Winsonic®

NE22003-101111

Industrial Cellular VPN Router, Dual SIM Failover, Multiple Industrial Interfaces



The Winsonic NE22003-101111 industrial cellular VPN router provides wireless data connectivity over public and private LTE cellular networks at 4G speeds.

It features dual SIM backup, two Ethernet ports, and RS232 and RS485 interfaces to support Serial to IP communication. GPS is optional, depending on the LTE module capability.

The router supports a wide range of power inputs from 9 to 48 VDC and includes a reverse-voltage protection mechanism.

This makes it an advanced choice for wireless M2M applications, offering reliable features for data transmission.

Secure and reliable internet access

- Wireless Mobile Broadband 2G / 3G / 4G Connection
- Connection manager ensure seamless communication
- Support Multiple VPN tunnels for data encryption

Designed for industrial usage

- Power Input Range 9 to 48 VDC
- Industrial design for harsh environment
- Metal casing and din-rail installation

Easy to use and easy maintenance

- User friendly web interface for user interaction
- Support Devices Management Platform
- Reduce high costs for onsite maintenance

SPECIFICATIONS

CELLULAR	
SIM	2 x SIM slots, 1.8V / 3V
SIM Failover	Auto-switch cases: data limited, no network, network denied, data connection fail
Antennas	2 (MAIN + AUX), SMA female
ETHERNET	
Number of Ports	1 x WAN + 1 x LAN or 2 x LAN, Auto 10/100 Mbps
Magnet Isolation Protection	1.5 KV
Wi-Fi (Optional)	
Wireless Mode	IEEE 802.11b/g/n, Access Point (AP), Client
Wireless Speed	2*2 MIMO, 300 Mbps
Wireless Security	WPA, WPA2, WEP, CCMP, TKIP
Frequency Bands	2.412 - 2.484 GHz (2.4 GHz ISM band)
Antennas	2 x RP-SMA for Wi-Fi antenna connectors
GNSS/GPS (Optional)	
Features	Gen8C Lite of Qualcomm (GPS, GLONASS, BeiDou, Galileo, QZSS)
Protocol	NMEA-0183
Antennas	1 x SMA female with 50 ohms impedance
SERIAL	
Number of Ports	1 x RS-232 (3 PIN) + 1 x RS-485
Connector	Terminal block
ESD Protection	± 15 KV
Baud Rate	1200bps to 921600 bps
DIGITAL INPUT & OUTPUT	
Type	2 x DI(dry contact) + 2 x DO(wet contact)
Connector	Terminal block
Isolation	3KVDC or 2KVrms
Absolute maximum VDC	36VDC
Absolute maximum ADC	100 mA
POWER	
Connector	3-pin 3.5 mm female socket with lock
Input Voltage Range	9 to 48 VDC
Power Consumption	Idle: 100 mA@12 V Data link: 400 mA (peak) @12 V
HARDWARE	
Watchdog	Built-in watchdog
LEDs	SYS, NET, USR, RSSI x 3
Reset Button	Reset/restore to factory default button
Ingress Protection	IP30
Housing & Weight	Metal, 300 g
Dimensions	106mm x 106mm x 40mm
Installations	DIN-rail mounting
Operating Temperature	-40 °C to 85 °C
Operating Humidity	5% to 95% non-condensing

NETWORK		
Routing	Static routing	
Network Protocols	TCP, UDP, IPv4, ICMP, NTP, DNS, HTTP, HTTPS, ARP, PPP, PPPoE, DHCP, IP Passthrough, VRRP	
Connection Manager	Ping Detection, Timer Reboot, ICMP for link detection, Call Reboot	
Firewall	Flexible access control of TCP, UDP, ICMP packets, MAC address filter, Port mapping, DMZ, 1 to1 NAT, DDos Defense	
DDNS	Supported some service providers, others can be configured manually	
SMS	SMS Configuration, SMS Gateway, SMS Notification	
VPN		
OpenVPN	OpenVPN server/client mode, client mode supports up to 5 x OpenVPN tunnels	
GRE	Layer2 and Layer3, supports up to 5 x GRE VPN tunnels	
IPsec	IKEv1, IKEv2, supports up to 5 x IPsec VPN tunnels	
MONITORING & MANAGEMENT		
Web GUI	HTTP/HTTPS, Firmware Upgrade	
Command Line Interface	SSHv2 and TELNET	
Management platform	Devices Management Platform	
APP CENTER		
Apps	**VPN**: IPsec, L2TP, PPTP, DMVPN, Wireguard **Network**: Dynamic Routing (RIPv1/v2, OSPF, BGP), VRRP, Qos, Email Notification, Enforce Modem PPP, NAT Loopback, Loopback, Roaming policy, VPN ICMP detection, GRE VPN Redundancy **Management**: AT over IP, AT over COM, AT over Telnet, SNMPv1/v2/v3/, TR069, DMPC, Captive Portal, AAA **Protocol Converter**: Modbus Master, Modbus Slave, Modbus ID Mapping, Modbus Gateway IEC101-104, Modbus to DNP3, DNP3 to IEC104, Modbus to SparkplugB, Modbus to LwM2M, Modbus to IEC104, DLMS Master, DLMS to IEC104, FTP Transfer, BACnet Master **More Apps Demands please contact with us**	
APPROVAL		
EMI	EN 55032:2012 Class B	
EMS	IEC 61000-4-2 ESD	Level 4
	IEC 61000-4-3 RS	Level 3
	IEC 61000-4-4 EFT	Level 3
	IEC 61000-4-5 Surge	Level 3
	IEC 61000-4-6 CS	Level 3
Vibration	EN50155	
E-mark	E57 10R-06.0135	

DIMENSIONS

