

# 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



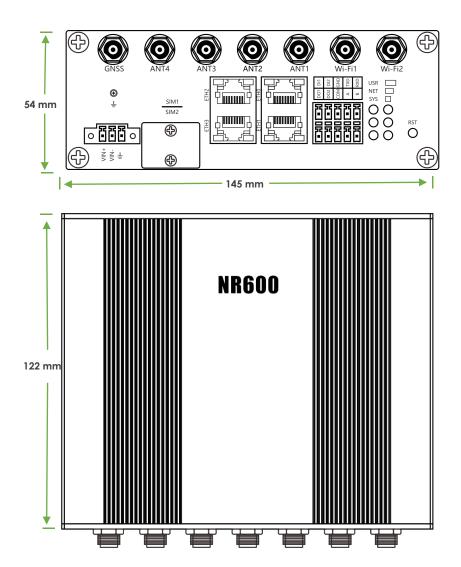
# **SPECIFICATIONS**

CELLULAR		
	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	
Frequency Bands	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	
Wireless Security	2.4G: Up to 300Mbps  WPA, WPA2, WEP, CCMP, TKIP	
•	5.15 – 5.825 GHz (5 GHz ISM band)	
Frequency Bands	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 Antennas	NMEA-0183  1 x SMA female with 50 ohms impedance	
SERIAL	1 x 3W/X terriale with 50 offins impedance	
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		
Туре	2 x DI + 2 x DO	
Connector Isolation	Terminal block	
Absolute maximum VDC	3KVDC or 2KVrms 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	
HARDWARE	Data link: 600 mA (peak) @12 V	
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	



Routing	Static routing	Static routing			
Network Protocols	0	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, UD	Flexible access control of TCP, UDP, ICMP packets, MAC address filter			
DDNS	Supported some service provider	Supported some service providers, others can be configured manually			
SMS	SMS Configuration, SMS Gateway	SMS Configuration, SMS Gateway, SMS Notification			
VPN					
OpenVPN	OpenVPN server/client mode, cli	OpenVPN server/client mode, client mode supports up to 5 x OpenVPN tunnels			
GRE	Layer2 and Layer3, supports up to	Layer2 and Layer3, supports up to 5 x GRE VPN tunnels			
IPsec	IKEv1, IKEv2, supports up to 5 x IPs	IKEv1, IKEv2, supports up to 5 x IPsec VPN tunnels			
MONITORING & MAN	IAGEMENT				
Web GUI	HTTP/HTTPS, firmware upgrade				
Command Line Interface	SSHv2 and TELNET	SSHv2 and TELNET			
Management platform	Central Management Platform	Central Management Platform			
APP CENTER					
APPs	Management: AT over IP, AT over Protocol Converter: Modbus Masi IEC101-104, DLMS to IEC104, Mod	VPN: L2TP, PPTP, DMVPN Network: Dynamic Routing (RIPv1/v2, OSPF, BGP), Email Notification, Enforce Modem PPP, Qo: 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	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	EN50155			

## **DIMENSIONS**





## **ORDERING INFORMATION**

MODEL	PART NUMBER	DESCRIPTION			
NR600-P5G	A634833	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, aGPS			
	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			
1 GWGI GODDIY	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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