

UbiBot[®] NR1 is a cloud-supported network relay that enables full control of connected appliances via network connections (or offline) according to the environmental conditions.

It supports 4-channel relay independent outputs, which can be remotely synchronized as a whole or independently controlled at a single point. Experience a contact capacity of 250V AC/10A or 30V DC/10A, and a service life up to 100,000 times to meet external load requirements and use scenarios.

Network Relay NR1 can be used in online or offline while supporting a variety of control modes to fully realize your intelligent control needs.

The automation management function creates an exclusive automation system tailored for you. This function links with other devices or external sensors within the platform to realize all-weather, multi-directional site monitoring, helping you grasp the overall situation in real-time.



FEATURES

- Support **4-channel relay independent outputs**, which can be remotely synchronized as a whole or independently controlled at a single point.
- A service life up to **100,000 times** to meet external load requirements and use scenarios.
- **Online control mode:** you can remotely control relay operations through the UbiBot cloud platform, including opening/closing the relay, the overall synchronization or independent single-point control, timing and cycle setup, delaying tasks or defining trigger conditions through early warning rules and automation control
- **External probes** are supported to achieve real-time environmental monitoring and automatic power on/off according to the environmental conditions.
- **Local Linkage** - In conjunction with smoke sensors, water valves, access control, and other switching inputs, the local device can be connected to perform corresponding switching operations. This allows for the local linkage of all devices.
- **Offline Control** - The NR1 device supports the Modbus RTU protocol, allowing for offline control of 4-channel relays through an RS485 connection to a computer.
- **Freely Selectable Modbus Master/Slave Mode:** Able to support RS485 serial communication, master/slave mode can be selected freely. The slave mode is for default, which can be queried or controlled by the RS485 host. After switching to the host mode, it can be connected with RS485 probes to expand the product functions and realize the integration of monitoring and control.
- **Input Wiring** - Supports four switch inputs and can be connected to wireless or active switches.
- **Output Wiring** - Supports normally open or normally closed operations. Various wiring methods can meet different output requirements.
 - ① Low load wiring: Applicable when the non-resistive load current is less than 3A or resistive load is less than 5A.
 - ② AC 220V Load Wiring: External load is AC 220V .
 - ③ AC 380V (with null wire) Load Wiring: External load is AC 380V with null wire.

- **Pulse On/Off - Pulse On:** The relay receives the command, turns on for a period of time, and then turn off automatically. **Pulse Off:** The relay receives the command, turns off for a period of time, and then turn on automatically.
- **Interlock Groups** - The network relays support user-defined safety interlock groups. Any one relay in the group is open while the other relays are disconnected. The safety interlock effectively prevents external devices controlled by the relay from working simultaneously, thus avoiding potential dangers. It can be applied to the protection of fans, rolling shutters, and other motors in forward and reverse motion.
- **Default Power-Up State Setting** - The relay output state after repowering can be set through the platform end to maintain the disconnection or closure before power failure. This prevents damage to external loads or other property loss after equipment internally reboots or power failure.
- **Multiple Network Connection Modes** - UbiBot NR1 can be connected to the UbiBot IoT cloud platform through WiFi/4G/RJ45 Ethernet cable (Depending on the specific model purchased)
- **Multiple ways of receiving real-time alerts:** App notifications, emails, phone calls, SMS, HTTP
- **Free App & Web Console** to access and monitor real-time data remotely, no subscription fee
- Unlimited **UbiBot cloud storage** for historical data; free historical data export
- Working with **IFTTT, Alexa, Google Assistant, Google Sheet**

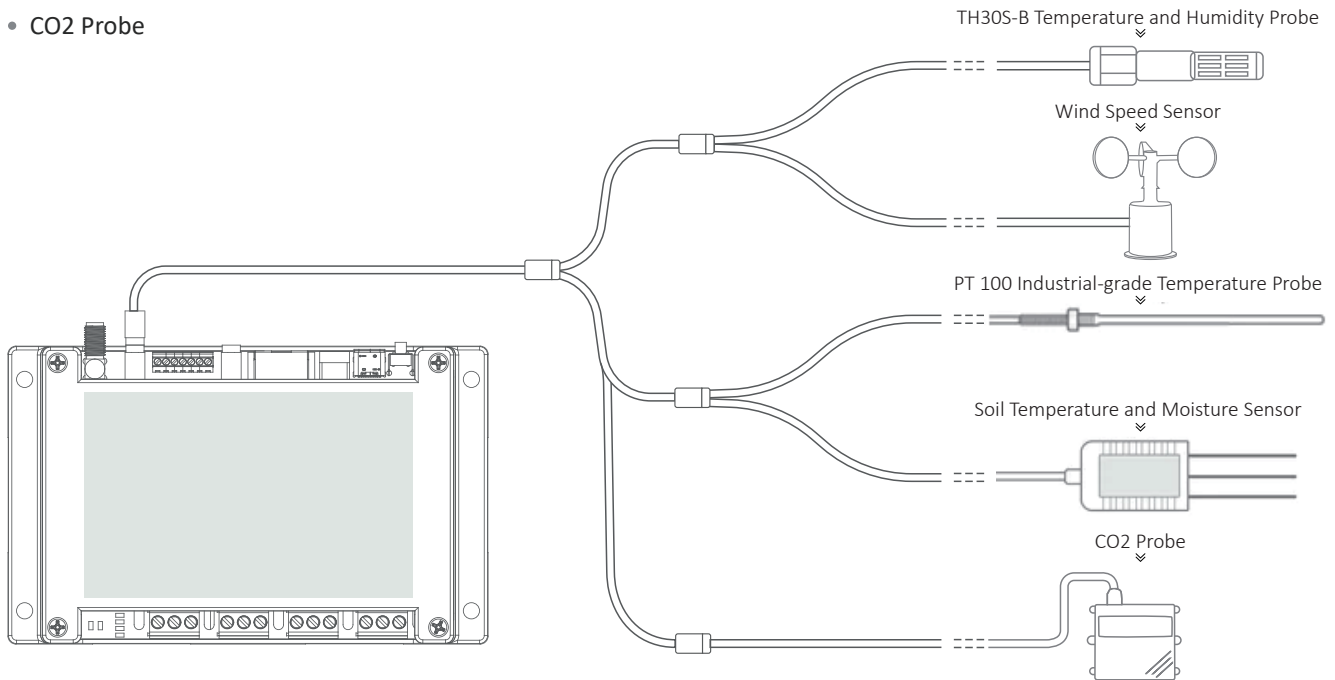
NOTE:

Add an AC contactor/intermediate relay between this product and the load in the following four cases.

- ① Load rated voltage > 30VDC
- ② Load rated voltage > 250VAC
- ③ Non-resistive load current > 3A
- ④ Resistive load current > 5A

EXTERNAL PROBES SUPPORTED

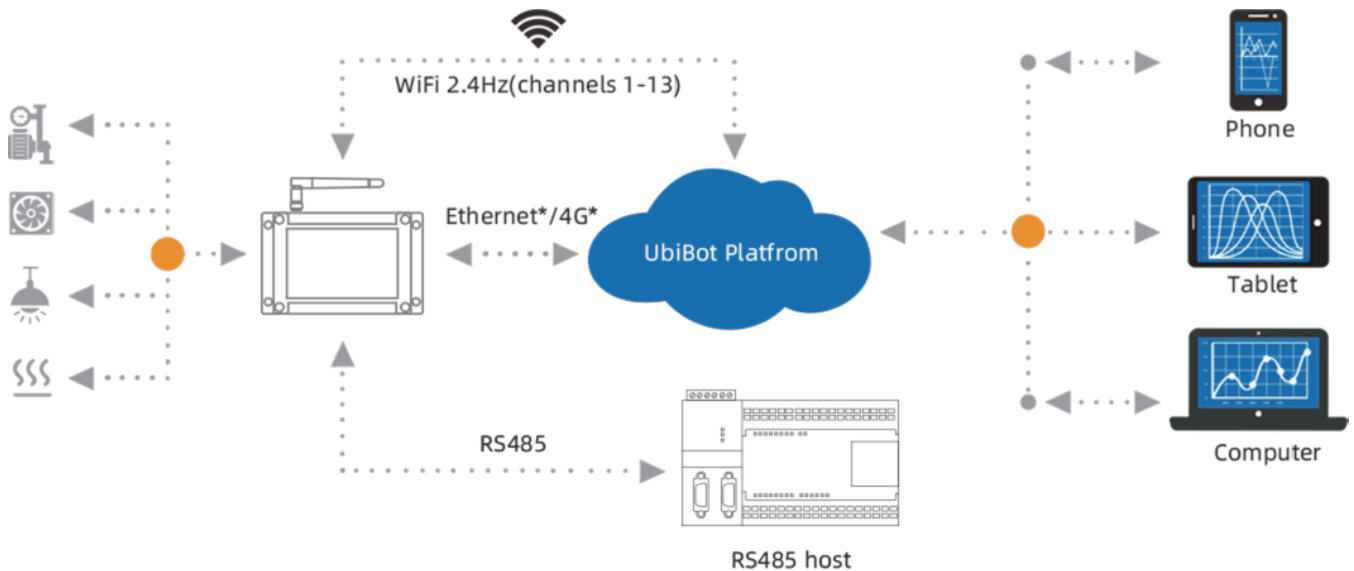
- TH30S-B Temperature and Humidity Probe
- Soil Temperature and Moisture Sensor
- PT 100 Industrial-grade Temperature Probe
- Wind Speed Sensor
- CO2 Probe



SPECIFICATIONS

Contact Capacity	250V AC/10A, 30V DC/10A
Durability	100,000 times
Device Input	4-way DI (optocoupler isolated)
Power Supply	DC 12V/2A
Communication	WiFi 2.4GHz(1-13channels)/4G*/RJ45*/RS485
Main Material	ABS
Dimension	145*90*40mm
Working Environment	-20~60℃, 5~85% RH(no condensation)
Certification	CE, RoHS

UbiBot Cloud IoT Platform



Data Management: Manage all your IoT data in one place; you could add as many devices as you want to one UbiBot account.

Unlimited Storage: Unlimited cloud-based storage ensures you will never run out of space. This allows you to view all your historical data via UbiBot App or Web.

Free App & Web Console: Using **UbiBot App** and **Web Console** is free. Powerful and thoughtful features provide you brilliant experience.

Analysis and Visualization: Use powerful analysis and visualization tools to get the most out of your data; spot trends and direct comparisons.

Real-Time Alerts: Fully customizable alert system will notify you via **App notifications, emails, phone call/SMS, HTTP** whenever any metric goes out of the range preset.

Highly Secure Platform: UbiBot IoT platform is designed to keep all your data secure so you never have to worry about hackers or other security issues.

Third-Party Services: Working with **IFTTT, Alexa, Google Assistant, Google Sheet**

Compliant with FDA CFR21