NavigateWorx

NAVIGATEWORX
NR600-5G

Industrial **5G** VPN Router, Dual SIM Failover,
High speed cellular 5G connectivity

Navigateworx NR600-5G industrial 5G VPN router enables wireless data connectivity over public and private 5G cellular networks.

NR600-5G router has dual SIM backup, 1 WAN and 3 LAN Ethernet ports, Dual band 2.4GHz and 5.8GHz Wi-Fi access, ports, RS232 and RS485 interfaces are provided to support Serial to IP communication. GNSS feature is based on LTE module capability. Supports 9 to 48 VDC wide range power inputs, designed with reverse-voltage protection mechanism. It is an advanced choice for wireless M2M applications with reliable features for data transmission.

TYPICAL APPLICATION

Secure and reliable internet access
- Wireless Mobile Broadband **5G/4G/3G** Connection
- Connection manager ensure seamless communication
- Dual band 2.4GHz and 5.8GHz Wi-Fi access

Designed for industrial usage
- Power Input Range 9 to 48 VDC
- Industrial design for harsh environment
- Aluminum enclosure and wall mounting installation
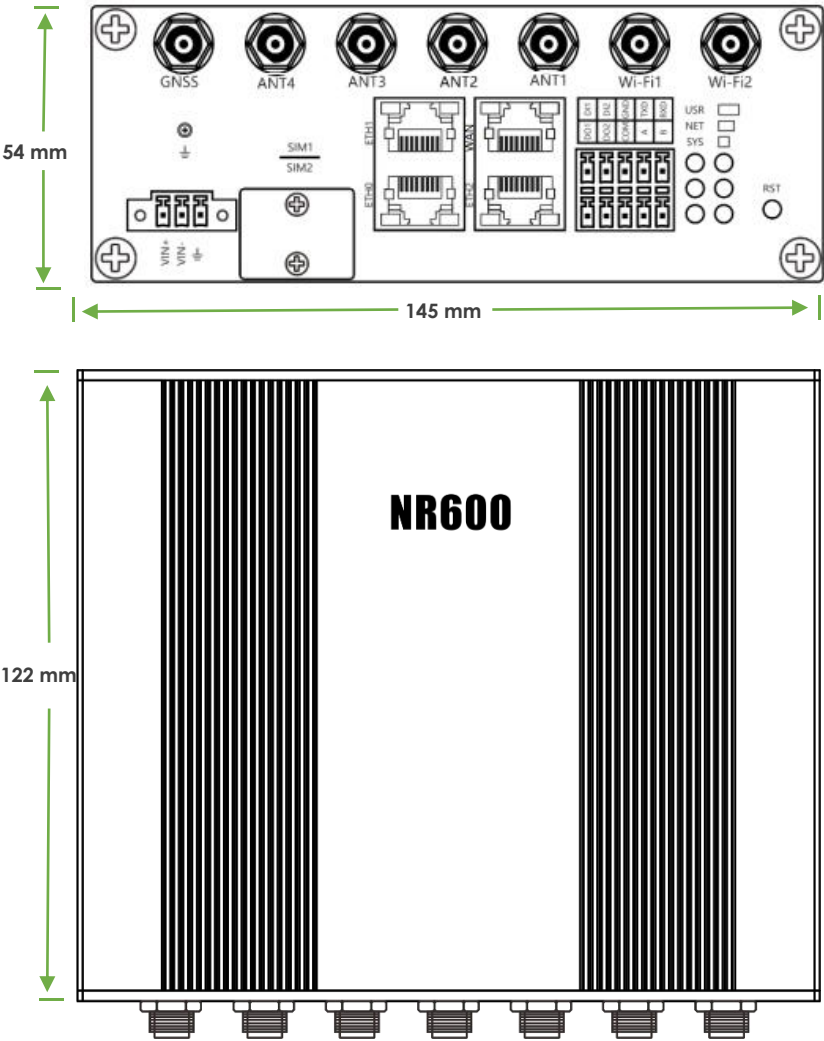
Easy to use and easy maintenance
- User friendly web interface for user interaction
- Support Central Management Platform

SPECIFICATIONS

CELLULAR

Frequency Bands	5G NR NSA: n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/ 5G NR SA: n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n77/n78/n79 LTE-FDD: B1/B3/B5/B7/B8/B18/B19/B20/B26/B28/B32 LTE-TDD: B34/B38/B39/B40/B41/B42/B43 WCDMA: B1/B3/B5/B6/B8/B19 **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	4 external antennas, SMA

ETHERNET

Number of Ports	1 x WAN + 3 x LAN, Auto 10/100/1000 Mbps
Magnet Isolation Protection	1.5 KV

DUAL BAND Wi-Fi

Wireless Mode	802.11a/b/g/n/ac 2*2 MIMO, supports AP and Client modes
Wireless Speed	5.8G: Up to 867Mbps 2.4G: Up to 300Mbps
Wireless Security	WPA, WPA2, WEP, CCMP, TKIP
Frequency Bands	5.15 – 5.825 GHz (5 GHz ISM band) 2.412 - 2.484 GHz (2.4 GHz ISM band)
Antennas	2 x RP-SMA

GNSS/GPS

Features	Gen9C Lite of Qualcomm (GPS, GLONASS, BeiDou, Galileo)
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	300bps to 115200bps

DIGITAL INPUT & OUTPUT

Type	2 x DI + 2 x DO
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
Input Voltage Range	9 to 48 VDC
Power Consumption	Idle: 300 mA@12 V Data link: 600 mA (peak) @12 V

HARDWARE

Built-in	Watchdog
LEDs	SYS, NET, USR, RSSI x 3
Reset Button	Reset/restore to factory default button
Ingress Protection	IP30
Housing & Weight	Aluminum, 600g
Dimensions	145 * 122* 54 mm
Installations	Din Rail
Operating Temperature	-30 °C to 70 °C
Extended Temperature	-40 °C to 85 °C
Operating Humidity	5% to 95% non-condensing

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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
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, 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	Central Management Platform

APP CENTER

APPs	**VPN**: L2TP, PPTP, DMVPN **Network**: Dynamic Routing (RIPv1/v2, OSPF, BGP), Email Notification, Enforce Modem PPP, QoS **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 3
	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	

DIMENSIONS

54 mm

145 mm

122 mm

NR600

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ORDERING INFORMATION

MODEL	PART NUMBER	DESCRIPTION
NR600-5G	A614533	5G, Dual SIMs, 4 x Gigabit Port, Dual band 2.4GHz and 5.8GHz Wi-Fi, 1 x RS232 (3 PIN), 1 x RS485, 2 x DI, 2 x DO, 9 - 48VDC
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
5G Rubber Antenna	F001025	5G Rubber Antenna, 698-960/1710-3500MHz,2.15dbi, Φ13×172mm
5G Magnet Antenna	F001026	5G Magnet Antenna, 698-960/1710-3500MHz, 3dbi, 3m, Φ29×290mm
Wi-Fi Rubber Antenna	F001060	2.4G/5.8G Rubber Antennas, 2.4G/5.8GHz,5dbi,Φ13x200mm
Wi-Fi Magnet Antenna	F001059	2.4G/5.8G Magnetic Antenna, 3 Meters, 2.4G/5.8GHz,3dbi, Φ 65x285mm
GPS Antenna	F001015	GPS Active Magnetic Mount Antenna, 3 Meters Cable
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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