

# Rail type T&H sensor

Model ES-A240



## Main features

- High cost performance, wide voltage design.
- Digital linearization correction, high precision and high stability.
- Full-scale temperature and humidity compensation, wide temperature and humidity measurement range, optional measurement range.
- Flexible installation and convenient use.
- Small size, light weight and anti-vibration.
- A variety of shapes to facilitate the needs of different customers.

## Compliance

The electromagnetic compatibility in accordance with the following applicable directives:

EMC 2014/30/EU

Electromagnetic Compatibility

EMC 2014/35/EU

Electromagnetic Compatibility

## Introduction

The relative humidity of the air is the ratio of the absolute humidity in the air to the saturated absolute humidity at the same temperature, and the number is a percentage. (that is, in a certain period of time, the percentage of water vapor contained in the air in a certain place to the saturated water vapor at that temperature), expressed in RH.

The ES-A240 rail type temperature and humidity sensor adopts imported digital temperature and humidity sensor, which has been carefully calibrated during production, and the calibration data is stored in the internal memory. The relative humidity and temperature sensor has the characteristics of digital output and can be completely inter-rotated, and does not need to go through a complex calibration and calibration process. It is outstanding in measurement accuracy, linearity, repeatability, inter-rotation, and consistency. Environmental equipment matching, instrument equipment integration, general environmental testing.

## Application

It is widely used in building automation, telecommunications room, papermaking, warehousing and logistics, shopping malls, hotels, cinemas, railway stations, museums, theaters, agricultural greenhouses, hospitals, meteorology, clean workshops and other fields that need to measure temperature and humidity.

## Dimension

Unit:mm



## Specification

DC power supply (default)	5~30V DC	
Power consumption	0.1W	
Range	humidity	0%RH-100%RH
	temperature	-40°C~+80°C
Accuracy	humidity	±3% RH (default), ±2% RH (5% RH~95% RH, 25°C)
	temperature	±0.5°C (default), ±0.4°C (25°C)
Resolution	humidity	0.1%RH
	temperature	0.1°C
Long-term stability	humidity	≤1%RH/y
	temperature	≤0.1°C/y
Response time	humidity	≤8s (1m/s wind speed)
	temperature	≤25s (1m/s wind speed)
Signal output	RS485 output (standard Modbus-RTU protocol)	
Transmitter circuit operating temperature and humidity	-40°C~+80°C, 0%RH~95%RH (non-condensing)	
Refresh Time	1s	
Installation	35mm standard rail installation (DIN35)	

## Order guide

ES-A240	temperature and humidity sensor		
	CODE	Type	
	A	DIN35 rail installation	
	C	Others	
		CODE	Signal output
		1	RS485
ES-A240	A	1	Order example