NavigateWorx

IoT/M2M Solution & Hardware
Industrial 4G/5G VPN Router

Company Profile

We specialize in operating IoT/M2M Solutions with various Industrial Cellular Equipment, not only for standard products but also proficient in customization.

Introduction

- Delivering Secure wireless connections

- To become your most reliable IoT/M2M Industry navigating partner.

Technical **Improve** **Service** **Alliance**

ABOUT US

NavigateWorx is a high-tech enterprise committed to delivering secure wireless connections. Since its establishment in 2015 in Guangzhou, we have focused on developing innovative 4G/5G industrial devices for IoT/M2M markets. Our key strength lies in exceptional customization capabilities. With years of experience and professional expertise, we are dedicated to helping our clients develop tailored products and practical solutions to address the diverse and complex IoT markets. Our growth is tightly connected to our expanding global partnerships. We continually strive to explore more feasibilities for wireless connections across various industries, develop products to meet different industrial protocols, and enhance data transmissions in line with evolving technologies.

History

Establishment

A team composed of experienced personnel in the M2M industry

Self-developed OS

Qualified & Convenient Device Management Platform

Honors

Technology oriented SEM
Innovative SEM
High tech enterprises

2015 **2018** **2020** **2022** **2024**
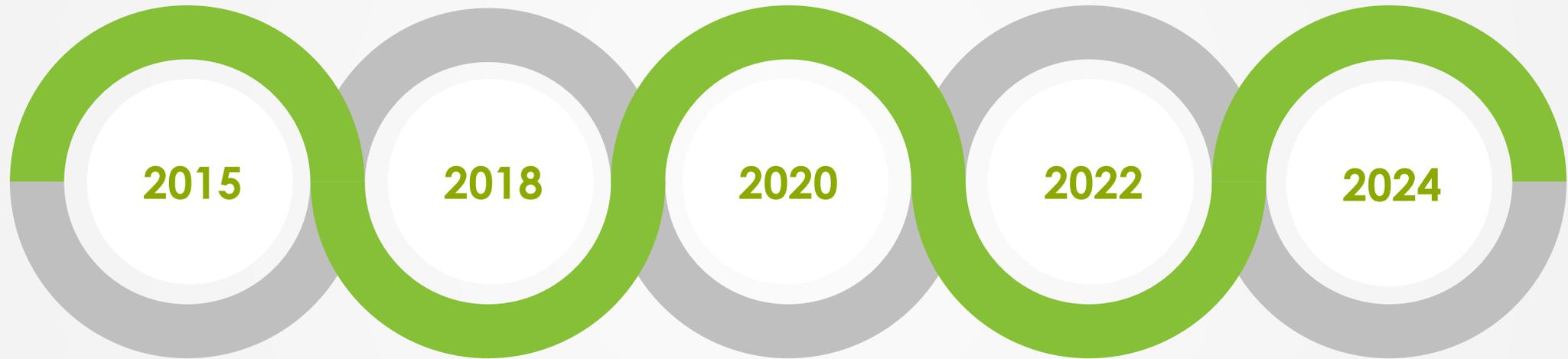
NR500 Rugged LTE Router

The 1st self-developed product has also become one of the best-selling product

NR600 5G Edge Gateway

Technological breakthrough products, whose applied projects have won awards in domestic competitions

Our Team

Management

R&D Dep.

Sales Dep.

Production

Complete and Solid Structure

- ◆ Enterprise management
- ◆ R&D management
- ◆ Project management
- ◆ Operation management

- ◆ More than 40%
- ◆ Software and Hardware
- ◆ Functional Testing
- ◆ Environmental Testing

- ◆ Customer service
- ◆ Technical support
- ◆ Business coordination
- ◆ Market analysis

- ◆ Raw material procurement
- ◆ Processing and assembly
- ◆ Factory inspection
- ◆ Aging Testing

Global Footprint

Products are sold in **85** countries worldwide

Sales have increased by over **30%** in the last three years.

- **United Kingdom** - Impulse Embedded Limited
- **Switzerland** - Omni Ray
- **Finland** - Cru Power Oy
- **Netherlands** - CimPro
- **Middle East** - Startech GCC
- **America** - Engineerix

Product Line

Self-developed Industrial 4G/5G VPN Router & DMP

Star Product

NR500 NC/Std/Pro

Rugged LTE Routers

Used in numerous applications and widely recognized

Network failover between Ethernet, Cellular, and Wi-Fi
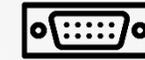
Multiple Industrial interface, RS232, RS485, DIDO

Wide Range Power Input 9 to 48 VDC

Industrial design & wide range working temperature

Self-developed OS, in-house development

Protocol conversion IEC101, IEC104, Modbus, DNP3, etc

Diversified VPN, IPSec, OpenVPN, DMVPN, Wireguard, Zerotier, etc

Remote management, compatible with 3rd party platforms

Open SDK for Secondary development

Hot Product

NR300 / NR310
Compact LTE Routers

Reliable cellular connection with dual SIM auto switch
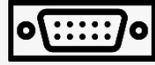
Multiple Industrial interfaces RS232 and RS485

Industrial design & wide Range Power Input 9 to 36 VDC

Protocol conversion IEC101, IEC104, Modbus, DNP3, etc.

Diversified VPN, IPSec, OpenVPN, DMVPN, Wireguard, Zerotier, etc.

Self-developed OS, compatible with 3rd party management platforms

NavigateWorx

NR300

Industrial Cellular VPN Router

Default IP: 192.168.5.1
User/Pass: admin/admin
Power Input: 9~36 VDC
CoO: China

RoHS CE

www.navigateworx.com

NavigateWorx

NR310

Industrial Cellular VPN Router

Default IP: 192.168.5.1
User/Pass: admin/admin
Power Input: 9~36 VDC
CoO: China

RoHS CE

www.navigateworx.com

Smaller in size. fully functional

Advanced Product

NR600

5G Edge Gateway
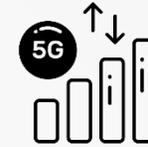
Advance 5G SA/NSA cellular connection with dual SIM auto switch

Dual band 2.4Ghz and 5Ghz Wi-Fi up to 802.11ac, AP and client mode
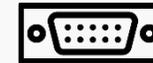
Multiple Industrial interfaces, Gigabit Ethernet, RS232, RS485, DIDO

Protocol conversion IEC101, IEC104, Modbus, DNP3 and etc.

Diversified VPN, IPSec, OpenVPN, DMVPN, Wireguard, Zerotier and etc.

Self-developed OS, compatible with 3rd party management platforms

Open SDK for Secondary development

Comparison Table

	NR300	NR310	NR500-Standard	NR500-Pro	NR500-NC	NR600
Cellular	4G		4G	4G	No	5G
Ethernet Ports	1	2	2	4	2/4	4
Wi-Fi	No	Yes	Optional			Yes
GPS	No		Optional		No	Yes
RS232	1		1			1
RS485	1		1			1
DI	No		2			2
DO	No		2			2
Power Input	9 - 36 VDC		9 - 48 VDC			9 - 48 VDC
Working Temp.	- 40 To 75 ℃		- 40 To 75 ℃			- 30 To 70 ℃
VPNs	OpenVPN, GRE, IPSec, L2TP, PPTP, DMVPN					
Config	Local Configuration/SNMP/CLI Command/Cloud Management Platform					

Device Management Platform

1 Real-time device statistics including model, online number analysis

2 Remote maintenance for firmware upgrade, config file import, and reboot task

3 User-friendly UI design and multiple access privilege

Centralized device management

4 Device group for batch operation and multiple user management

5 7 x 24 hours of operating design, multi-layer verification of device connections

6 Cloud-based service and support private deployments

Application Scenarios

Explore more feasibilities for wireless connections across various industries

Extensive Markets

Energy
Smart Metering
Power Dispatching
Gas Pipeline Remote Monitoring
Substation Automation System
Pump Station

Transportation
Intelligent Bus System
Highway Tunnel Monitoring
Subway Monitoring System
High Altitude Data Collection

Industrial Automation
Package Machines Remote Monitoring
CNC Machines Remote Monitoring
Compressor Remote Monitoring

Retail
ATM
Vending Machine
Gambling Machine
Digital Signage
Kiosk

Basic Topology
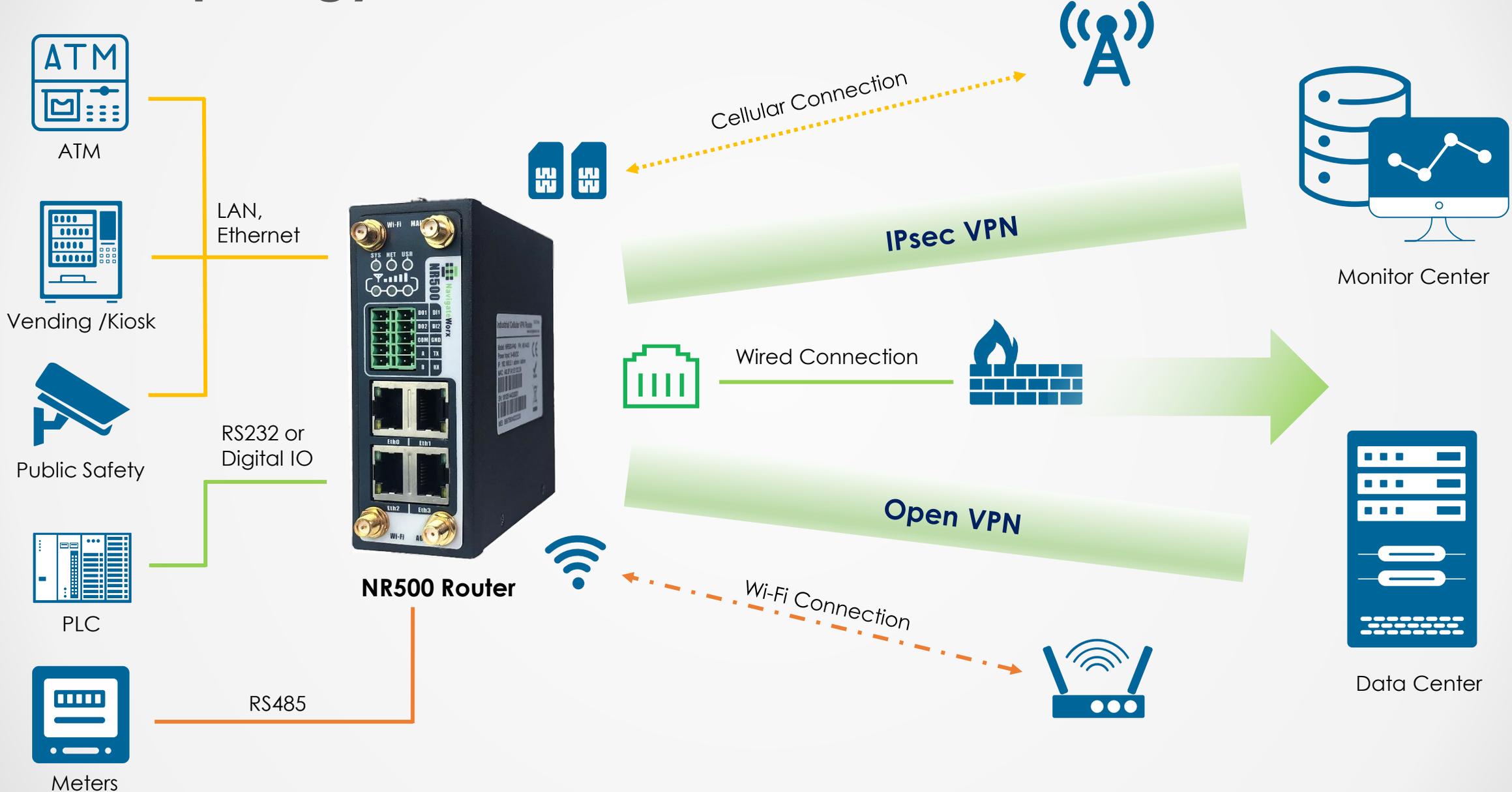
Industry Analysis

Since different industries have different standards, protocols, and scenarios，No standard cellular product can fully meet all needs in the diverse industrial market.

Therefore, product customization is crucial and this is what NavigateWorx excels at.

Industrial cellular routers perform diverse functions such as data security and encryption using firewalls and VPNs. The Edge computing function collects data from IoT terminals and transmits it to the server. It integrates with different application platforms for extensive data analysis, etc.

With the rapid evolution of wireless technology and its extended coverage, wireless communication offers superior reliability, cost-effectiveness, and deployment convenience compared to wired communication.

Wireless communication can replace wired connections in various applications, including Remote Meter Reading and Self-service Retail. It also serves as a backup link for ETC, Small Supermarket Chain payment Systems, Traffic Signals, and Remote Switching. Additionally, it supplements the real-time communication of mobile carriers for applications such as Bus Systems, High-speed Trains, Fire Trucks, and Helicopters.

Software Customization ①

DNP3 Serial to DNP3 UDP Protocol Conversation

This project is from the Middle East and applies to wastewater monitoring equipped with RTUs to pair with sensors. They are looking for a high-quality functional industrial router to transport the data from RTU to their multiple SCADA systems. Due to their RTU only supporting serial ports, which cannot make remote transport, we developed the protocol conversation of DNP3 Serial to DNP3 UDP in our NR300 4G Router.
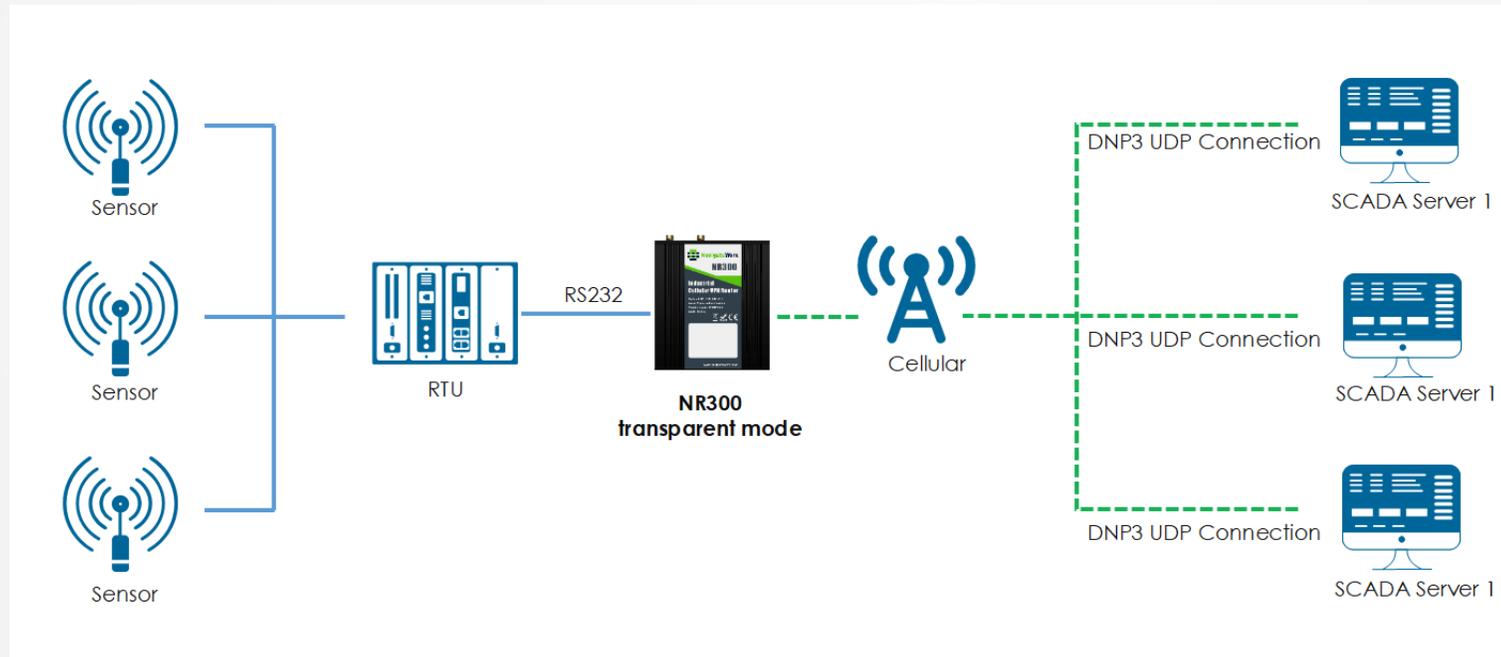
I am extremely impressed with the support provided by your company, we will seek more opportunities with NavigateWorx.   - Said By Mr.Mohammed
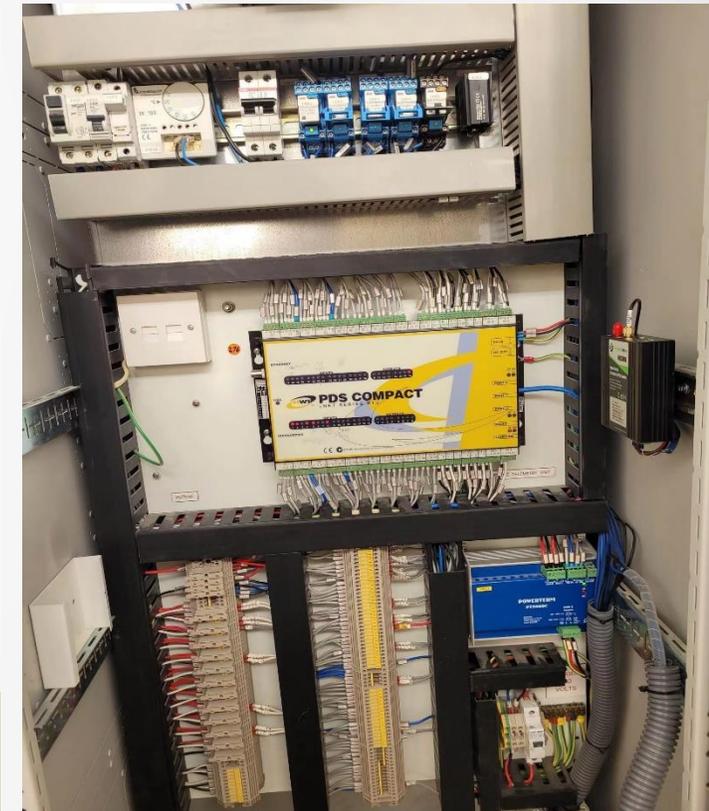
# Software Customization ②

IEC101-IEC104 Protocol Conversation

This project is from Saudi Arabia. Due to the increase in electricity needs in cities and towns, the high-quality development of the economy needs to build more 132/33kV substations. They need to develop the whole electrical system.

While the controllers in substations only support IEC 101 slave, so we developed the protocol conversation of IEC101- IEC104 in our NR500 4G router to make the data transmission from the controller to their SCADA System smoothly.
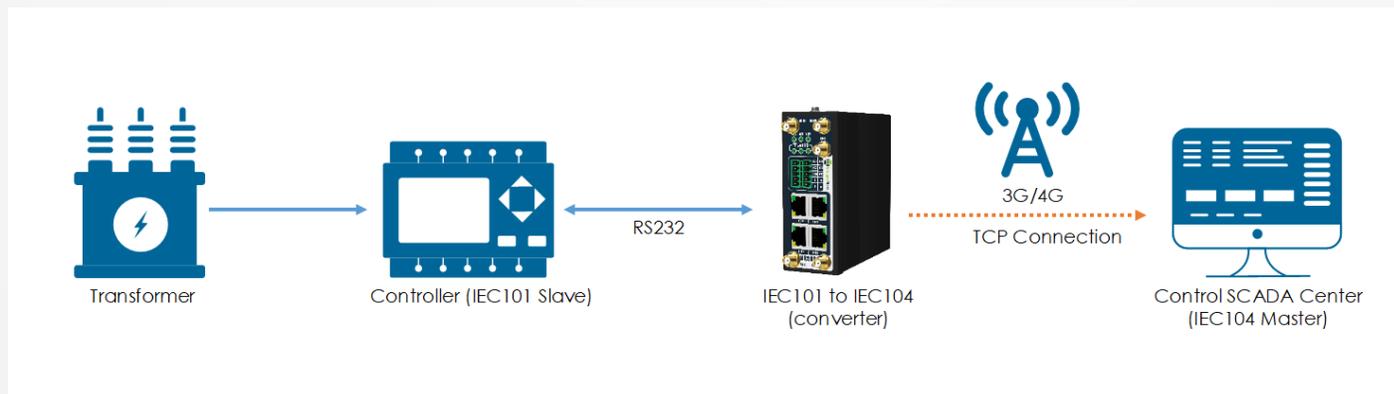
Hardware Customization ①
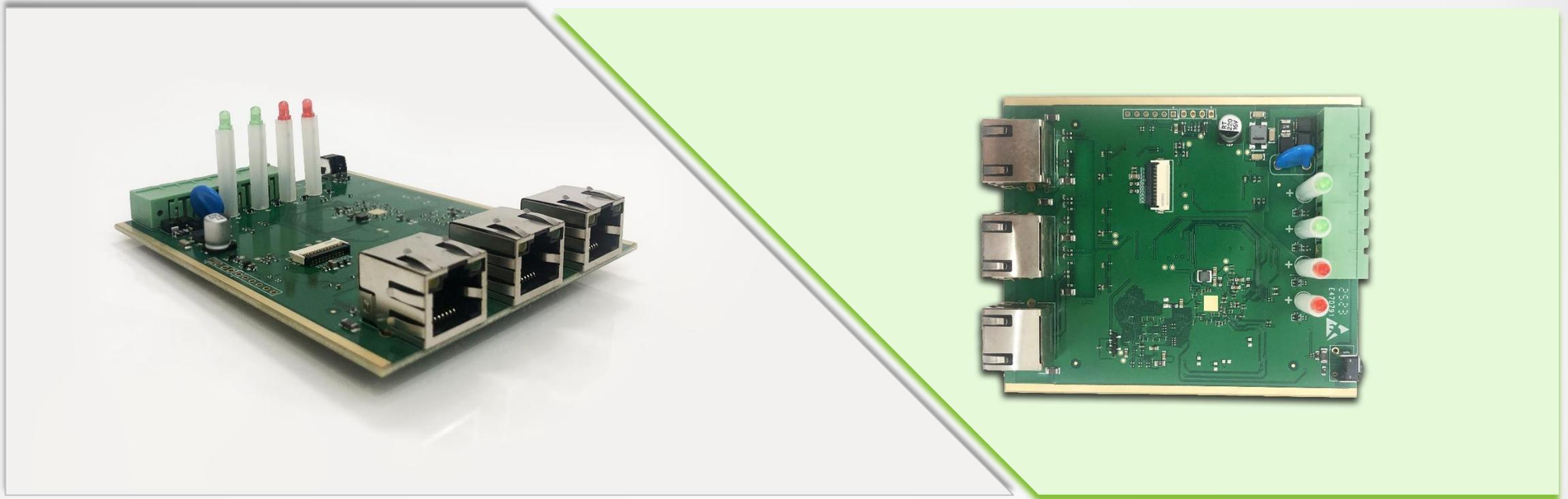
Factory Automation Production

This is an application from a German client specializing in industrial automation who is familiar with industry protocols such as PROFINET, PROFIBUS, EtherNet/IP, etc. They approached us to collaborate on customized products precisely because they saw Navigateworx's accumulation in the Industrial Automation applications. This product is applied in factory industrial automation deployment and supports classic PROFINET and smart sensor communication.

Hardware Customization ②

5G Subway Data Transmission

This project is from China. They need us to develop a 5G communication module and integrate it into the subway train's data system. The train data system will automatically connect to the station data center with high-speed data transmission. It can help reduce maintenance risks and pressure on maintenance workers, and efficiently analyze and handle problems.

RSIC 铁科智控
RAILWAY SCIENCES INTELLIGENT CONTROLS

Installations

NR500 on helicopter
For secure communication
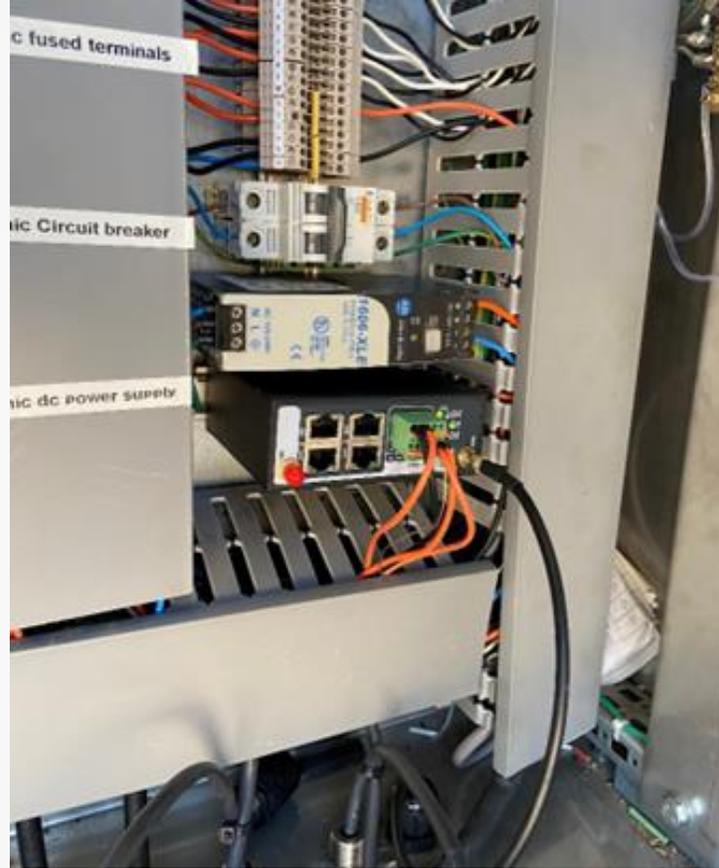
Remote Gas Pipeline
Monitoring via NR500

Oil Well Station Remote
Monitoring via NR500

Why NavigateWorx

Professional technology and services

Competitive Edge

Profitable Alliance

Competitive agency prices, inquiries referrals from the respective regions, and territory protection.

Strong Customized Services

Stay close to customer needs and help you develop and manage IoT solutions from hardware to software.

Technical Support & Training

Provide online support by Skype, TeamViewer, or even onsite Support, technical training for products and applications.

Collaborative Marketing

Work with our partners to develop marketing strategies and materials and organize co-branded activities.

Efficient & Cautious Service

Thoughtfully communicate with customers and Coordinate internal resources to resolve requests promptly.

Supporting Terms

Service Guidelines

01

Sales/Technical/Inquiries Response: General within 2H, Americas regions with 12H
Customer Service: Online Meetings, Routine, Exhibition, Visiting Plan

Delivery time

02

Samples take 3 working days, Small orders take 1-2 weeks,
Bulk orders generally take within 8 weeks, specific details can be negotiated

Delivery Standards

03

100% factory inspection from IQC-PCBA-OQC, 48-hour aging test

Warranty & after-sale service

04

2 years, Online Support, On-site Support, RMA

Win-Win Partnership

NavigateWorx

Distributors

VAR (Value Added Reseller)

System Integrator

End User

Operators / MNVO / MNC (Multinational Corporation)
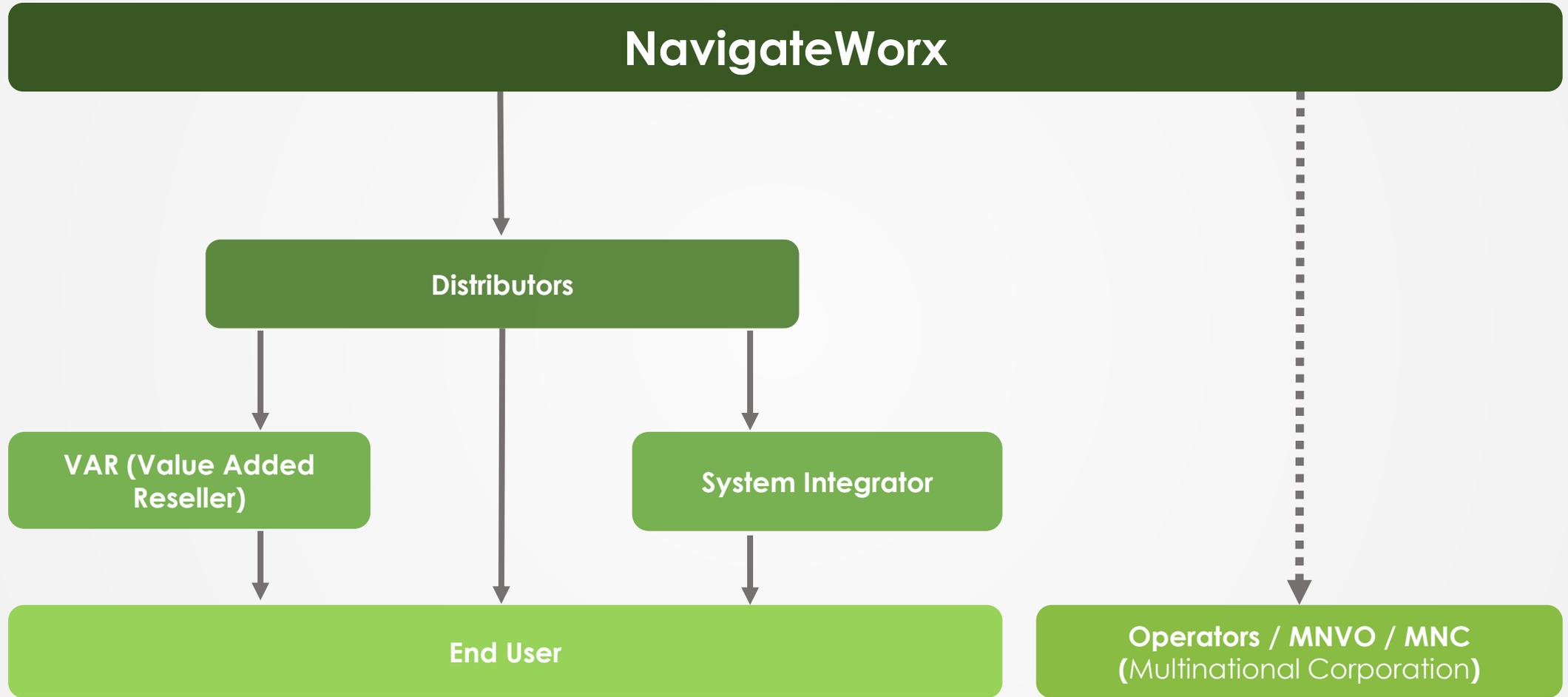
We appreciate your patient participation. We wish to establish a friendly and long-term cooperation with you!

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