

NAVIGATEWORX

NR500 NC

Industrial VPN Router, Ethernet WAN, Serial Ports,
Digital Input and Digital Output, Wi-Fi Optional



Navigateworx NR500 NC industrial router enables wireline data connectivity over public and private networks at high speeds.

NR500 NC router without cellular module, 2 or 4 LAN ports, RS232 and RS485 interfaces are provided to support Serial to IP communication. Supports 9 to 48 VDC wide range power inputs, designed with reverse-voltage protection mechanism for greater reliability. It is an advanced choice for universal wireline M2M applications with reliable features for data transmission.

TYPICAL APPLICATION



Secure and reliable internet access

- Wired Ethernet connection support DHCP, Static IP and PPPoE
- 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 Central Management Platform
- Reduce high costs for onsite maintenance

SPECIFICATIONS

ETHERNET	
Number of Ports	2 Ports: 1 x WAN + 1 x LAN or 2 x LAN, Auto 10/100 Mbps
	4 Ports: 1 x WAN + 3 x LAN or 4 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
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 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,USR
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 75 °C
Operating Humidity	5% to 95% non-condensing
NETWORK	
Routing	Static routing
Dynamic Routing (Optional)	RIPv1/v2, OSPF, BGP
Network Protocols	TCP, UDP, IPv4, ICMP, NTP, DNS, HTTP, HTTPS, ARP, PPP, PPPoE, DHCP, 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
Modbus Slave (Optional)	Read device status via Modbus protocol
Modbus Master (Optional)	Able to read specified channels value from external Modbus slave and generate alarm
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
DMVPN (Optional)	Dynamic Multipoint Virtual Private Networking DMVPN
PPTP/L2TP (Optional)	PPTP or Point-to-Point Tunneling Protocol and L2TP or Layer 2 Tunneling Protocol (L2TP)

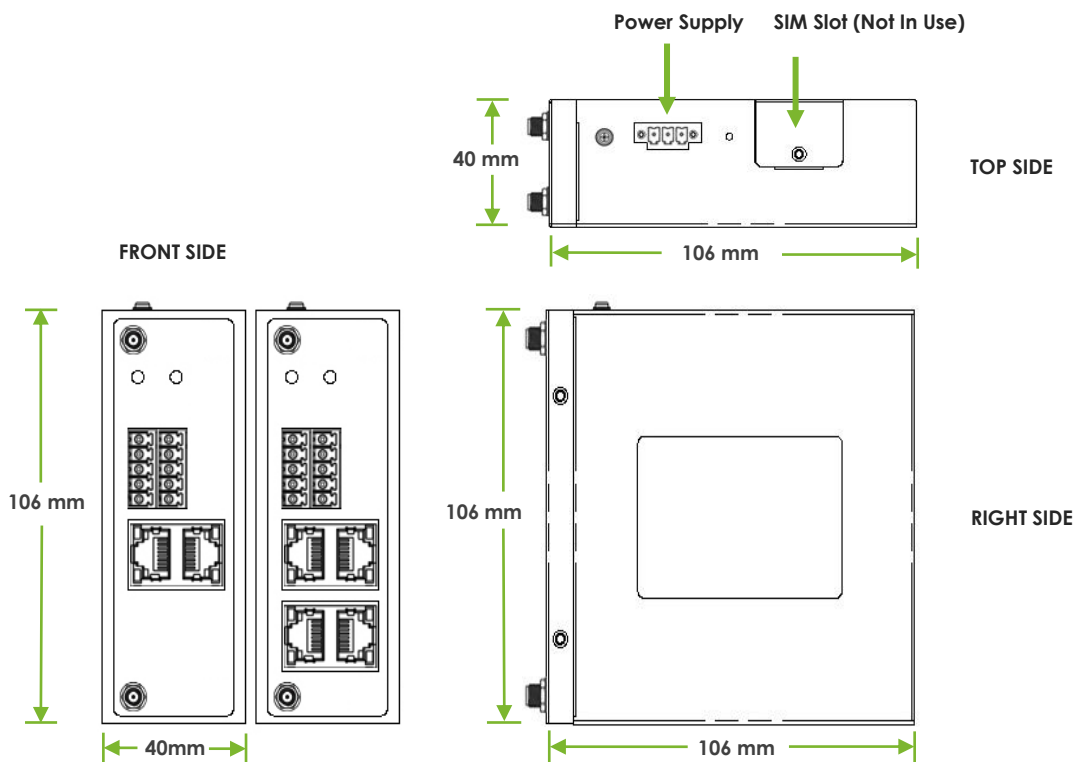
MONITORING & MANAGEMENT

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

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	

DIMENSIONS



ORDERING INFORMATION

MODEL	PART NUMBER	DESCRIPTION
 NR500-SNG	A502033	No Cellular Module, 2 x Eth, 1 x RS232 (3 PIN), 1 x RS485, 2 x DI, 2 x DO, 9 - 48VDC
	A512033	No Cellular Module, 2 x Eth, 1 x RS232 (3 PIN), 1 x RS485, 2 x DI, 2 x DO, 9 - 48VDC, 2.4GHz Wi-Fi
 NR500-PNC	A504033	No Cellular Module, 4 x Eth, 1 x RS232 (3 PIN), 1 x RS485, 2 x DI, 2 x DO, 9 - 48VDC
	A514033	No Cellular Module, 4 x Eth, 1 x RS232 (3 PIN), 1 x RS485, 2 x DI, 2 x DO, 9 - 48VDC, 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
 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, 5dbi, Φ 29×220mm, AC
 Din-Rail	F004001	Din Rail Kit, 35 mm, Aluminium with Black Spray Surface, 50 * 40 * 8.5 mm, 3 * M3.5 Screw Holes

ABOUT NAVIGATEWORX

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