Winsonic®

NE24002-101313

Industrial 4G Edge Computing Gateway Support MQTT



The NE24002-101313 series products are industrial-grade wireless communication gateways designed for user-side energy monitoring, a crucial aspect of energy management.

They can gather energy data from various sources, including charging stations, factories, office buildings, and shopping malls.

By utilizing platform data analysis, these gateways help achieve operational management and energy conservation objectives.

- Supports WLAN (optional)
- Supports 4G and wired network backup
- Supports 4G LTE CAT4 high-speed network
- Supports DIN rail and desktop installation
- Efficiently completes large-scale device network deployments
- Supports multiple hardware interfaces to meet various requirements
- Industrial-grade design, capable of withstanding challenging conditions
- Supports various VPN functions: PPTP, L2TP, IPSEC, OPENVPN, GRE, GERTAP, Vxlan, etc
- Supports SNMP and Star Device Manager (Star Cloud) platform for efficient remote centralized network management
- Supports Linux OpenWrt 19.07 system and Ubuntu 16.04 system, facilitating user secondary development with comprehensive secondary development guides.

Technical Parameters

Hardware Performance

Memory	1GB
FLASH	4GB EMMC
WIFI (optional)	802.11b/g/n
Network Support	Supports seven-mode full-network access (4G)
System Time	NTP technology for time synchronization, with built-in RTC

Interfaces

WAN port	1 WAN port, can be reused as LAN
LAN port	1 (10M/100M/1000M adaptive MDI/MDIX port)
SIM card interface	1 (flip card slot, supports 1.8V/3V SIM/UIM cards)
USB interface	1*USB2.0
Reset	1 (reset button)
Antenna interfaces	1 (4G, impedance 50 ohms, SMA female inner hole interface)
	1 (2.4G antenna, impedance 50 ohms, SMA male inner pin interface)
Power terminal	1 (2-pin 3.81mm spacing connector)
Console port	1 , RS232
CAN	2 pcs

RS485	2*RS485, independent isolation, one of which can be reused as RS232
Power output	1 channel 12V
Indicators	9, including 1 PWR light, 1 SYS light, 1 GPS light, 3 signal strength lights, SIM1, SIM2, and TF indicators
Power Characteristics	
power	External Power Adapter (12V·2A)
Operating voltage	DC 12V
Standby power consumption	300~500 mA@12V DC
Operating power consumption	500~700 mA@12V DC
Operating Conditions	
Operating temperature	-35～+75℃（-31～+167℉）
Storage temperature	-40~+85℃（-40～+185℉）
Operating humidity	5%~95% (non-condensing)
Equipment ventilation	Natural heat dissipation, no noise
Physical Characteristics	
Enclosure	All-metal enclosure
Dimensions	Length*Width*Height: 126*44*166mm (excluding antenna and installation components)
Installation methods	Desktop, DIN rail, wall-mounted
weight	Net weight: 0.67KG (excluding antenna and installation components) Gross weight: 0.95KG (with accessories and packaging box)
Device Safety and Reliability	
Safety and reliability	Power reverse protection, overvoltage protection, overcurrent protection; Ethernet interface built-in 1.5KV electromagnetic isolation protection; RS232/RS485 interface built-in 15KV ESD protection; SIM/UIM card interface built-in 15KV ESD protection
Protection level	IP30
Certification	Compliant with CCC, RoHS
MTBF	≥ 100,000 hours
Software features (OpenWrt	
Network access	Supports APN VPDN
Access authentication	Supports CHAP/PAP authentication
Network modes	GSM/GPRS/EDGE, LIMTS/HSPA+/EVDO, TD-SCDMA/TD-LTE/FDD LTE/5G NR
LAN protocol	Support ARP, Ethernet
WAN protocol	Supports static IP, DHCP, PPPoE, PPP
IP applications	Supports Ping, Trace, DHCP Server, DHCP Relay, DHCP Client, DNS relay, DDNS, Telnet
IP routing	Supports routing
NAT function	Supports network address translation

Industrial protocols	Supports environmental protection 212 protocol, supports MQTT, MUDBUS, and other industrial protocols
Network Security	
Firewall	Full-state packet inspection (SPI), prevent denial of service (DoS) attacks, filter multicast Ping packets, access control lists (ACL), URL filtering, port mapping, virtual IP mapping, IP-MAC binding
Data Security	IPsec VPN/L2TP/PPTP/GRE /OPEN VPN/CA certificate
Reliability	
Backup function	Supports wired and wireless backup
Online link detection	Sends heartbeat packets for detection and automatically reconnects when disconnected
Built-in watchdog	Device self-checking technology, device fault self-repair
WLAN (optional)	
Protocol standards	IEEE 802.11b/g/n
Rate	Up to 144Mbps
Safety features	Open system, shared key, WPA/WPA2 authentication, WEP/TKIP/AES encryption
Operating modes	AP, Client operating modes
Transmission distance	100m (actual transmission distance depends on the environment)
Intelligent Features	
Integrated DTU function	Supports TCP, UDP transparent transmission mode, TCP Server mode, supports Modbus RTU to Modbus TCP bridge, supports DCUDP, DCTCP mode
Network Management	
QoS management	Supports bandwidth limitation, IP throttling
Configuration methods	Supports telnet, web, SSH, and console configuration methods
Upgrade methods	Supports web upgrade, FOTA
Logging functionality	Supports local system logs, remote logs, serial port output logs
Network management functionality	Supports batch management on the Star Device Manager (Star Cloud) platform
Simple network management functionality	Supports SNMP v1/v2/v3, supports SNMP TRAP function
Traffic management	Supports traffic threshold setting, traffic statistics, and traffic alert functionality
Maintenance Tools	Ping, route tracing
Status Inquiry	System status, modem status, network connection status, route status

Product Dimensions

单位:mm
unit:mm

