on-site operation.
- CE and RoHS certified.
- Equipped with relay and alarm functions.

### Application:

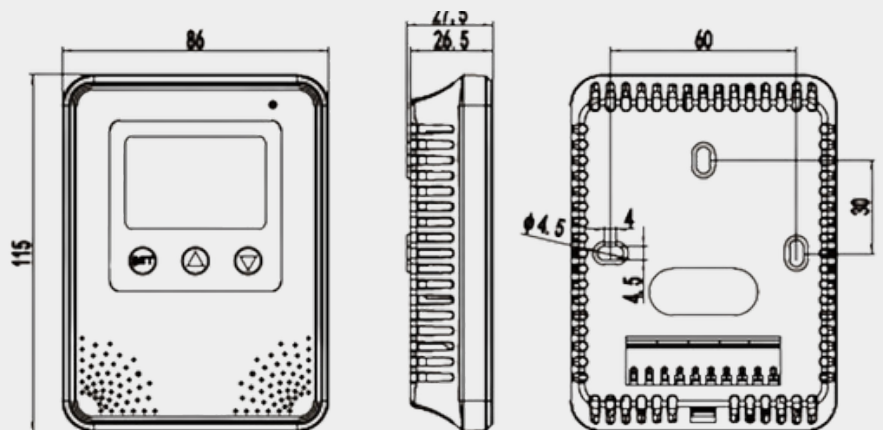
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## CTH21

### Indoor Temperature and Humidity Controller



### Dimensions:



**Specifications:**

**Indoor Temperature and Humidity Controller**

Relative Humidity	
Sensor	Digital type
Measuring Range	0%~100%RH
Output	RS485/Modbus, 0-1 0VDC, 4-20mA
Response Time	≤10s (20°C, slow flow air)
Accuracy	±3%@ 20 C & 20~80%RH
Temperature	
Sensor Measuring	Digital or thermal resistance, see Order Ref No
Range	0~50 C, -20-60 C etc.
Output	0~10VDC, RS485/Modbus
Thermal resistance	0.1°C, 0.1%RH
Thermal resistance	See Order Ref No. and Thermal Resistance Indexing Table
Output Load	≥10 KΩ (voltage output)
Accuracy	Digital type: ±0.5 C@20C; Passive Thermal resistance type: typical±0.2-0.4C@25C, see Order Ref No.
Display	LCD display and keys with unit display and backlight
Power Supply	Voltage type/485 type: 15-35VDC/24VAC±20%
	RS485 type: 15-35VDC/24VAC±20% <b>Note: when RS485 and voltage type uses AC power supply, an isolation transformer is required</b>
Shell Material	PC Shell
Protection Grade	IP30
Alarm function	1xBUZZER, 1xLED
Relay	2xSPST, 3A/30VDC, 3A/250VAC
Working Environment	"-20 - 60" ° B19C ,5%-95%RH (Non-condensing)

### Selection Code:

Code and description		Remark	
CTH21	Indoor type temperature and humidity controller	Model	
3	±3%RH(±0.5 C)	Accuracy Range	
V10	0-10VDC(3-wire)	Humidity Output	
RS	RS485/Modbus		
V10	0-10VDC(3-wire)	Temperature Output	
RS	RS485/Modbus		
1	Pt100, ±0.2C@0C		
2	Pt1000, ±0.2C@0C		
3	NTC10K, ±0.4'C@25C		
4	NTC20K, ±0.4'C@25C		
1	NO		Temperature range
2	0-50C		
3	"-20-60"C		
9	Others (customized)		
1	Setting button, backlight LCD display with unit	Display and setting button	
1	Alarm only	Alarm and relay	
2	Relay only		
3	Alarm and relay		