



InHand Networks



Secure Connections Steps Away

InHand Connect

Cloud Connection Service

InHand Connect Service, also InConnect, helps customers to build secure connections to distributed sites quickly and easily. The solution is SaaS (Software as a Service) based and is easy to deploy, connect and expand.

With InConnect Cloud Service,, users can connect multiple Ethernet terminals in the field to one same IoT network. Users can freely choose to access various smart devices such as IPCs, servers, IP cameras, PLCs, HIMs, RTUs, controllers, terminals, etc. in the field. It also supports access between devices and sites.

InConnect helps to quickly build IoT networks, enabling customers to perform remote maintenance and remote monitoring through the cloud service, so as to dynamically monitor the operation status of field devices in real time, and locate faults remotely over the network, reducing losses caused by failures. At the same time, it provides reliable, convenient and secure data aggregation service for IoT big data collection, transmission and full lifecycle management.

Applicable to IoT networking of devices on distributed sites:

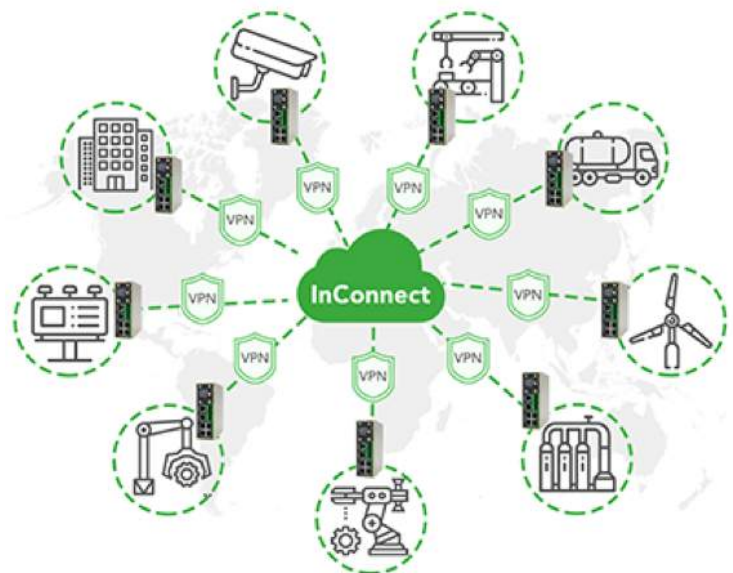
- Industrial automation equipment
 - Industrial robot
 - CNC machine tool
 - Air compressor
 - HVAC
 - Packaging, food, pharmaceutical and other mechanical equipment
- Automated production line
- Traffic security
- Smart medical
- Energy: oil, natural gas
- Public utilities: heating, water supply
- Other

Application Case

InConnect can help you easily connect to devices deployed in different geographic locations, making your device networking simpler and easier.

It supports multiple types of clients. You may choose to use a computer, mobile phone, or a Pad to connect to your field devices. Devices in different geographical locations can also access each other, resolving the restrictions of geographic locations.

The InConnect also provides cloud deployment service, providing customers an easy IoT connectivity solution.



Features and Advantages

- + Quickly build data tunnel service
 - + Achieve end-to-end access
 - + Automated configuration
 - + Encrypted data transmission
 - + Multiple types of terminal devices
 - + Multiple router models
 - + Convenient to manage
- **Quickly build data tunnel service**
Traditionally, to build a virtual private network (VPN: Virtual Private Network), the user has to apply to the operator for an Internet line with a public IP address, which involves a high application fee and long implementation period. The user also needs to purchase hardware VPN firewall.

The InConnect does not require the investment of a public IP Internet line or hardware VPN firewall. It just need the InHand networking devices to connect to the Internet through 4G LTE or a wired link.
 - **End-to-end access**
Users can remotely access devices on distributed sites, as well as realize access between devices on different sites. Any device connected through InConnect can access each other; the security mechanism of the gateway can also restrict access between devices, to allow complete network control by the user.
 - **Automated configuration**
InConnect provides automated configuration that automatically syncs the configuration when InHand devices are connected to the network. Organization administrators simply need to add the gateway information on the cloud platform and complete the configuration in one click. The cloud service can automatically scale up bandwidth and computing resources based on the network load.
 - **Encrypted data transmission**
The user client and InHand devices access InConnect using CA certificate SHA-265 algorithm for verification, and the data transmission uses asymmetric encryption algorithm AES-256 for data encryption.
 - **Multiple types of terminal devices**
The InConnect supports access of Windows or Linux computers, Android phones, iPhones, iPads and Android Pads. Users can install various applications or APPs in the devices to access various smart devices on distributed sites.
 - **Multiple router models**
InHand's all range of routers and gateways support InConnect. Users may choose from IR611-S, IR615-S, IR912L, IR915L and IG902 series products.
 - **Convenient to manage**
Users can log in InConnect service through a web browser to manage the network. InConnect supports email and SMS alerts for prompt discovery of abnormal connections of and account or device.

Access Types

Access Types of InConnect

No.	Type	Description
1	User to device	User can access all devices within the user authorization
2	Between sites	Both sites can access each other
3	Between devices	Both devices can access each other
4	Between multiple sites	Multiple sites can access each other

User-to-device



Site-to-site



Device-to-device



Multiple-to-multiple



Product Specifications

InConnect Cloud Connection Service	
Core Technologies	
OpenVPN, AWS Cloud Computing, LXC, MQTT	
Basic Functions	
Add client account information, download configuration and client, connect OpenVPN	
Add router(s) and router's lower-end device(s)	
Manage configuration files of routers	
Firmware upgrade and batch upgrade of routers	
Router traffic and connection duration statistics, user traffic statistics	
Service recharge, purchase records and details, monthly bill	
Log management	
Router Management	
Web management, access to the router's local environment and operate in the visual configuration interface	
Run configuration management	
Virtual IP mapping	
Site Management	
Basic Information	Device serial number, model, firmware version, creation time, configuration time
Site Details	IP address, mobile phone number, address, signal value, IMSI, configuration synchronization status, login protocol, IMEI, ICCID
Network Address Allocation	Cloud platform automatically assigns network addresses
Traffic Management	Statistical analysis of network traffic
Online Status	Can review router connection status; supports online status analysis report
Task Management	Can manage current router's task progress and status; supports cancel or re-do tasks
Data Encryption	
CA certificate verification SHA265	
Data encryption algorithm AES265	
Network Access	
Router	Maximum access point of each organization is 4000
End Terminal	Each field gateway node supports access of up to 254 devices
Supported InHand Product Models	
Model	InHand' s IR611-S, IR615-S, IR912L, IR915L and IG902 series products
Deployment Plan	
Public Cloud	InHand deploys InConnect service on public cloud, users can directly register and login to use.
Privatized	InHand provides private custom deployment solutions based on customer requirements. Customer can choose to build their own cloud service or build this service in an existing data centre.

About Us

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 both Rockwell Automation Encompass Product Partner in Asia-Pacific and Schneider Electric CAPP Technology Partner, while listed on NEEQ 430642 as of February 18, 2014, InHand Networks defines industrial innovation and reliability.



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