

InConnect Service

Simple and Secure Remote Connection

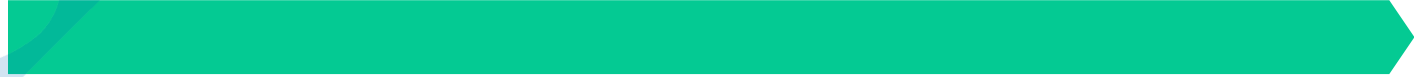


InHand Networks

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



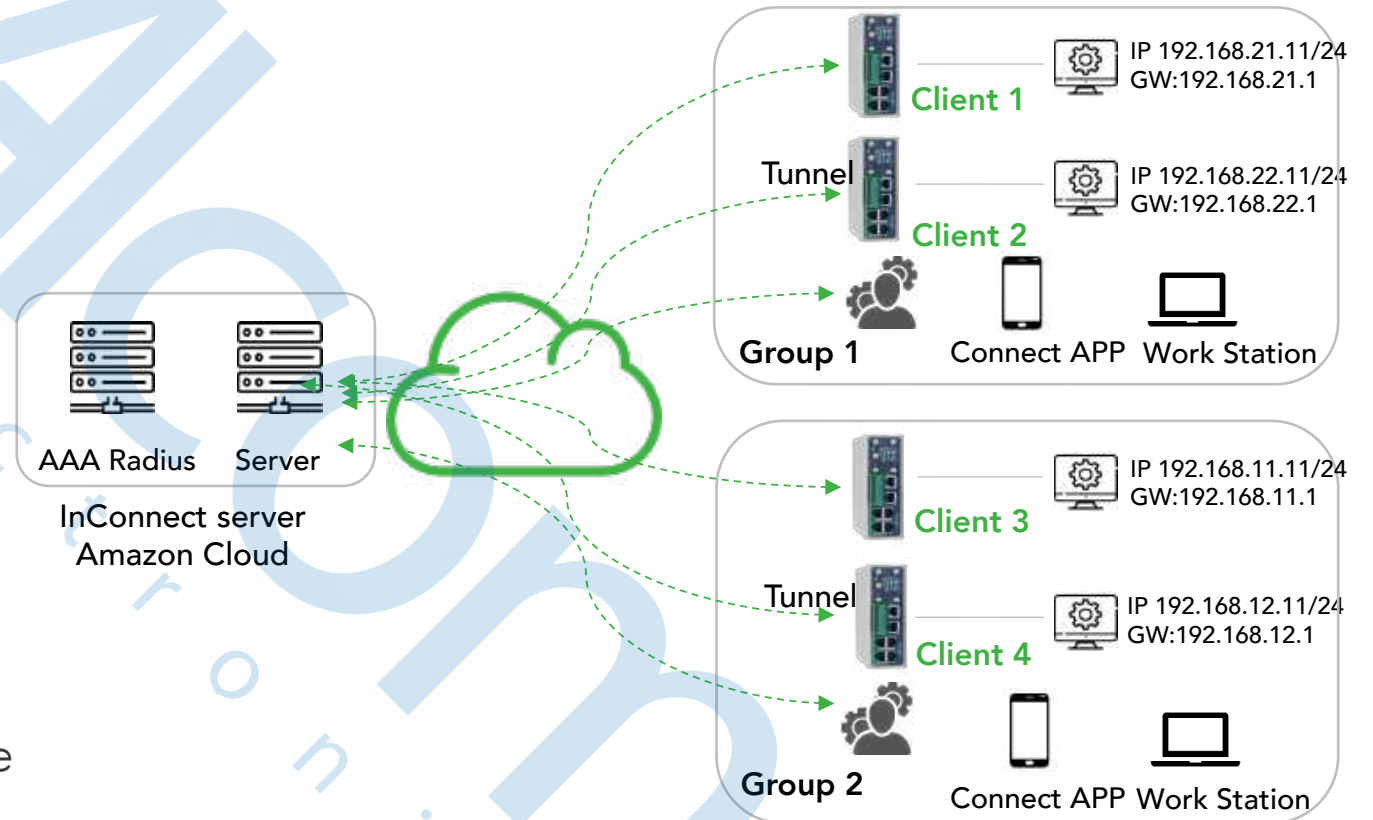
What is InConnect?

- 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?

"One-stop" service
integrating hardware + cloud



01

Hassle-free plug & play



02

Free from operation
& maintenance



06

Management in the
cloud



03

Highly scalable for IoT

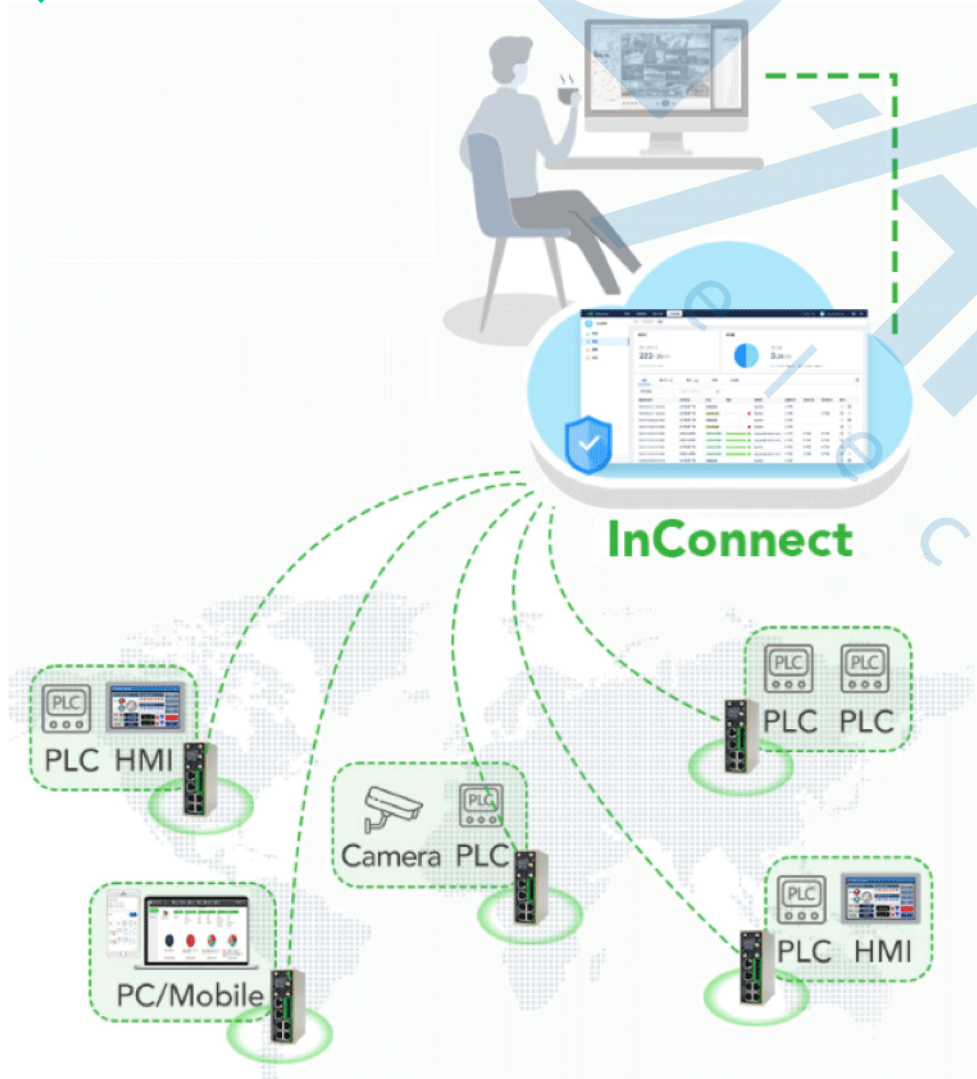


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Advanced security



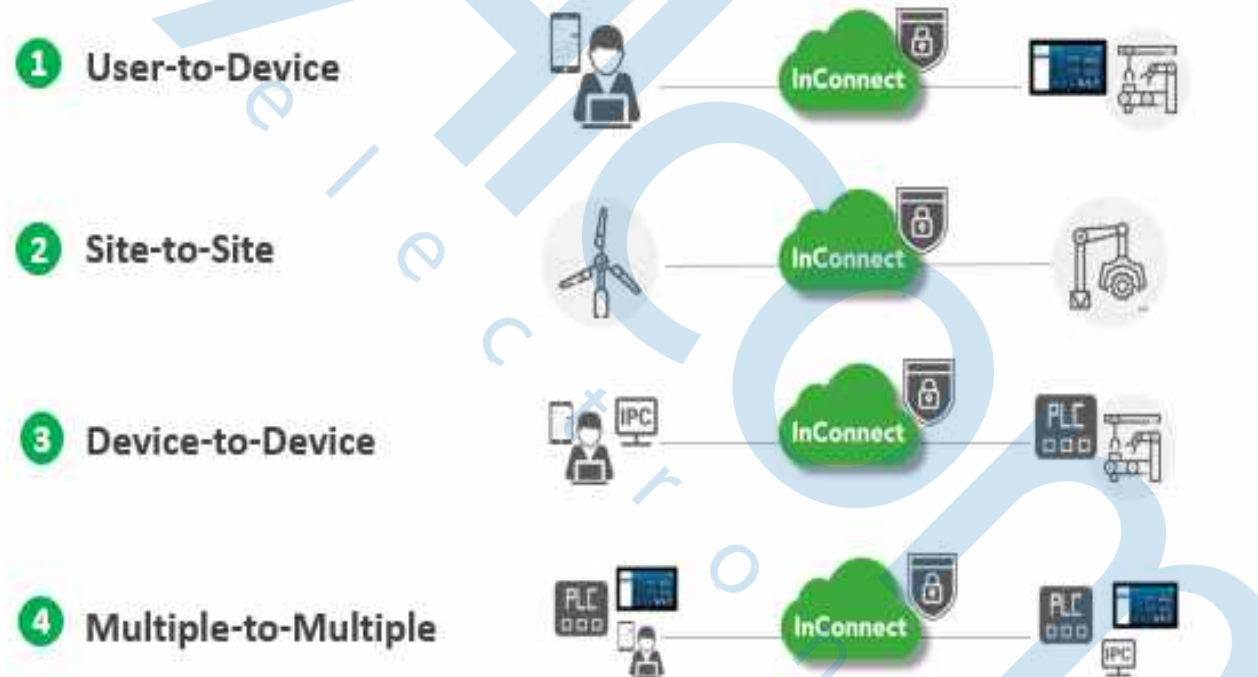
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**“One-stop” connection:
Cloud + InHand’s routers/gateways +
client software**

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

Multiple Remote Connections



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

The screenshot shows a table with columns for 'Name', 'Status', 'Project', 'Created By', 'Created Time', and 'Last Time'. The table contains several rows of data, with each row representing a task or project. The status column uses color-coded indicators (green for 'Success', red for 'Failed', and yellow for 'Warning').

Name	Status	Project	Created By	Created Time	Last Time
2020-04-02	Success	...	...	...	...
2020-04-02	Failed	...	...	...	...
2020-04-02	Warning	...	...	...	...

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

InRouter600-S Industrial LTE Router

InRouter611-S / InRouter615-S

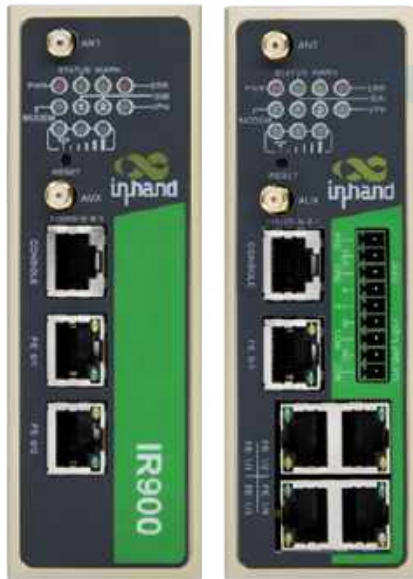


- All industrial-grade design, EMC level 3
- 1/5*ETH port, 1*serial port
- 4G LTE/3G, Ethernet, Wi-Fi
- IPsec VPN, DMVPN, L2TP, OPEN VPN
- Compact, easy for installation, wall/panel mounting



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



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
- **Solution: Industrial LTE router IR915 + InConnect cloud service**



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

- 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

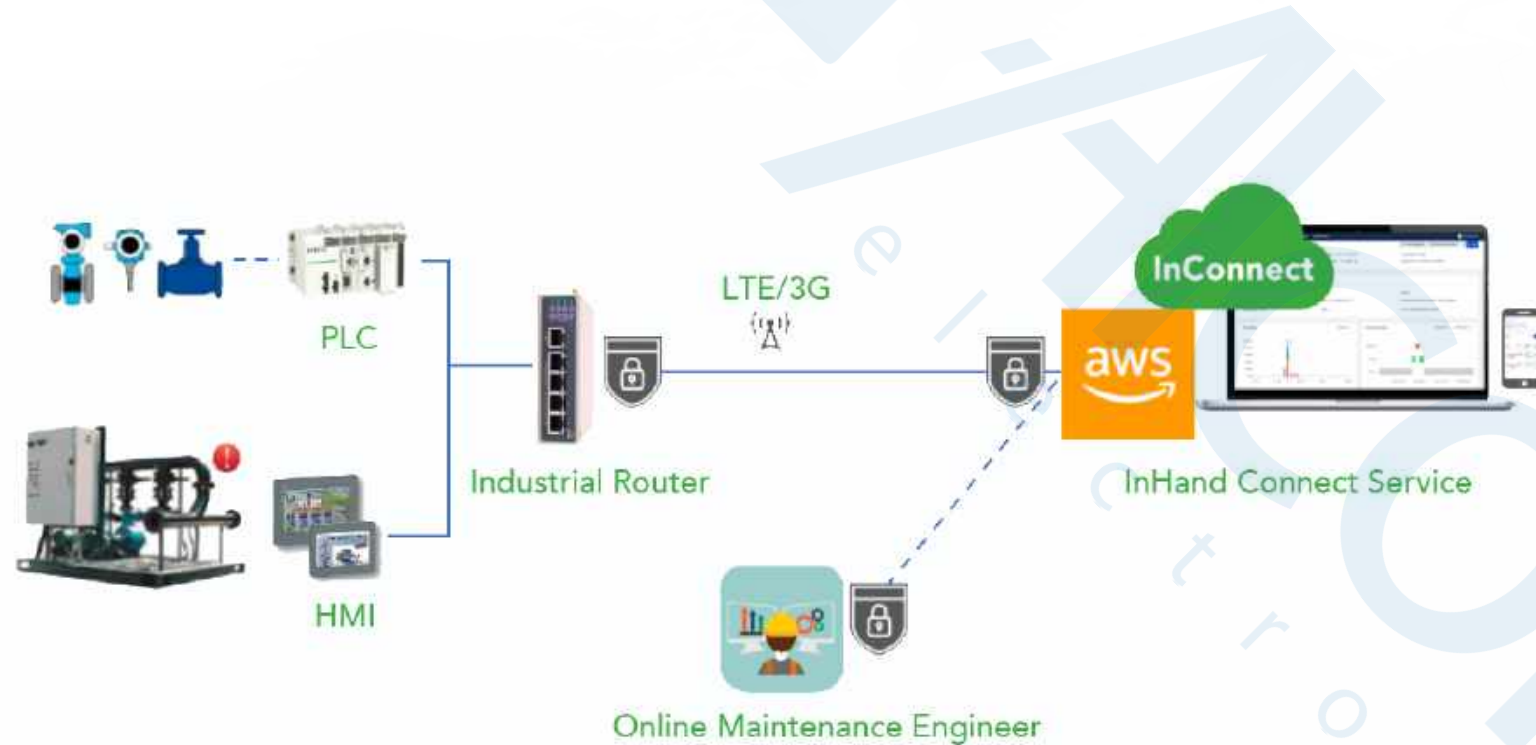


HMI



Maintenance Engineer

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.

Service fee

\$2.5/GB

Charged by data usage in the cloud

Try now!

Address: <https://ics.inhandnetworks.com>



from April 1 to June 30



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/>