

# KLTH-2000 Series Duct Temp. & Relative Humidity Sensors

KLED's KLTH-2000 series sensors are designed to monitor HVAC duct air temperature and relative humidity. These sensors offer a range of control signal outputs and are compatible with various automatic control systems. Whether you're cooling a commercial building or optimizing temperature and humidity levels in your lab, KLTH-2000 Series Sensors offer superior performance and accuracy.

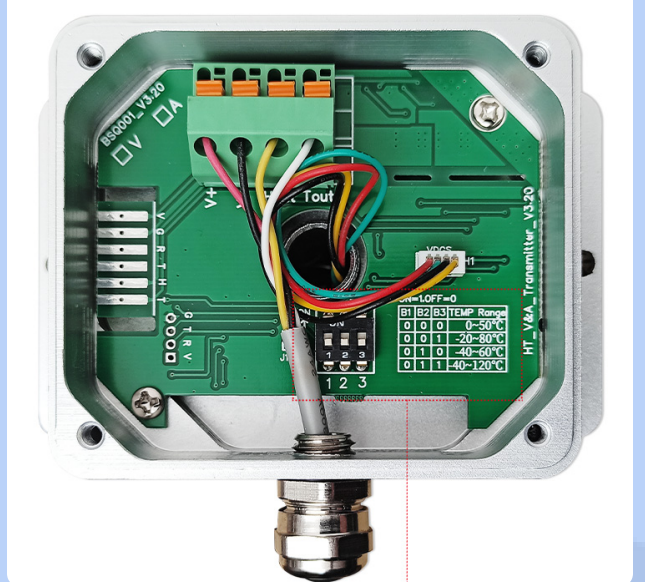
## Overview of Specifications

Place of Origin	Guangdong, China
Model Number	KLTH-2000
Measurement accuracy	±0.5C, ±3%RH (25C 60%RH)
Temperature range	0~120°C (four ranges optional)
Lead length	50~ 100cm (Customizable)
Signal output method	Voltage/current/485
Humidity range	0~99.9%RH



### Optional temperature range

DIP switch can set the temperature range.



## Basic Parameters

Parameter	Specification
Measuring Temp. Range	-40°C to 120°C
Working Environment	-40°C to 120°C, 0-95%RH (Non condensation)
Humidity Accuracy (RH)	2% (20-80% RH: ±2%, 0-95% RH: ±3%)
Humidity Accuracy (RH) @ 25°C	3% (20-80% RH: ±3%, 0-95% RH: ±5%)
Power Supply	24 VDC/24VAC ±20%
IP Rating	IP65
Wire Conduct Diameter	0.33mm <sup>2</sup> to 1.65mm <sup>2</sup>
Storage Temperature	-40°C to 70°C
Housing Material	PC (Fire rating: UL94-V0)
Certification	EN IEC 61000-6-3:2021, EN IEC 61000-6-2:2019, EN IEC 60730-1:2016+A1, EN IEC 60730-2-9:2019+A1

Imported sensor measuring unit and high-strength metal sintered filter cap can not only filter out dust, but also ensure high-humidity air circulation.



Dustproof and Breathable



No fear of condensation

## Display and Control of Temperature and Humidity in Air Conditioning Pipes

- ★ long-term stability
- ★ Fast response and strong resistance to chemical pollution
- ★ Small volume
- ★ Wide measuring range
- ★ High precision



Pipeline installation  
Flange fixing



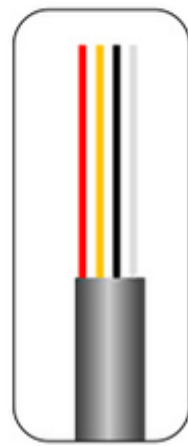
## M10 Waterproof Connector

Diameter of lock wire:3-6mm

lead length:50~100cm



## Core Color Representation



Red:

V+

Positive power supply



Yellow:

Hout

Humidity output



black:

V-

Negative power supply



White:

Tout

Temperature output

## 485 Network Diagram



Dedicated Monitoring Software

# Customizable Sensors

Many of KLED's KLTH-2000 series sensors have customizable features and different specifications. You can choose the output RH accuracy, temperature sensor element type, temperature accuracy, and temperature output. All these options assure that you get a personalized solution which serves your specific requirement. Whether you are working on an OEM project or designing a brand new system, KLED's customizable solutions will meet your unique requirements.

## Maximum Flexibility

KLED's KLTH-2000 series duct sensors offer maximum flexibility with their multiple control signal outputs. You can choose between voltage, current, or 485 outputs depending on your system requirements. Honeywell understands the unique needs of each industry, and that's why these sensors are ideal for use in environmental chambers, HVAC systems, and building automation systems.

## Easy Installation

"KLTH-2000 series sensors are designed for easy installation in HVAC ducts. These HVAC sensors mount directly to ducts for easy temperature and relative humidity control. With customizable sensor features and easy installation, you can rely on these sensors for efficient performance and accurate temperature readings."

- HVAC installation expert

## Superior Accuracy

With an accuracy of  $\pm 0.1^{\circ}\text{C}$  and  $\pm 3\%$  RH (25°C, 60% RH), Honeywell's KLTH-2000 series sensors offer superior accuracy. These sensors use resistance, PT1000, and NTC sensors to ensure that you get the precise measurements you need for your application. KLED's sensors are time-tested and reliable, so you won't have to worry about constant maintenance or calibration.

## Applications

- HVAC systems
- Environmental chambers
- Building automation systems
- Laboratories and clean rooms

SKU	Output RH Accuracy	Temp. Sensor Element Type	Temp. Accuracy	Temp. Output
KLTH-2000M2A	4-20mA 2%	Resistance Value 10K NTC	0.3K @ 25°C	4-20mA
KLTH-2000M2B	4-20mA 2%	Resistance Value 20K NTC	0.3K @ 25°C	4-20mA
KLTH-2000M2P	4-20mA 2%	Resistance Value PT1000	0.2K @ 0°C	4-20mA
KLTH-2000M2M-P	4-20mA 2%	4-20mA PT1000	0.3K @ 25°C	4-20mA
KLTH-2000M2M-E	4-20mA 2%	Digital	0.3K @ 25°C	4-20mA
KLTH-2000M3A	4-20mA 3%	Resistance Value 10K NTC	0.3K @ 25°C	4-20mA
KLTH-2000M3B	4-20mA 3%	Resistance Value 20K NTC	0.3K @ 25°C	4-20mA
KLTH-2000M3P	4-20mA 3%	Resistance Value PT1000	0.2K @ 0°C	4-20mA
KLTH-2000M3M-P	4-20mA 3%	4-20mA PT1000	0.3K @ 25°C	4-20mA
KLTH-2000M3M-E	4-20mA 3%	Digital	0.3K @ 25°C	4-20mA
KLTH-2000M5A	4-20mA 5%	Resistance Value 10K NTC	0.3K @ 25°C	4-20mA
KLTH-2000M5B	4-20mA 5%	Resistance Value 20K NTC	0.3K @ 25°C	4-20mA
KLTH-2000M5P	4-20mA 5%	Resistance Value PT1000	0.2K @ 0°C	4-20mA
KLTH-2000M5M-P	4-20mA 5%	4-20mA PT1000	0.3K @ 25°C	4-20mA
KLTH-2000M5M-E	4-20mA 5%	Digital	0.3K @ 25°C	4-20mA
KLTH-2000V2A	0-10V 2%	Resistance Value 10K NTC	0.3K @ 25°C	0-10V
KLTH-2000V2B	0-10V 2%	Resistance Value 20K NTC	0.3K @ 25°C	0-10V
KLTH-2000V2P	0-10V 2%	Resistance Value PT1000	0.2K @ 0°C	0-10V
KLTH-2000V2V-P	0-10V 2%	0-10V PT1000	0.3K @ 25°C	0-10V
KLTH-2000V2V-E	0-10V 2%	Digital	0.3K @ 25°C	0-10V
KLTH-2000V3A	0-10V 3%	Resistance Value 10K NTC	0.3K @ 25°C	0-10V
KLTH-2000V3B	0-10V 3%	Resistance Value 20K NTC	0.3K @ 25°C	0-10V
KLTH-2000V3P	0-10V 3%	Resistance Value PT1000	0.2K @	0-10V

## Conclusion

KLED's KLTH-series duct sensors are the ideal solutions for monitoring air temperature and relative humidity in HVAC systems and environmental chambers. With customizable features, multiple control signal outputs, and easy installation, these sensors provide reliable and precise temperature and humidity readings to ensure optimal performance of the systems they are installed in.