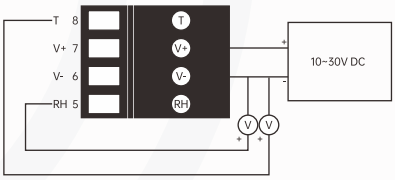
Please refer to page 3 for selection details

Temperature And Humidity Transmitter DBP20

Overview

A temperature and humidity transmitter uses a temperature and humidity integrated probe as a temperature measuring element to collect temperature and humidity signals. After being processed by circuits such as voltage stabilization filtering and operational amplification, it is converted into a current signal or voltage signal output that is linearly related to temperature and humidity. It can also be directly output through a 485 interface through the main control chip.



Function Characteristics

Multiple installation and output options are available. The shell design is lightweight and beautiful, with LCD backlight temperature and humidity dual display power supply and output with overvoltage and reverse protection functions. It has a high protection level of up to IP65 and adopts high-precision sensors and main control, with good long-term stability and anti-interference ability

Application

Pharmaceutical industry, electronic industry air conditioning units, subway ventilation systems, commercial buildings, laboratories, meteorology

Product Description

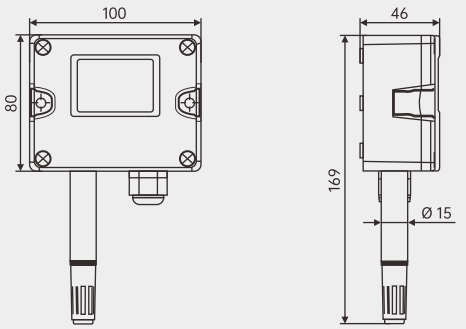
Specially designed for measuring the relative humidity and temperature of HVAC system ducts. The humidity sensor outputs an active signal, while the temperature sensor outputs an active or passive signal. Temperature and humidity transmitters are the most commonly used sensors in production and daily life, widely used in various fields such as meteorology, national defense, scientific research, postal and telecommunications, chemical industry, environmental protection, medicine, hotels, grain storage, HVAC, etc. for measuring and controlling temperature and humidity in the air.

Technical Specifications

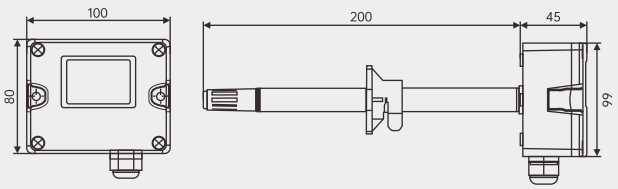
Relative Humidity	
Sensor	digital
Range	0%~100%
Output	Output: RS485/Modbus, 0~10VDC, 4~20mA optional
Precision	±3%@25℃&20~80%RH
Response Time	+Accuracy at 20 ° C ± 1.0% RH (0... 90% RH); ± 1.7 % RH (90 ... 100 % RH)； +Accuracy ± 0.2 ° C at 20 ° C
Temperature	
Sensor	Digital or thermistor, see selection table
Range	0~50℃，-20~60℃， -70 . ..+180 ° C, etc
Output	RS232，0~20 mA，4-20mA，0~1V， 0~ 5V，0~10V
Thermal Resistor	Refer to the selection table and thermal resistance scale table
Precision	Digital sensor: ± 0.3 ℃ @ 5~60 ℃ Thermal resistance: Typical ± 0.2~0.4 ℃ @ 25 ℃, see selection table
Power Supply	Voltage type/485 type 15~35VDC,/24VAC ± 20% current type 18.5~35VDC (RL=500 Ω)/8.5~35VDC (RL=0 Ω)
Output Load	≤ 500 Ω (current type), ≥ 2K Ω (voltage type)
Display	Optional LCD display with unit display and backlight (4-20mA without backlight)
Housing Material	PC casing, PC probe, and polymer filter (optional stainless steel probe and stainless steel sintered filter)
Working Environment	-20~60 ℃, 5%~95% RH (non condensing)
Protection Level	IP65

Size mm

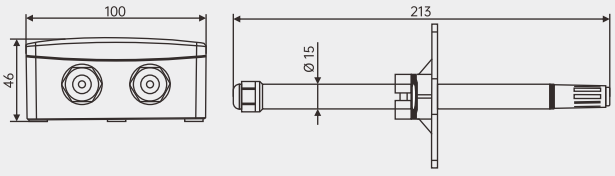
Wall Mounted Type



Duct Type



Split Type



DBP20- Selection Composition

Example Of Selection **DBP20**

A	I	E	N	U	X	Y	W	P	N
1	2	3	4	5	6	7	8	9	10

1. Installation Type	A	Wall mounted type
	B	Duct type
	C	Split type
2. Accuracy Level	G	±1%RH(0.1℃)
	H	±1.5%RH(0.2℃)
3. Output (Multiple Choice)	K	0~1V
	L	0-10V
	M	0-5V
	N	0~20mA
	O	4~20mA
	P	RS485
	Q	RS232
	T( )	Other outputs
4. Shell Material	R	aluminum alloy
	S	PC
	T( )	Other materials
5. Temperature Range	A	none
	B	0~50℃
	C	-20~60℃
	D	-70 ~+180 ℃
	T( )	Other ranges
6. Humidity Range	L	0 ~100 % RH
	T( )	Other ranges
7. Display	M	LCD display
	N	none

Explanation:

The DBP20 temperature and humidity transmitter is a wall mounted type with an accuracy of ± 1% RH (0.1 ℃), an output of 4-20mA, a housing material of PC, a temperature range of 0-50 ℃, a humidity range of 0-100% RH, and an LCD display.

Product Certification

Compliance and approval; The Ludwig water quality analyzer meets key standards and certifications for process measurement technology; To ensure the highest reliability in such settings;