PAQUIN SENSORS
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Humidity & Temperature Transmitter

- Measures relative humidity from 0–100% RH with ±3% RH accuracy at 68°F (20°C) and 60% RH.
- Temperature accuracy listed as ±0.54°F (±0.3°C) at 68°F (20°C).
- Output options include RS485/Modbus and 0–10 VDC.
- 12–36 VDC wide-range power supply with overvoltage and reverse-polarity protection.
- Compact probe design with IP65 protection rating for easier installation in ducts or equipment areas.

About

The P163is a probe-type temperature and humidity transmitter designed for compact installation and reliable environmental measurement. It uses a high-precision digital probe with good long-term stability and anti-interference performance. The transmitter supports RS485 Modbus or 0–10 VDC output options, making it adaptable for building automation, HVAC, and industrial monitoring systems. With IP65 protection and a working environment of -40°F to 185°F (-40°C to 85°C), it is built for use in demanding indoor measurement locations.

Applications

- ✓ HVAC
- ✓ Data Centers
- ✓ Warehouses
- ✓ Commercial Buildings
- ✓ Parking Garages
- ✓ Museums
- ✓ Laboratories
- ✓ Schools
- ✓ Hospitals

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Build Your Part Number

Series P163

Example: P163BB2

Series
P163

Humidity Output - *select one*	
A	0 ... 10 VDC (3 wire)
B	RS485 Modbus

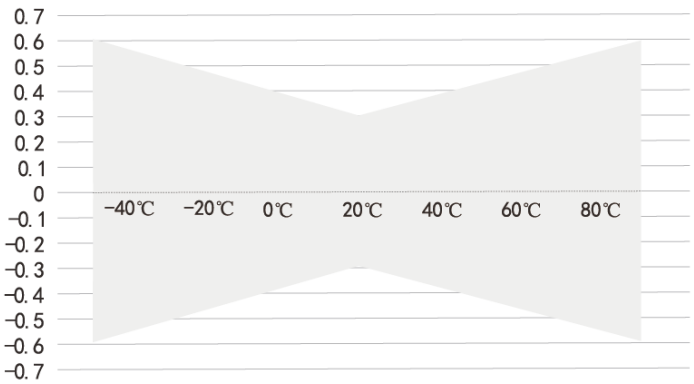
Temperature Output - *select one*	
A	0 ... 10 VDC (3 wire)
B	RS485 Modbus

Temperature Range - *select one*	
0	None
1	32°F ... 122°F (0°C ... 50°C)
2	-4°F ... 140°F (-20°C ... 60°C)
3	Customer Specified

1. When the temperature output selection is 0 ... 10 VDC, only temperature ranges 1, 2, or 3 can be selected; otherwise, only 0 can be selected.
2. If the transmitter probe is exposed to high concentrations of chemical gases for a long time, this may cause the reading of the sensor to shift.

Technical Parameters		
Relative Humidity	Sensor	Digital
	Measurement Range	0 ... 100%
	Output	RS485 Modbus 0 ... 10 VDC
	Accuracy	±3% @ 68°F (20°C) and 60% Relative Humidity
Temperature	Sensor	Digital
	Measuring Range	Customer Selected
	Output	RS485 Modbus 0 ... 10 VDC
	Accuracy	±3% @ 68°F (20°C) (See table below)
	Power Supply	12 ... 36 VDC
	Shell Material	PC Shell
	Working Environment	-40°F ... 185°F (-40°C ... 85°C) 5 ... 95% Relative Humidity (Non-condensing)
	Protection Level	IP65

Temperature Accuracy Curve



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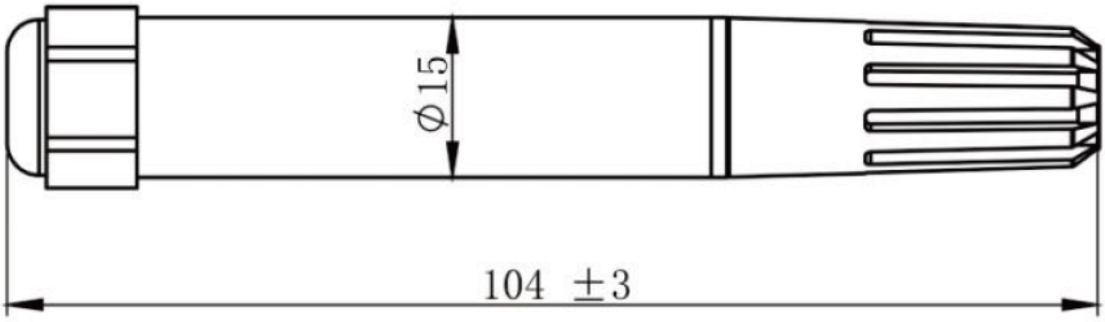
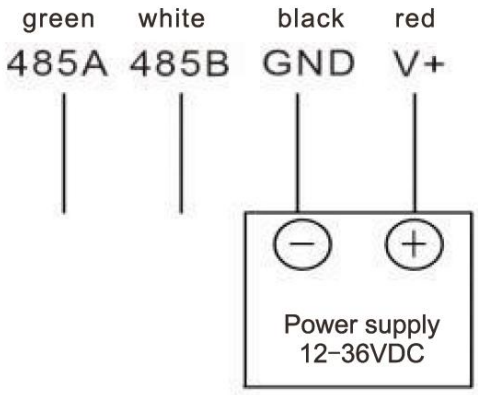
Dimensions and Installation

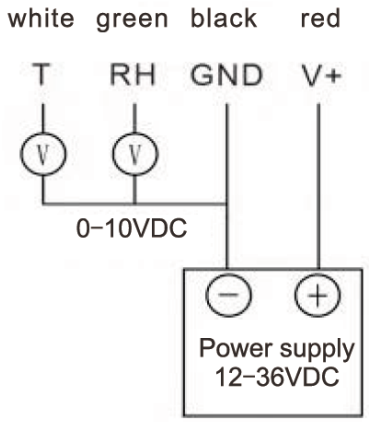


Output Wiring

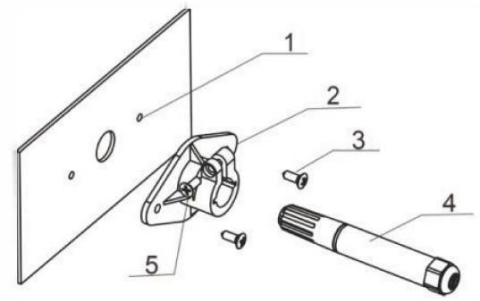
RS485 Output



Voltage Output



Installation



1. Open installation hole
2. Install the mounting flange
3. Tighten the fixing screws
4. Insert the temperature and humidity transmitter and adjust into position
5. Tighten the flat tapping screw

Caution

1. Avoid close heat sources, cold sources, or direct sunlight.
2. Not suitable for use in the environment of oil pollution, organic solvent and corrosive gas.
3. When in dust and other environments, the filter membrane of the probe must be cleaned regularly.
4. When not in use for a long time, please store it in a dry environment.

Additional Information

Paquin Sensors' product portfolio is designed to provide options to fit the most diverse range of specifications.

We collaborate with our customers to match the best product technologies with your unique application requirements.

Please contact us or call +1 (800) 831-8217 anytime to discuss your needs!