NAVIGATEWORX NR310

Intelligent 4G LTE VPN Router, Industrial Design,
Dual SIM Failover, RS232 and RS485 Serial connection

Navigateworx NR310 industrial cellular VPN router enables wireless data connectivity over public and private LTE cellular networks at 4G speeds.

NR310 router has dual SIM backup, 2 Ethernet ports, RS232 and RS485 interfaces are provided to support Serial to IP communication. NR310 router supports 9 to 36 VDC wide range power inputs, designed with reverse-voltage protection mechanism for greater reliability. It is an advanced choice for universal wireless M2M applications with reliable features for data transmission.

TYPICAL APPLICATION

Kiosk

ATM

Industrial Automation

Video Surveillance

Transportation

Meter

NR310 Router

2G/3G/4G LTE

Management Platform

Central Application

Secure and reliable internet access
- Wireless Mobile Broadband 2G / 3G / 4G Connection
- Connection managers ensure seamless communication
- Support Multiple VPN tunnels for data encryption

Designed for industrial usage
- Power Input Range 9 to 36 VDC
- Industrial design for harsh environment
- Aluminum casing and din-rail installation

Easy to use and easy maintenance
- User friendly web interface for user interaction
- Support Central Management Platform
- Reduce high costs for onsite maintenance

SPECIFICATIONS

CELLULAR

Frequency Bands	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B20/B28/B28A LTE TDD: B40 WCDMA: B1/B2/B5/B8 GSM: B2/B3/B5/B8 **More Bands Demands please contact with us**
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

Wireless Mode	IEEE 802.11b/g/n, Access Point (AP), Client
Wireless Speed	150 Mbps
Wireless Security	WPA, WPA2, WEP, CCMP, TKIP
Frequency Bands	2.412 - 2.484 GHz (2.4 GHz ISM band)
Antennas	1 x RP-SMA for Wi-Fi antenna connectors

SERIAL

Number of Ports	1 x RS-232 (3 PIN) + 1 x RS-485
Connector	Terminal block
ESD Protection	± 15 KV
Baud Rate	300bps to 115200bps

POWER

Connector	2-pin 3.5 mm female socket
Input Voltage Range	9 to 36 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	Aluminum, 220 g
Dimensions	82.8 mm x 103.3 mm x 28.8 mm
Installations	DIN-rail mounting
Operating Temperature	-40 °C to 75 °C
Operating Humidity	5% to 95% non-condensing

NETWORK

Routing	Static routing
Network Protocols	TCP, UDP, IPv4, ICMP, NTP, DNS, HTTP, HTTPS, ARP, PPP, DHCP, IP Passthrough
Connection Manager	Ping Detection, Timer Reboot, ICMP for link detection
Firewall	Flexible access control of TCP, UDP, ICMP packets, MAC address filter
DDNS	Supported some service providers, others can be configured manually
SMS	SMS Configuration

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

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MONITORING & MANAGEMENT

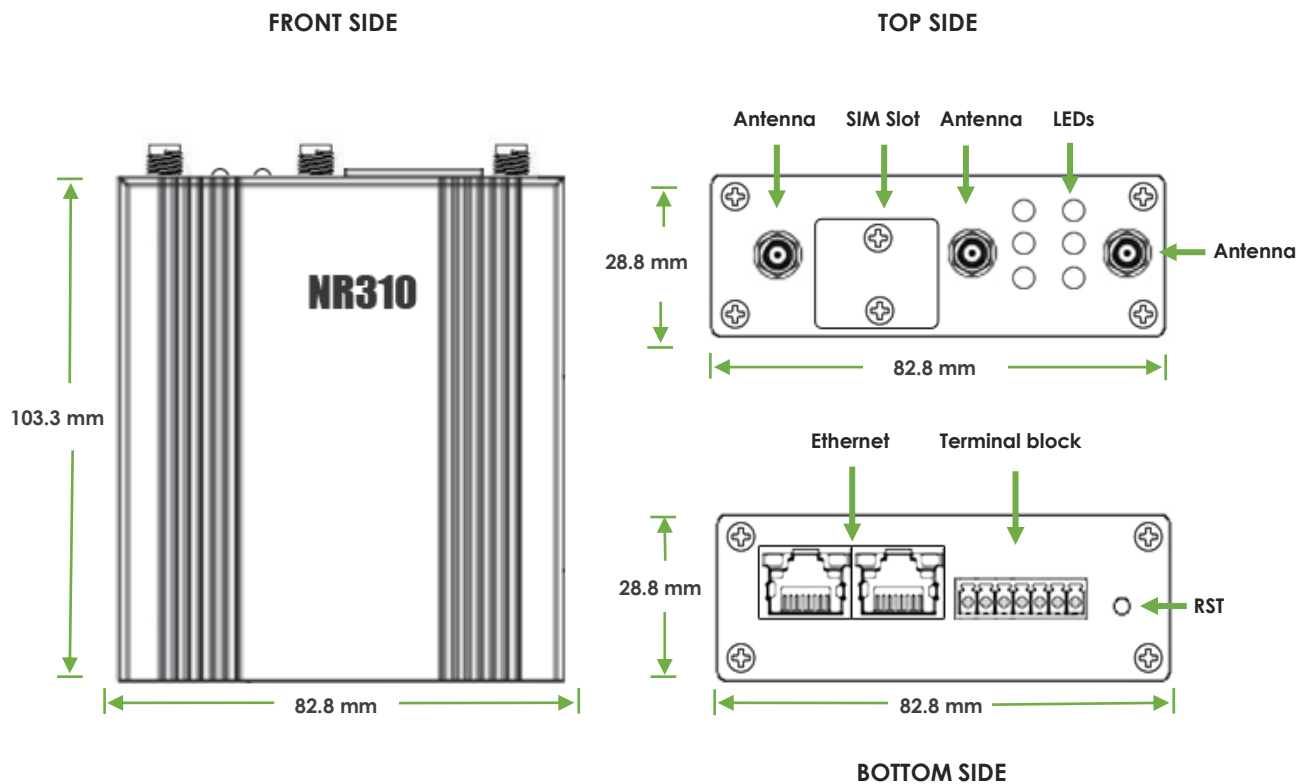|	
Web GUI	HTTP/HTTPS, firmware upgrade
Command Line Interface	SSHv2 and TELNET
Management platform	Central Management Platform

APP CENTER

Apps	**VPN**: IPsec, L2TP, PPTP, DMVPN **Network**: Dynamic Routing (RIPv1/v2, OSPF, BGP), VRRP, Email Notification, SMS Gateway SMS Notification, Enforce Modem PPP **Management**: AT over IP, AT over COM, AT over Telnet, SNMPv1/v2/v3/, TR069, DMPC **Protocol Converter**: Modbus Master, Modbus Slave, Modbus ID Mapping, Modbus Gateway IEC101-104, DLMS to IEC104, Modbus to DNP3 **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
	IEC 61000-4-12	Level 3
Vibration	EN50155	

DIMENSIONS

FRONT SIDE

TOP SIDE

BOTTOM SIDE

ORDERING INFORMATION

MODEL	PART NUMBER	DESCRIPTION
NR310-4G	A312430	4G LTE, Dual SIMs, 2 x Eth, 1 x RS232 (3 PIN), 1 x RS485, 9 - 36VDC, 2.4GHz Wi-Fi
OPTIONAL ACCESSORIES		
Power Supply	F001009	Power Supply Adapter, EU Plug, Input 100 to 240VAC, Output 12V DC 1.5A
	F001011	Power Supply Adapter, AU Plug, Input 100 to 240VAC, Output 12V DC 1.5A
	F001012	Power Supply Adapter, US Plug, Input 100 to 240VAC, Output 12V DC 1.5A
	F001013	Power Supply Adapter, UK Plug, Input 100 to 240VAC, Output 12V DC 1.5A
LTE Rubber Antenna	F001006	4G / 3G / 2G Rubber Antenna, 698-960 / 1710-2170 / 2500-2700 MHz, 2dbi, Φ8×108mm, AC
LTE Magnet Antenna	F001007	4G / 3G / 2G Magnet Antenna, 3 Meters Long, 698-960 / 1710-2700 MHz, 3dbi, Φ 29×112mm, AC
Wi-Fi Rubber Antenna	F001004	Wi-Fi Rubber Antenna, 2.4G-2.483G, 5dbi, Φ 13×197mm, AC
Wi-Fi Magnet Antenna	F001005	Wi-Fi Magnet Antenna, 3 Meters, 2.4G - 2.483G, 7dbi, Φ 29×220mm, AC
Din-Rail	F004001	Din Rail Kit, 35 mm, Aluminum with Black Spray Surface, 50 * 40 * 8.5 mm, 3 * M3.5 Screw Holes

ABOUT NAVIGATEWORX

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