flyUP :: Technology

Product Specifications

Temperature and Humidity Sensor



Overview:

A temperature and humidity sensor is a device that measures the temperature and humidity of the surrounding environment. These sensors typically consist of two main components: a thermistor, which measures temperature, and a hygrometer, which measures humidity. The sensor can be used to monitor and control the temperature and humidity levels in a wide range of applications, such as HVAC systems, greenhouses, museums, and data centers.

There are different types of temperature and humidity sensors available, including those that use resistance, capacitance, and thermal conductivity to measure temperature and humidity. Some sensors use a single chip to measure both temperature and humidity, while others use separate chips for each measurement. Some of the advanced features includes multi-sensors and wifi enabled sensors, which allows to connect the sensor to a computer, a smartphone or internet and monitor it remotely.



Applications:

- **HVAC (Heating, Ventilation, and Air Conditioning):** Temperature and humidity sensors can be used in HVAC systems to monitor and control the temperature and humidity levels in buildings, which helps to maintain a comfortable and healthy indoor environment.

- **Agriculture:** In Greenhouses and other agricultural setting, temperature and humidity sensors can be used to monitor and control the environment to ensure optimal growing conditions for plants.

- **Data Centers:** Temperature and humidity sensors can be used in data centers to monitor and control the temperature and humidity levels to ensure optimal operating conditions for electronic equipment.

- **Automotive:** Humidity sensors are used in the automotive industry for various applications such as Engine Air-Fuel Ratio control, Air conditioning systems, Cabin air quality etc.

- **Industry:** Temperature and humidity sensors are also used in industrial settings such as manufacturing and warehousing to monitor and control the temperature and humidity levels in order to protect equipment and products from damage.

- **Weather monitoring:** Temperature and humidity sensors can also be used in weather monitoring systems to measure the temperature and humidity levels at a specific location and time.

Features:

Model	DHT21
Range	0-100%RH
Temperature Measuring Range	-40~80℃
Humidity measurement accuracy	±3%RH
Temperature measurement accuracy	±0.5℃
Resolution	0.1
Measurement range	0-100%RH

Description:

- Relative humidity and temperature measurements, digital output
- Excellent long-term stability
- No need additional components
- Long signal transmission distance
- Ultra-low power consume
- 4 pin for installation