Winsonic®

NE24005-101111

Industrial 4G Energy Consumption Gateway



The NE24005-101111 is a fanless embedded communication gateway designed for data collection in building energy monitoring systems. It meets the energy consumption metering and sub-item data collection requirements for national government agencies, large public buildings, industrial enterprises, and more, covering various forms of energy such as water, electricity, gas, oil, cooling, and heating.

- Supports 4G full Netcom
- Supports rail and desktop installation
- Supports wired and wireless mutual backup
- Supports efficient completion of large-scale device network deployment
- Supports standby power supply and power failure alarm functions (optional) Fully industrial
- design, capable of facing challenges in harsh conditions Supports various VPN functions,
- including PPTP, L2TP, IPSEC, OPENVPN, GRE, GRETAP, Vxlan, etc.
- Supports SNMP and StarCloud STAR DEVICE MANAGER platform for efficient remote centralized network management
- Supports Linux OpenWrt system, facilitating user secondary development and providing comprehensive secondary development guides
- 4 independent isolated RS485 serial interfaces, can also be reused as RS232, 1 RS232 (CONSOLE), 2 RJ-45 Ethernet interfaces

Technical Parameters

Hardware Performance	
Memory	128MB
FLASH	32MB
Network Support	Supports seven-mode full Netcom (4G)
System Time	Time synchronization using NTP technology, with built-in RTC
Interfaces	
WAN Port	1 WAN port (configurable as LAN)
LAN Port	1 (10M/100M/port)
SIM Card Interface	1 (drawer card slot, supports 1.8V/3V SIM/UIM card)
USB Interface	1*USB2.0
TF Interface	1*TF interface
Reset	1 (reset button)
Antenna Interface	1 (4G antenna, 50 ohm impedance, SMA male inner pin interface)
	1 wifi or 1 GPS
Power Terminal	Supports 2*3.81mm phoenix terminals, supports DC JACK 5.5/2.5mm terminal, built-in power reverse protection and overvoltage protection
RS485	4*RS232/RS485 (switchable), 53.5mm phoenix terminals, independently isolated
Console Port	1*RS232, 53.5mm phoenix terminals
Indicators	16 (1 PWR light, 1 SYS light, 1 WIFI light, 1 TF light, 1 ONLINE light, 3 signal strength lights, 8 serial port lights (1 input and 1 output for each)
Power Characteristics	
Power	Power input (9-36V DC)
Operating Conditions	
Operating Temperature	-35~+75℃ (-31~+167℉)
Storage Temperature	-40~+85℃ (-40~+185℉)
Operating Humidity	5%~95% (non-condensing)
Device Ventilation	Natural heat dissipation, no noise

Physical Features

Chassis	Full metal chassis
Dimensions	Length*width*height:150*105*30mm (excluding antenna mounting accessories)
Installation Methods	Desktop flat placement, rail mounting, wall mounting
Weight	Net weight: 0.82KG (excluding antennas and mounting accessories) Gross weight: 1.02KG (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

Network Access	Supports APN VPDN
Access Authentication	Supports CHAP/PAP authentication
Network Mode	GSM/GPRS/EDGE,LIMTS/HSPA+/EVDO/TD-SCDMA/TD-LTE/FDD LTE
LAN Protocol	Supports 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 MQTT, MODBUS and other industrial protocols

Network Security	
Firewall	Full state packet monitoring (SPI), defense against denial of service (DoS) attacks, filtering of multicast Ping packets, access control lists (ACL), content 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, 4G mutual backup
Link Online Monitoring	Sends heartbeat packets for detection, automatically reconnects if disconnected
Built-in Watchdog	Device self-checking technology, self-repairing device faults
WLAN(optional)	
Protocol Standard	IEEE 802.11b/g/n/
Rate	Up to 144Mbps
Security Features	Open system, shared key, WPA/WPA2 authentication, WEP/TKIP/AES encryption
Operating Mode	AP, Client mode
Transmission Distance	100m (actual transmission distance depends on the environment)
Smart Features	
Integrated DTU Function	Supports TCP, UDP transparent transmission mode
Network Management	
QoS Management	Supports bandwidth limitation and IP throttling
Configuration Methods	Supports telnet, web, SSH, and console configuration methods
Upgrade Methods	Supports web upgrade and remote upgrade
Logging Functionality	Supports local system logs, remote logs, and serial port output logs
Network Management Functionality	Supports batch management on the STAR Device Manager "Star Cloud" platform
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

