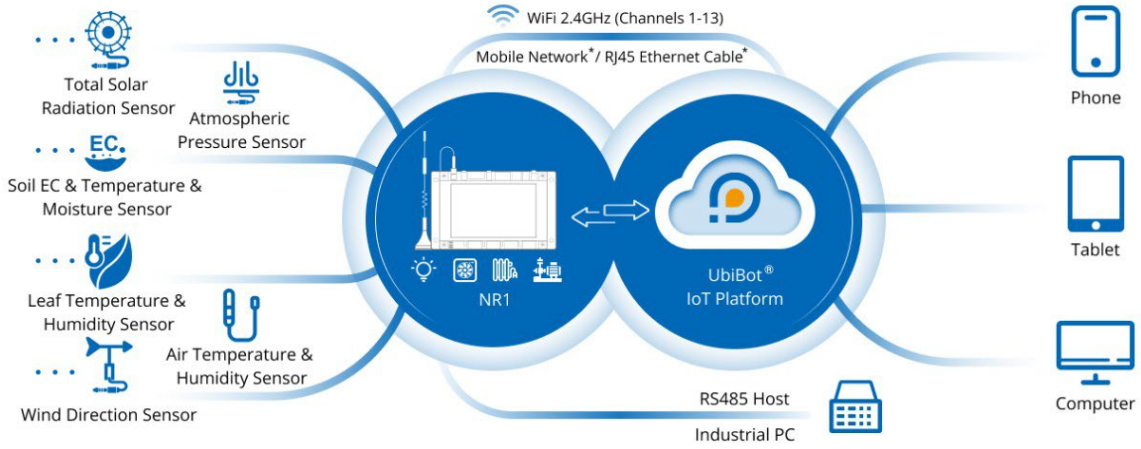
UbiBot NR1-ETH

Smart Network Relay (2.4GHz WIFI & Ethernet Version)

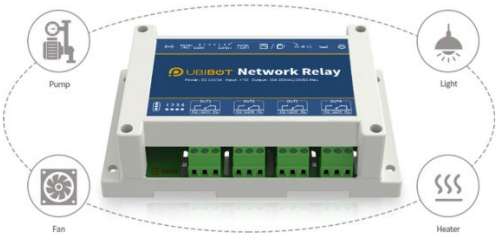
SKU: UBINR1WIFIETH
Manufacture Warranty period: 12 months
Country of Origin: China

Introduction

UbiBot Network Relay NR1 is not just a device; it's a leap towards intelligent and automated control in various environments. It directly accesses the IoT big data platform through 2.4GHz wifi / 4G SIM / RJ45 network cables, which can be controlled in real-time on various IoT terminals such as cell phones, tablets, and computers. In additional, the status of the accessed devices should be able to be viewed at any time.



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



Intelligent Control / Various Modes

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

Time Task
In additional to setting up various time task such as the timer, cycle, delay, etc through the UbiBot Cloud Platform, the relay can be automatically controlled to turn on and off according to time.

Online Control
Control the four-way switch of the relays via the UbiBot cloud platform and take advantage of relays that can be executed immediately.

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
With the relay supporting Modbus RTU protocol, and in accordance with the communication protocol, users benefit from the linkage control of the replay through the 485 upper computer.

Pulse On / Off
Pulse On: The relay receives the command, turns on for a period of time, and then turns off automatically.
Pulse Off: The relay receives the command, turns off for a period of time, and then turns on automatically.

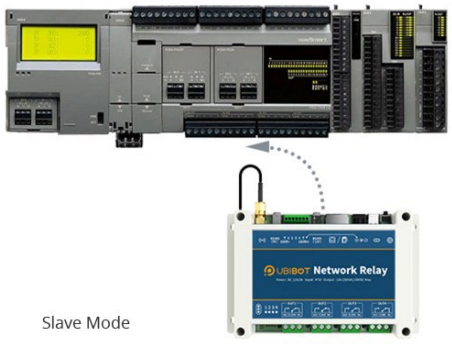
Safety Interlock / Safety Control

The network relays support user-defined safety interlock groups. Any one reply in the group is open while the other replays 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.

Freely Selectable Modbus Master / Slave Mode

Able to support RS485 serial communication, master / slave mode can be selected freely. The salve 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 sensors to expand the product functions and realize the integration of monitoring and control.

Master Mode

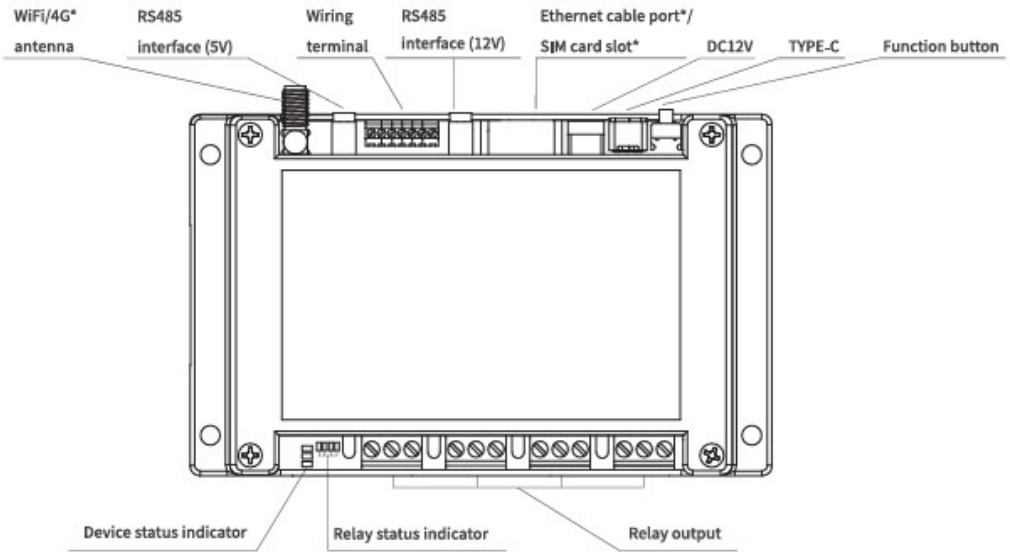


Slave Mode

Specifications:

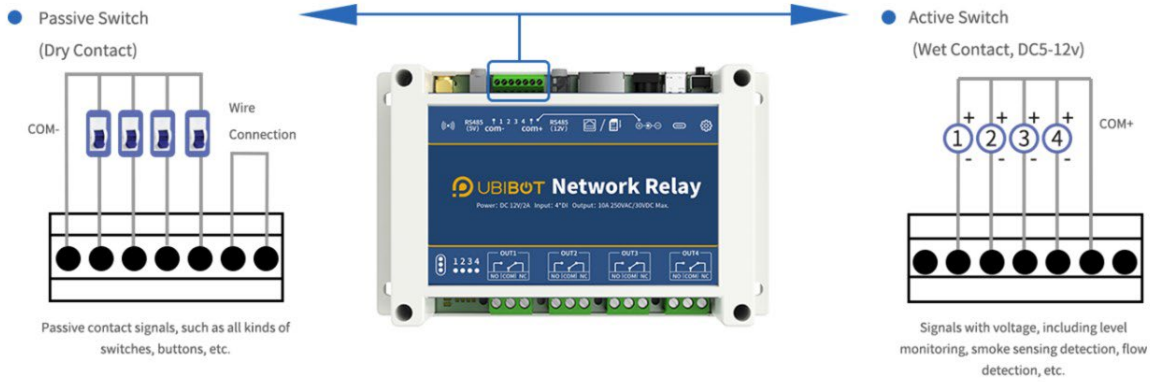
General Informaiton	
Dimensions	145 x 90 x 40 mm
Weight	208g ±3
Material	ABS
Power Supply	DC 12V / 2A
Relay Output	4 Channels
Contract Capacity	250V AC/10A, 30V DC/10A
Durability	100,000 times
Device Input	4-way DI (optocoupler isolated)
Operation Environment	Temperature: -20 ~ 60°C
	Humidity: 5 ~ 85%RH (Non-condensing)
Certifications	CE, RoHS, FCC, MIC
Communications & Interfaces	
Network	WiFi 2.4GHz (802.11 b / g / n), channels 1-13 network (5GHz WiFi is NOT supported)
	WiFi Security: Supports OPEN, WEP, or WPA / WPA2 types, WPA2-Enterprise (802.1x / RADIUS authentication) network is not supported.
	RJ45 Ethernet
Sensors	
Supports External Sensors	Air Temperature & Humidity Sensor / Soil Temperature and Moisture Sensor / PT 100 Industrial-grade Temperature Sensor / External CO2 Sensor / Wind Speed Sensor / Soil EC & Temperature & Moisture Sensor / Soil PH Sensor / NH3 Sensor / H2S Sensor / Smoke Alarm / Leaf Temperature & Humidity Sensor / Ethylene & Oxygen Sensor / Atmospheric Pressure Sensor / Total Solar Radiation Sensor / Wind Direction Sensor / Rainfall Sensor / Water Immersion Sensor / Wet & Dry Bulb Temperature Sensor / Vibration Sensor / Pumped PM Sensor / AI-RS485 converter

Basic Features Introduction



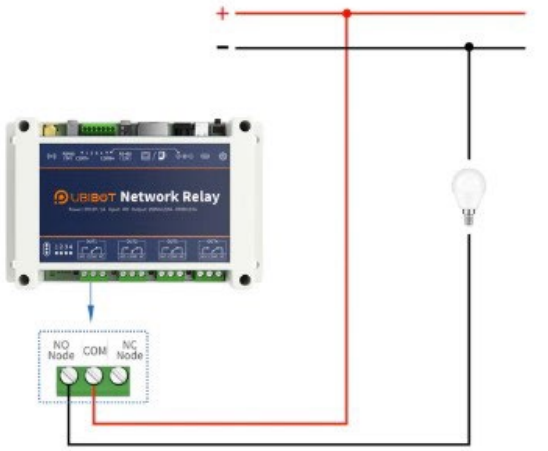
Input Wiring

Supports four switch inputs and can be connected to wireless or active switches.

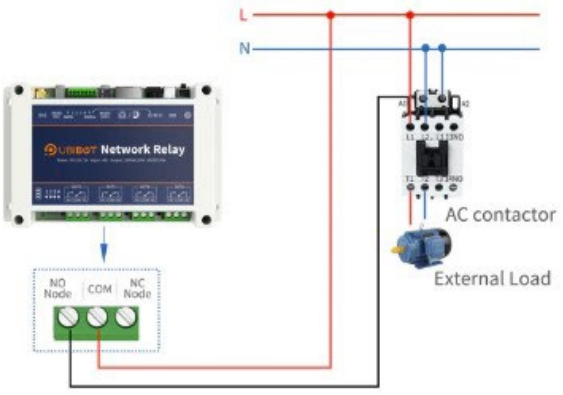


Output Wiring

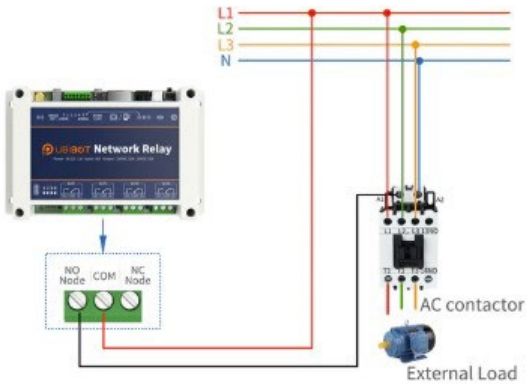
Supports normally open or normally closed operations. Various wiring methods can meet different output requirements.



Low load wiring: Applicable when the non-resistive load current is less than 3A or resistive load is less than 5A.



AC 220V Load Wiring: External load is AC 220V



AC 380V (with null wire) Load Wiring: External load is AC 380V with null wire.