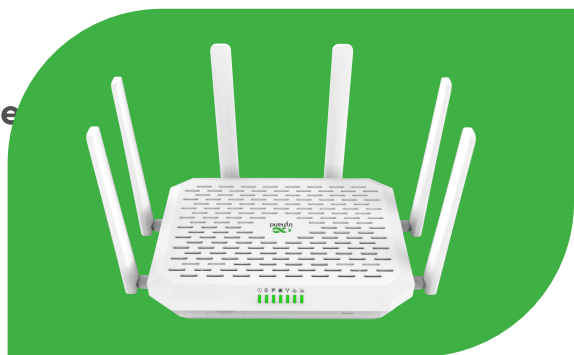**5G High-Speed Network, Connecting the Future**
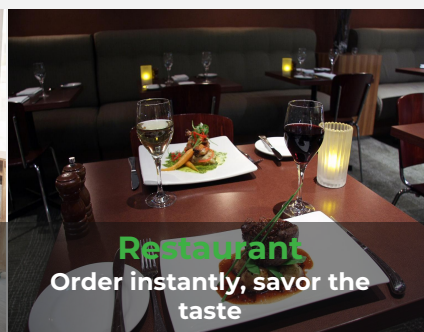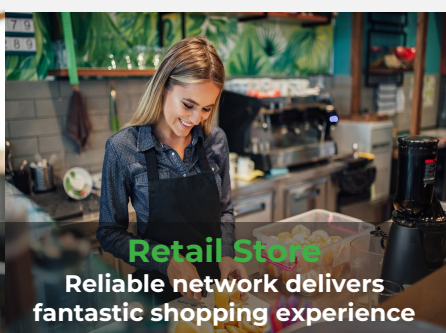
5G FWA12 Router

· 5G   · Wi-Fi 7   · Cloud-Managed

The FWA12 is InHand Networks' next-generation high-performance 5G networking solution, designed with the global 5G module to deliver exceptional cellular data throughput. Equipped with two 2.5G high-speed Ethernet ports and 4200Mbps Wi-Fi7, the FWA12 ensures stable and continuous data transmission across diverse scenarios, including urban areas, commercial spaces, and remote suburbs, providing users with a seamless and reliable network experience.

Rural School
Empowering rural children for their future

Retail Store
Reliable network delivers fantastic shopping experience

Medical Station
Connecting every moment, making rescues more efficient

Mobile Stall
Business Anytime, Anywhere

Small Office
Instant access makes business operated swiftly

Restaurant
Order instantly, savor the taste

Outdoor Camping
Capture every joyful moment outdoors

Public Safety
Efficient and rapid emergency network

RV Travel
Enjoying every moment with the ones you love

Features and Advantages

● Plug and Play High-speed 5G

TThe FWA12 offers you an upgraded 5G product. With blazing-fast 5G, download speeds of up to 7.01 Gbps, upload speeds of up to 2.5 Gbps, and the ability to switch to high-speed LTE Cat 19.
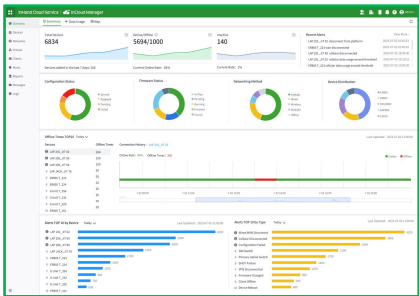
● "Always-on" Connectivity

The FWA12 comes with 5G/wired backup, cellular link failover, dual SIM switching, optional eSIM, Supports dialing for Verizon, AT&T, and T-Mobile，always keep the network connection

● Secure Network Connection

The FWA12 is equipped with firewall policies, access control, built-in VPN, data encryption, enhanced Wi-Fi security, and other features, effectively ensuring the security of the network.
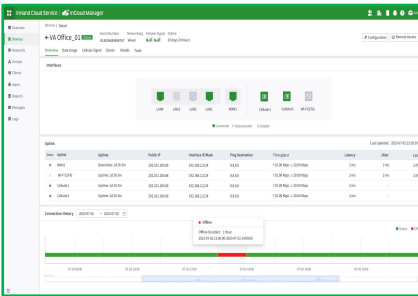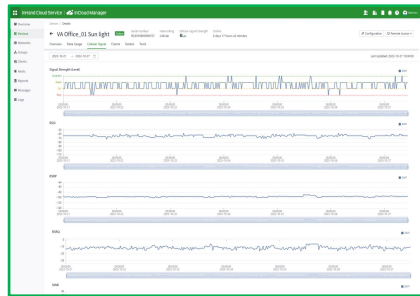
● Cloud-Managed Networking Solution

The FWA12 and the InCloud Manager deliver seamless cloud management of distributed sites at scale, monitor your network in real time and enhance IT management efficiency anywhere, unlocking the full potential of your network.
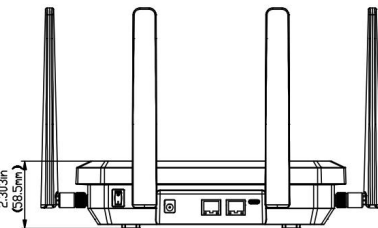
Centralized Management

Real-time Monitoring

Visualized Network

Dimensions

11.697in
(297.1mm)

9.287in
(235.9mm)

8.024in
(203.8mm)

6.791in
(172.5mm)

3.937in
(100.0mm)

3.937in
(100.0mm)

3.937in
(100.0mm)

3.937in
(100.0mm)

2.303in
(58.5mm)

A

Antenna:

0.846in
(21.5mm)

1.535in
(39.0mm)

6.842in
(173.8mm)
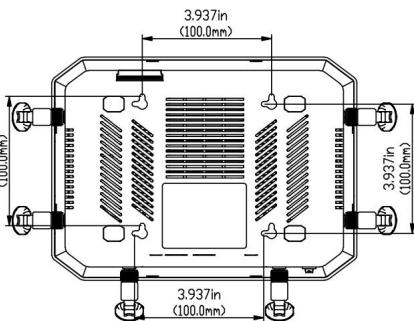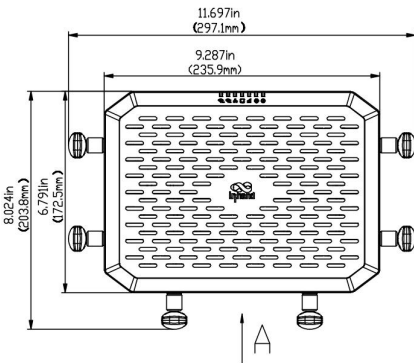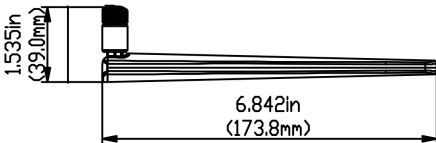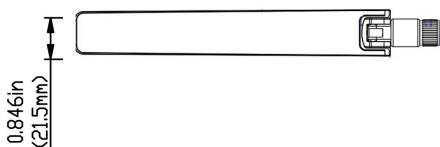
Dimensions: 9.29 * 6.79 * 2.3(in) / 236 * 172.5 * 58.5 (mm)

InHand Networks

Product Specifications

5G FWA12 Hardware Specifications

Hardware Platform

Stateful Firewall Throughput	2Gbps
Recommended No. of Users	220 (128 Wi-Fi devices)

Interfaces

Ethernet Port	2*2.5 GbE RJ45; WAN/LAN switchable, Dual-LAN
USB	1*Type-C，USB 2.0，Supports HOST and SLAVE modes
SIM	1*eSIM; 2*SIM, Nano SIM slot, Hot plug
Reset	Reset button
Power Switch	1*button
Lights	System, Cellular, Signal, WAN, LAN, Wi-Fi
Antenna Interface	6*external sub6 antenna, 4*built-in Wi-Fi antenna

Cellular

Cellular Rate	5G SA&NSA: 7.01Gbps (DL)/2.5Gbps (UL) 4G CAT19：1.6Gbps (DL)/200Mbps (UL)
Antenna Freq. Range	617-5925 MHz
Antenna Gain	617-894MHz: 2 dBi 1700-5000MHz: 4.11 dBi

Wi-Fi

Radio Frequency	2.4GHz&5.8GHz
Max Transmission Bandwidth	4200Mbps
Transfer Protocol	802.11 be/ax/ac/b/g/n，Wi-Fi 7
Antenna Freq. Range	2400-2500；5000-5800 MHz
Antenna Gain	2400-2500MHz: 4.17 dBi 5000-5800MHz: 4.56 dBi

Power Supply

Power	Circular interface, 12V 3A
Power Consumption	≤24W

Mechanical Features

Installation	Wall mounted, desktop mounted
Dimensions & Weight	236 * 172.5 * 58.5 (mm), 2.2lbs 9.29 * 6.79 * 2.3(in)

Environment

Working Temp.	-10°C to 50°C
Storage Temp.	-40°C to 85°C
Humidity	5% to 95% (non-condensing)
Ingress Protection	IP20

Physical Properties

Shockproof	IEC60068-2-27
Vibration Resistance	IEC60068-2-6
Free Fall	IEC60068-2-32

Certification

Certification	In Plan* （FCC, IC, PTCRB, Verizon, T-Mobile, CE）
Warranty	3 years

5G FWA12 Software Specifications

Cloud Management

InCloud Manager	Centralized management platform Simple and intuitive dashboard User-friendly management Batch upgrade and management

Uplink Management

Network Access	Multiple network access, 5G/4G cellular network access, ETH network access
Dial-up Service	PPPoE, cellular automatic redial, dual SIM switching, APN configuration
Smart Link	Link backup Packet-by-packet load balancing among multiple links Real-time detection of link delay, jitter, and packet loss Supports link priority adjustment

Monitoring & Alerts

Dashboard	Device information, interface status, and refined traffic
Link Monitoring	Link delay, jitter, packet loss, and throughput monitoring
Cellular Signal	Real-time view of cellular signal strength, RSSI, RSRP, RSRQ, SINR, etc.
Data Security	System logs, diagnostic logs, device events, email alerts

Network Functions

IP Protocol	IPv4/IPv6
IP Application	VLAN, DHCP server/client, DNS, DDNS, Fixed Address Assignment, IP Passthrough
Interface Management	Duplex mode, link negotiation rate, interface enable
Wi-Fi	802.11 be/ax/ac/b/g/n，Wi-Fi 7, AP mode
Policy Management	Policy Routing, Traffic Shaping
Self Recovery	Built-in software and hardware watchdog, self-healing equipment operation failure, to ensure the equipment maintains high availability

Security

VPN	IPSec VPN, L2TP VPN
Firewall	Access control, port mapping, port forwarding, MAC address filtering Firewall filtering based on MAC, IP, port, and protocol

Remote Maintenance

Remote Access Control	Supports Web UI/CLI remote access and control
Cloud Connection	Remote maintenance of PCs, monitoring equipment, servers, etc.
Network Diagnostics	Ping, Traceroute, network packet capture tools, diagnostic logs
Configuration Backup	Supports configuration import and export

InHand Networks

Ordering Guide

Model	Model code: FWA12–<WMNN>
	<WMNN>: Type & Module
FWA12-NANR	5G for North Americia 5G Sub6: n2/n5/n7/n12/n13/n14/n25/n26/n29/n30/n38/n41/n48/n66/n70/n71/n77/n78 LTE FDD: B2/4/5/7/12/13/14/17/25/26/29/30/66/71 LTE TDD: B38/41/42/43/48

InHand Cloud-Managed Networking Solution

Our solution encompasses cloud-managed edge routers, Wi-Fi 6 AP, switches, 5G FWA/ODU cellular routers, and the InCloud Manager SaaS. By integrating top-tier IT management, IoT, 5G, and other technologies, we provide fast, secure, and user-friendly network solutions globally, enabling businesses to unlock boundless growth opportunities.

InCloud Manager

- Centralized management
- Efficient zero-touch deployment
- Simplified network configuration
- Multi-dimensional security
- Multiple intelligent strategies

5G SD-WAN Edge Router

- 5G (Sub 6)/ LTE CAT20
- Multilink Backup & Dual SIM failover
- 5*Gigabit Ethernet port, dual WAN
- 1200M WiFi5/3000M WiFi6
- SD-WAN, VLAN, VPN networking

5G Outdoor Unit

- High-speed 5G, DL 4.76Gbps, UL 1.25Gbps
- 2Gbps throughput
- 2.5G ETH, WAN/LAN, PoE
- IP67, -30 ~ 70°C, GPS
- Wall & pole mounting with adjustable angles

About Us

InHand Networks is a leading IoT solutions provider founded in 2001, dedicated to driving digital transformation across industries and empowering customers to unlock their full potential and achieve accelerated growth.

We specialize in delivering industrial-grade connectivity solutions for diverse sectors, such as enterprise networks, industrial and building IoT, digital energy, smart commerce, and mobility. Our comprehensive product portfolio and services cater to various applications worldwide, including smart manufacturing, smart grid, intelligent transportation, smart retail, etc. With a global footprint spanning over 60 countries, we serve customers in China, the United States, France, Germany, the United Kingdom, Italy, and beyond.

InHand Networks

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