

# Dew point temperature sensor

Model ES-A120



## Introduction

Dew point temperature refers to the temperature of air when it is cooled to saturation under the condition that the water vapor content and air pressure remain unchanged. Figuratively speaking, the temperature when the water vapor in the air turns into dewdrops is called the dew point temperature.

The ES-A120 stainless steel dew point temperature transmitter can be installed through 4-way pipe thread to measure the dew point temperature in the pipeline, and can also directly measure the atmospheric dew point temperature in ordinary environments.

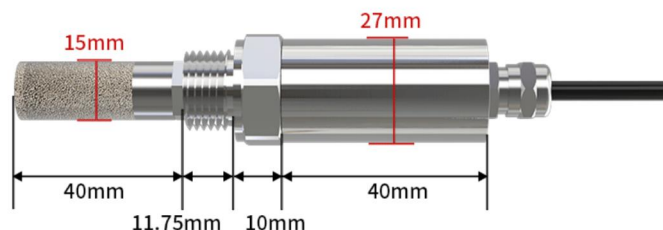
ES-A120 dew point temperature transmitter housing is made of 304 stainless steel, with waterproof outlet and IP65 protection grade. The circuit adopts imported industrial-grade microprocessor chip and imported high-precision temperature sensor to ensure the excellent measurement performance of the product. The product appearance is exquisite and compact, suitable for various industrial environments. The output signal type is RS485, the maximum communication distance is 2000 meters, standard modbus protocol, and supports secondary development.

## Application

ES-A120 Dew point temperature transmitters are widely used in many fields, mainly including industrial production, environmental monitoring and special application scenarios.

## Dimension

Unit:mm



## Features

- Use high-quality imported temperature sensors to measure temperature data.
- Waterproof grade IP65, suitable for a variety of industrial environments.
- DC10-30V wide voltage power supply.
- G1/2 thread installation.

## Compliance

The electromagnetic compatibility in accordance with the following applicable directives:

EMC 2014/30/EU

Electromagnetic Compatibility

EMC 2014/35/EU

Electromagnetic Compatibility

## Specification

DC power supply (default)	10-30V DC
Maximum power consumption	0.4W
Accuracy	Dew point temperature: $\pm 0.8^{\circ}\text{C}$ ( $25^{\circ}\text{C}$ ) Temperature: $\pm 0.4^{\circ}\text{C}$ ( $25^{\circ}\text{C}$ )
Transmitter circuit operating temperature and humidity	$-40^{\circ}\text{C}\sim+60^{\circ}\text{C}$ , 0%RH~95%RH (non-condensing)
Probe operating temperature	$-40^{\circ}\text{C}\sim+100^{\circ}\text{C}$
Probe operating humidity	0%RH-100%RH
Dew point temperature range	$-30^{\circ}\text{C}$ - $100^{\circ}\text{C}$
Dew point temperature display resolution	0.1 $^{\circ}\text{C}$
Temperature display resolution	0.1 $^{\circ}\text{C}$
Dew point temperature, temperature refresh time	1s
Long-term stability	$\leq 0.1^{\circ}\text{C}/\text{y}$
Response time	$\leq 25\text{s}$ (1m/s wind speed)
Output signal	RS485(Modbus protocol)
Installation method	G1/2 thread installation

## Order guide

ES-A120	dew point temperature transmitter		
	CODE	Range	
	R1	$-40^{\circ}\text{C}\sim+100^{\circ}\text{C}$	
		CODE	Signal output
		1	RS485
ES-A120	R1	1	Order example