Contents [hide]

1 UBIBOT UB-ATHP-N1 Wifi Temperature Sensor User Guide
1.1 Product Introduction
1.2 Use Case Scenarios
1.3 Features
1.4 Product Specifications
1.5 Wiring Instruction
1.6 Communication protocols
2 Documents / Resources
2.1 References

UBIBOT UB-ATHP-N1 Wifi Temperature Sensor User Guide

UBIBOT

User Guide

Product Introduction

Atmospheric pressure sensor adopts original imported sensors, stable measurement data, high precision, strong anti-interference ability, long service life, can accurately measure the value of atmospheric pressure, while the built-in temperature and humidity sensors, suitable for a variety of environments under the air pressure and temperature and humidity measurement.

Use Case Scenarios

It is widely used in greenhouses, environmental protection, weather stations, ships, docks and other outdoor locations.

Features

1. Designed for real-time monitoring of environmental temperature, humidity and air pressure.
2. Wall-mounted, easy to use.
3. Provides RS485 communication interface and DC5V power supply.

Product Specifications

Specifications	
Model	UB-ATHP-N1
Power Supply	DC 5V
Max Current	139mA (@5V)
Measuring Range	Pressure: 26~126kPa Temperature: -40℃~80℃ Humidity: 0~100%RH
Accuracy	Pressure: ±50Pa Temperature: ±0.2℃ (@0~65℃) Humidity: ±2%RH (@10~90%RH)
Working Environment	-40~60℃, 0~80%RH
Connector	Audio
Communication Protocol	RS485 Modbus RTU Protocol
RS485 Address	0xC1, 0xCE
Baud Rate	1200 bit/s,2400 bit/s, 4800 bit/s, 9600 bit/s (default), 19200 bit/s

Wiring Instruction

Communication protocols

1. Communication basic parameters

Communication Basic Parameter	
Coding System	8–bit binary
Data Bit	8 bits
Parity Checking Bit	none
Stop Bit	1 bit
Error Checking	CRC Check
Baud Rate	1200 bit/s, 2400 bit/s, 4800 bit/s, 9600 bit/s (default), 19200 bit/s

2. Data Frame Format

The Modbus-RTU communication protocol is used in the following format:

- Initial structure ≥ 4 bytes in time.
- Address code: 1 byte, default 0xC1 & 0xCE.
- Function code: 1 byte, support function code 0x03 (read only) and 0x06 (read/write).
- Data area: N bytes, 16-bit data, high byte comes first.
- Error check: 16-bit CRC code.
- End structure ≥ 4 bytes of time.

Request					
Slave Address	Function Code	Register Address	No. of Registers	CRC LSB	CRC MSB
1 byte	1 byte	2 bytes	2 bytes	1 byte	1 byte

Response							
Slave Address	Function Code	No. of Bytes	Content 1	Content 1	...	Content n	CRC
1 byte	1 byte	1 byte	2 bytes	2 bytes	...	2 bytes	2 bytes

3. Register Address

Register Address				
Address	Content	Register Length	Function Code	Description of definitions
0x0000 (for C1) 0x0001 (for CE)	Pressure	1	03	Unsigned integer data, divided by 10
0x0001 (for C1) 0x0002 (for CE)	Temperature	1	03	Signed integer data, divided by 10
0x0002 (for C1) 0x0000 (for CE)	Humidity	1	03	Unsigned integer data, divided by 10
0x0064	Address	1	03/06	1 ~ 255
0x0065	Baud Rate	1	03/06	0:1200, 1:2400, 2:4800, 3:9600, 4:19200

NOTE

1. Do not pull the sensor lead wire, do not drop or hit the sensor violently.
2. Do not place the transmitter directly under high temperature environment.
3. Prohibit the transmitter to be placed in steam, water mist, water curtain or condensation environment for a long time.

UBIBOT Making sense of your world!

www.ubibot.com

Documents / Resources

	UBIBOT UB-ATHP-N1 Wifi Temperature Sensor [pdf] User Guide WS1, WS1 Pro, UB-ATHP-N1, UB-ATHP-N1 Wifi Temperature Sensor, UB-ATHP-N1, Wifi Temperature Sensor, Temperature Sensor, Sensor

References

- User Manual

UBIBOT

Sensor, Temperature Sensor, UB-ATHP-N1, UB-ATHP-N1 Wifi Temperature Sensor, UBIBOT, WiFi Temperature Sensor, WS1, WS1 Pro

Leave a comment

Your email address will not be published. Required fields are marked *

Comment *

Name

Email

Website

Save my name, email, and website in this browser for the next time I comment.

Post Comment

Search:

e.g. whirlpool wrf535swhz

Search