InHand Networks

InConnect Service

Simple and Secure Remote Connection

InHand Networks

www.inhandnetworks.com

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Challenges in managing distributed business sites

Onsite management

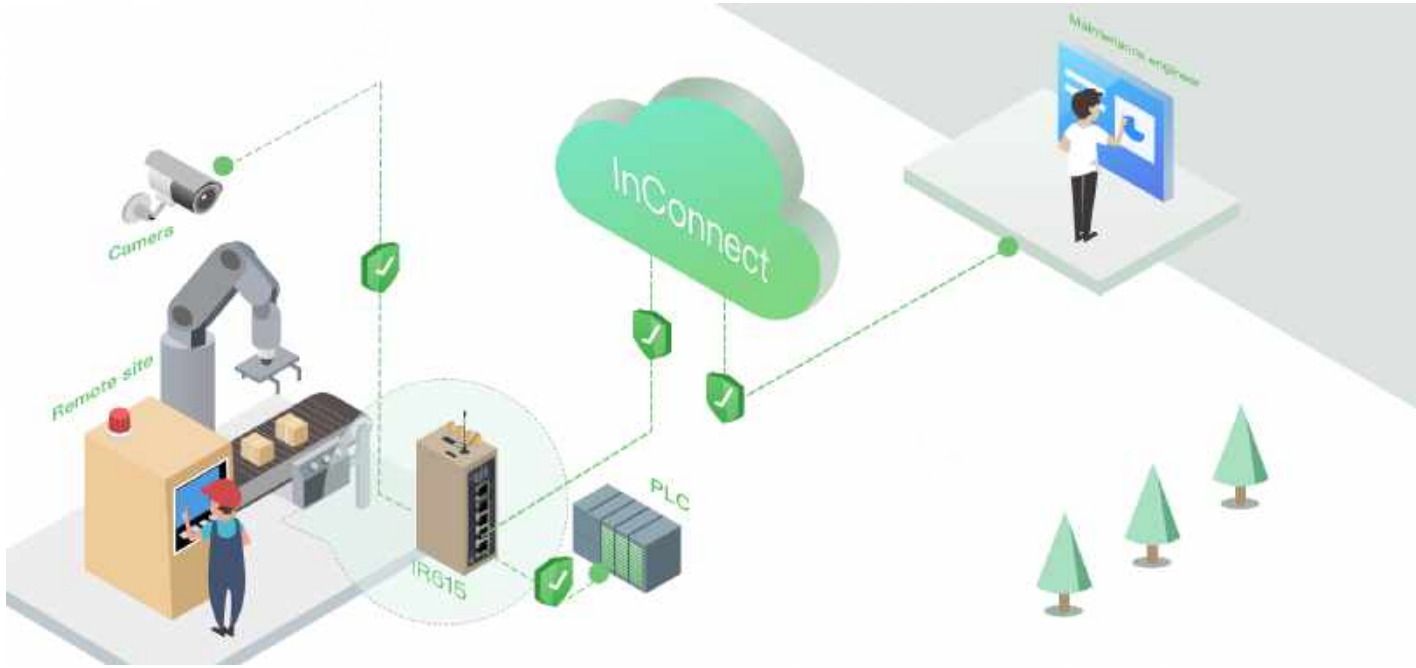
- High costs for regular maintenance
- Delayed troubleshooting
- Time and energy consuming

Remote management

- IT expertise required
- Security and reliability concerns
- Hardware and software compatibility
- Inefficiency of operation & maintenance

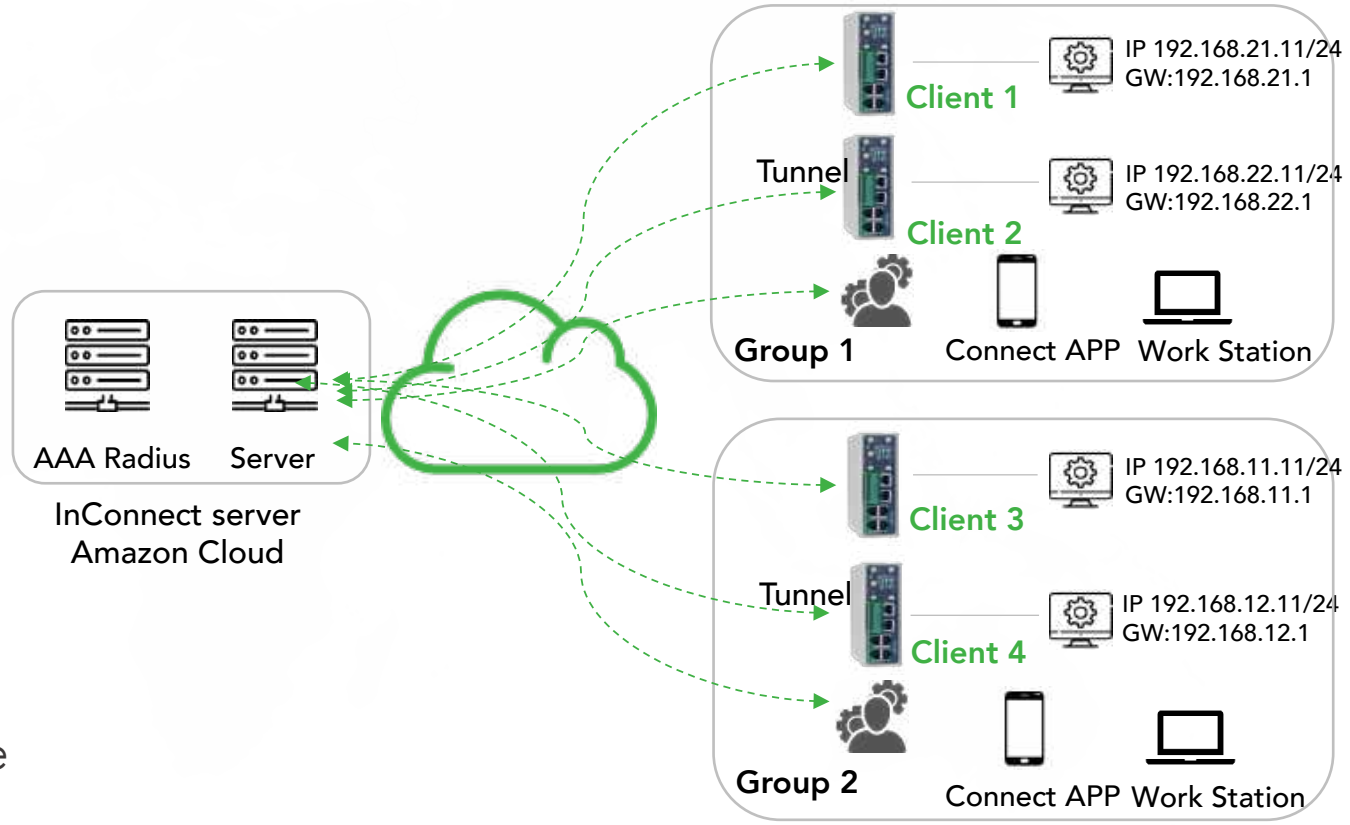
What is InConnect?

- InConnect is a simple service which builds secure remote networks for your IoT applications
- It allows you to connect to remote sites via PC/Phone 24*7
- Remote devices (PLCs, HMIs) can talk to each other within the secure private network



How Does InConnect Work?

- InRouter VPN router connects field devices to the VPN server
- Access remote devices on PCs or mobile devices via secure VPN tunnels anytime from anywhere
- Machine to Machine (M2M) remote communications
- View device connection status and data usage via InConnect



Why InConnect?

01 "One-stop" service integrating hardware + cloud

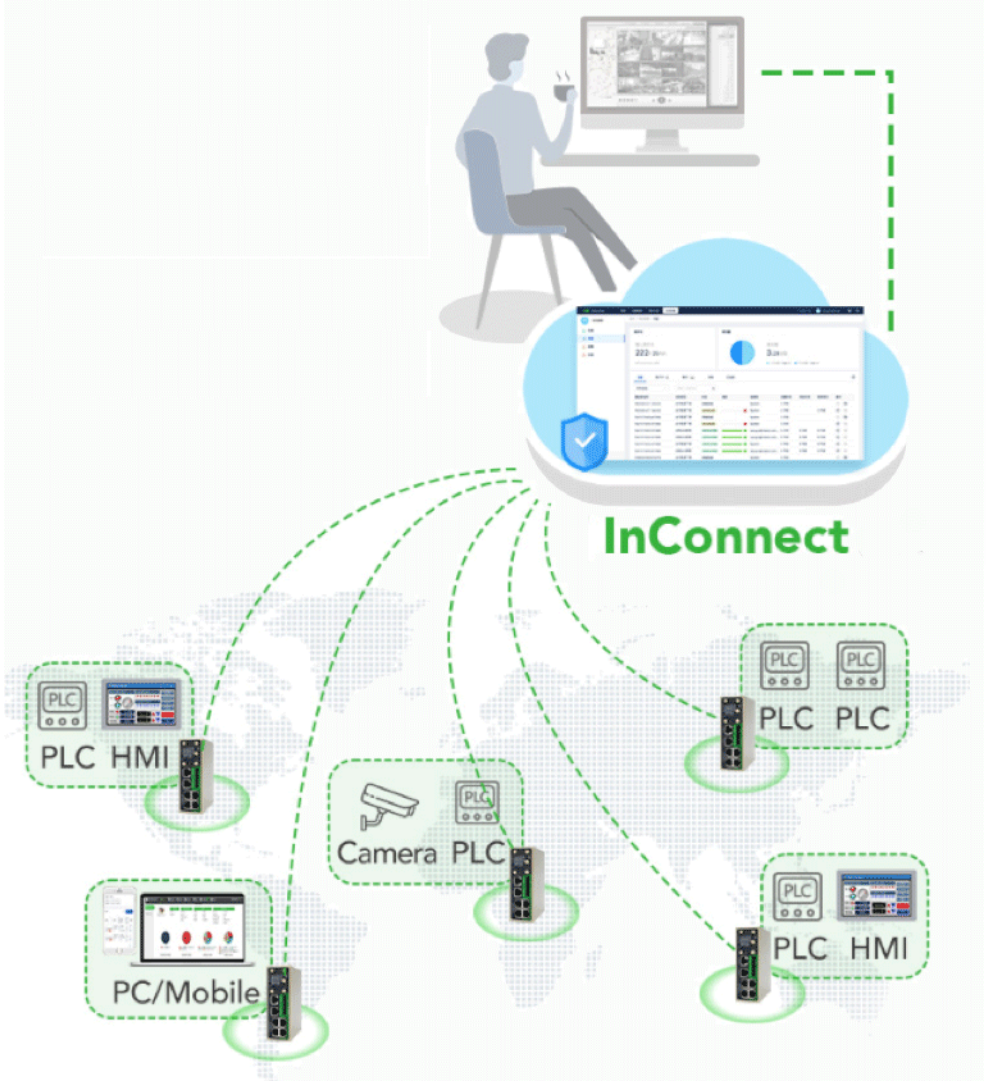
02 Hassle-free plug & play

03 Management in the cloud

04 Advanced security

05 Highly scalable for IoT

06 Free from operation & maintenance



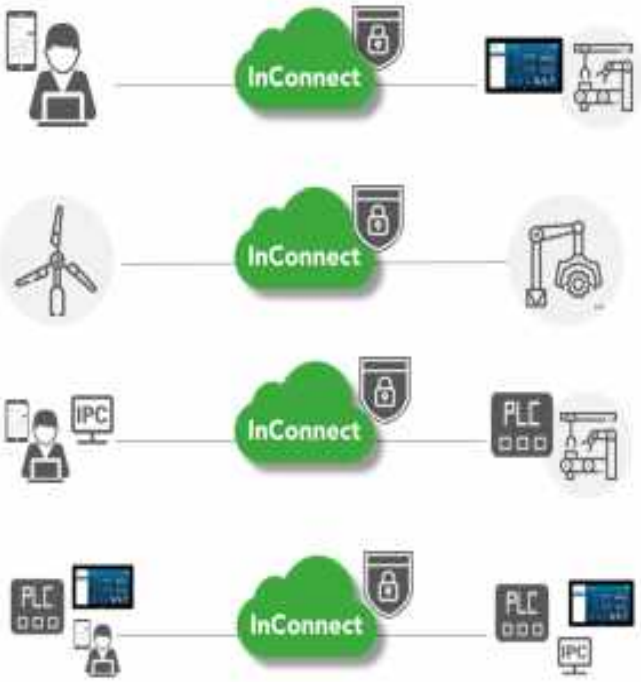
“One-stop” connection:

Cloud + InHand’s routers/gateways + client software

- Networking of distributed sites
- Remote office
- Connectivity between Devices
- Highly secure encryption

Multiple Remote Connections

1. User-to-Device
2. Site-to-Site
3. Device-to-Device
4. Multiple-to-Multiple



Truly Plug & Play

It's Easy as 1-2-3:

1. Register an InConnect account (https://ics.inhandnetworks.com/)
2. Install and connect to InHand's routers / gateways
3. Install InConnect VPN client and set up connection (very simple!)
4. Connection completed!

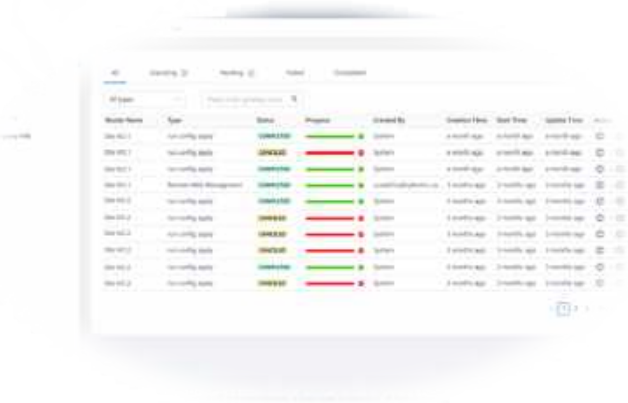
For more information, please refer to ***InHand InConnect Cloud Platform User Manual***.

Device Management in the Cloud

- Gateway traffic monitoring
- Update of gateway configurations
- Upgrading of gateway firmware

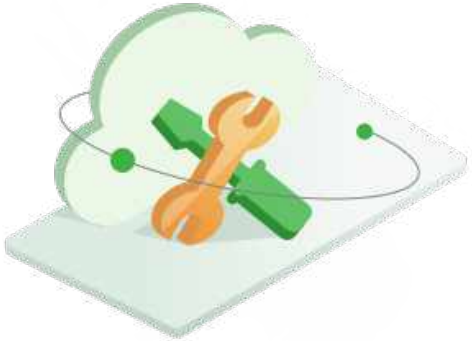
InHand Connect Service

- Online tracking of task status



Secure & Reliable Service

- AWS cloud deployment
- InHand's industrial routers & gateways with CA authorization
- VPN tunnel with SHA265 and AES265 encryption
- PC and mobile apps need CA authentication



Highly Scalable for IoT

- Easily add remote sites to your account as business grows (up to **4000** sites accessible)
- With AWS cloud service, flexibly scale up bandwidth, processor features, memory and storage
- Ideal for industrial automation, smart manufacturing, transportation security, smart healthcare, utilities, public services, etc.

Traditional VPN vs. InConnect

	Traditional VPN	InConnect
Deployment	Complex and time-consuming; extensive IT knowledge required	Easy deployment and configuration, little technology required
Network	Public static IP address and VPN Server	Fast network building with AWS cloud service
Connection	User-to-device	User-to-device and device-to-device
Security	Data center exposed in public networks, security settings required	Secure deployment center and encrypted data transmission
Cost	Public IP and broadband fees, VPN devices in the center	No fees for network building; charged by data usage, lower investment
Access Capacity	Number of connected sites subject to VPN	Flexibly scalable
Expansion		Remote management of routers, firmware upgrade, configuration update; data statistics, device monitoring

PART 02

Compatible Hardware

Supports connection of InRouter600-S, InRouter900, InGateway900, InVehicle G710 series products

Compatible InHand Devices

Product	Cellular Network	LAN/WAN	WIFI	GPS	Serial Port	I/O Port	CanBus	Coverage	Certification
InRouter912	Dual SIM	2* 10/100Mbps WAN/LAN						Global	CE, FCC, UL, PTCRB, CCC, Verizon Wireless, AT&T, E-MARK, IC, IMDA, RCM
InRouter611-S	Single SIM	1*10/100Mbps LAN/WAN	802.11b/g/n		✔			Global	CE, FCC, PTCRB, IC, RCM, SDPPI, AT&T, T-Mobile, Verizon Wireless
InRouter615-S	Dual SIM	1*10/100Mbps WAN 4*10/100Mbps LAN	802.11b/g/n		✔			Global	CE, FCC, PTCRB, IC, IMDA、RCM, Verizon、AT&T, T-Mobile, Class Ⅰ Division 2
InRouter915	Dual SIM	1* 10/100Mbps WAN/LAN 4*10/100Mbps WAN/LAN	802.11b/g/n	✔	✔	✔		Global	CE, FCC, UL, PTCRB, CCC, Verizon Wireless, AT&T
InGateway900	Dual SIM	2*10/100/1000Mbps WAN/LAN or 2*LAN	802.11 ac/a/b/g/n	✔	✔	✔		Global	CE, IC, FCC, PTCRB, Verizon Wireless, AT&T
InVehicle G710	Dual SIM	4*10/100/1000Mbps RJ45	802.11ac/a/b/g/n	✔	✔	✔	✔	Global	CE, FCC, IC, RCM, PTCRB, IMDA

PART 02

Compatible Hardware

Supports connection of InRouter600-S, InRouter900, InGateway900, InVehicle G710 series products

InRouter600-S Industrial LTE Router

InRouter611-S / InRouter615-S

- All industrial-grade design, EMC level 3
- 1/5*ETH port, 1*serial port
- 4G LTE/3G, Ethernet, Wi-Fi
- IPsec VPN, DMVPN, L2TP, OPEN VPN
- Compact, easy for installation, wall/panel mounting

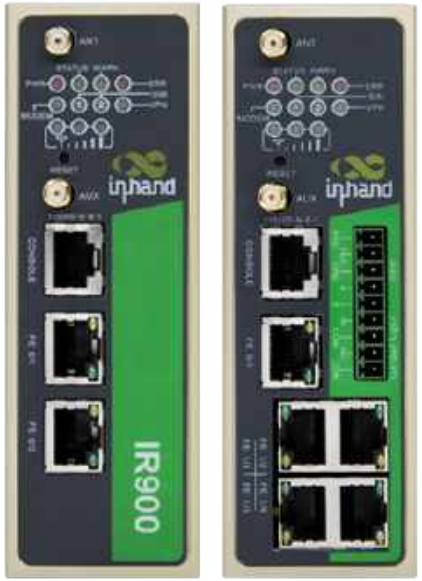
PART 02

Compatible Hardware

Supports connection of InRouter600-S, InRouter900, InGateway900, InVehicle G710 series products

InRouter900 High-level Industrial Router

InRouter912 / InRouter915



- All industrial-grade design, DIN rail installation, EMC level 4
- 2/5* Ethernet port, 2* serial port, 2*I/O
- 4G LTE/3G, Ethernet, Wi-Fi
- IPsec VPN, DMVPN, L2TP, OPEN VPN
- Python programmable

CE FC UL PTCRB at&t verizon T-Mobile Microsoft Azure Certified AWS Greengrass

InGateway900 Edge Computing Gateway

IG902-B / IG902-H

- All industrial-grade design, DIN rail/wall mounting, EMC level 3
- 2*Ethernet port, 2*serial port, 2*I/O, 2*industrial protocol port
- 4G LTE, 3G, ADSL, Ethernet, Wi-Fi
- IPsec VPN, CA, OPEN VPN
- Python programmable
- Multiple industrial protocols supported: Modbus TCP, Modbus RTU, OPC UA, PROFINET, PROFIBUS-DP, EtherCAT, EtherNET/IP, CC-LINK, PPI

PART 03

CASE NO.1 Automated Irrigation System of Golf Course Lawn

- Industry: Smart irrigation
- Application: Remote control of golf course irrigation system
- Requirements:
  - Automated irrigation that is prompt, demand-based, efficient, and water-saving
  - Improvement in management, costs reduction and efficiency enhancement

Golf Pump Station

- Solution: Industrial LTE router IR915 + InConnect cloud service

PART 03

CASE NO.1 Automated Irrigation System of Golf Course Lawn

Solution: Industrial LTE router IR915 + InConnect cloud service

- InHand's router IR915
  - Devices including pipelines, pumps, PLC, routers, business servers, etc.
  - IR915L connected to the Internet via cellular LTE 4G network or ADLS, no need for public IP address
  - IR915L connected to InConnect cloud service via VPN
- InConnect cloud service
  - Terminal devices installed with HMI systems connected to InConnect via clients, users can remotely control the irrigation system on mobile phones, tablets or laptops
  - Remotely maintain or upgrade onsite PLC programs via InConnect for irrigation strategy adjustment

PART 03

CASE NO.2 Smart Maintenance Solution for Oil Wells

- Industry: Oil
- Application: Smart control system for valves of oil wells
- Requirements:
  - Anomaly detection in advance, user reminder for targeted maintenance
  - Less downtime and continuous production

- Solution: Industrial LTE router IR615-S + InConnect cloud service

Valve

PLC

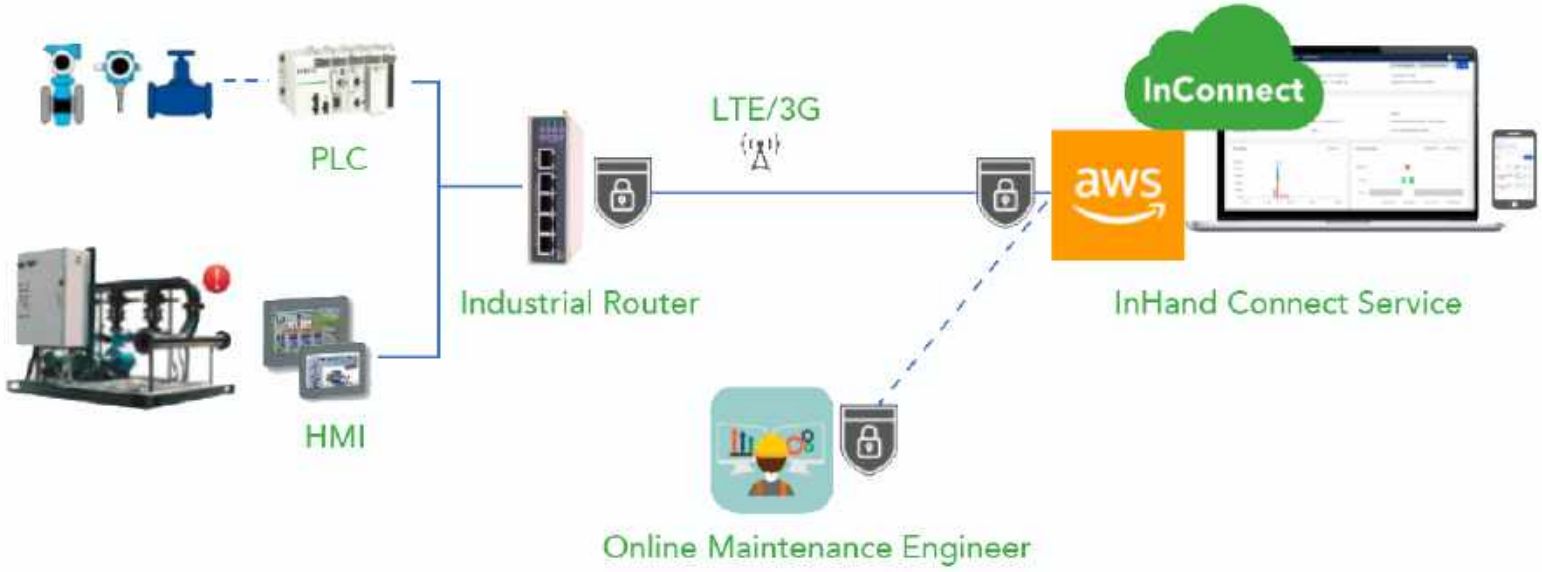
HMI

Maintenance Engineer

PART 03

CASE NO.2 Smart Maintenance Solution for Oil Wells

Solution: Industrial LTE router IR615-S + InConnect cloud service



InHand IR615-S router

- PLCs, HMIs and other smart devices connected to IR615-S via Ethernet
- OpenVPN tunnel between IR615-S and InConnect

InConnect cloud service

- Onsite control systems accessible via InConnect anytime anywhere
- Online test, variable tracking, maintenance and diagnostics, remote program uploading and downloading, data collection, etc.

PART 04

Pricing

Service fee

$2.5/GB

Charged by data usage in the cloud

Try now!

Address: https://ics.inhandnetworks.com

free from April 1 to June 30

ABOUT

InHand Networks

InHand Networks is a global leader of Industrial IoT, with a record of tremendous success following groundbreaking innovation since our inception in 2001.

InHand serves world-class partners and customers with industrial M2M routers, gateways, industrial Ethernet switches, rugged computers and IoT management platforms. We provide IoT solutions for various vertical markets including Smart Grid, Industrial Automation, Remote Machine Monitoring, Smart Vending, Smart City, Retail and more.

Proudly bearing the marks of AWS Select Technology Partner, Schneider Electric TPP Certified Technology Partner, and Rockwell Automation Encompass Product Partner in Asia-Pacific, InHand Networks defines industrial innovation and reliability.

Website: https://www.inhandnetworks.com/

InConnect

Facilitating Informationization &

Digital Transformation

InHand Networks

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