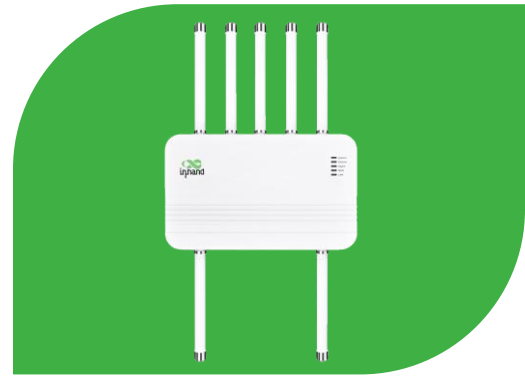# InHand Networks

Connect beyond Boundaries

5G ODU2002 Outdoor Unit

• 5G   • Outdoor IP67   • Cloud-Managed   • Security

5G cellular technology revolutionizes network flexibility and convenience, enabling enterprises to effortlessly establish high-speed connectivity within minutes. This advancement not only enhances operational efficiency but also elevates competitiveness in digital business development.

Across bustling cities, remote villages, outdoor settings, and challenging conditions, InHand cloud-managed 5G ODU ensures reliable high-speed access and robust protection, delivering a global network that is fast, convenient, efficient, and secure.

Paired with the InCloud Manager, InHand offers a completely cloud-managed networking solution to enable zero-touch deployment, remote configuration, and visualized monitoring, thus reducing management costs and increasing efficiency to achieve rapid business growth.

Recreation
Stay connected at each moment worth of memory

Sports Training
Exploring full potential through continuous connectivity

Winery
Elevating your wine journey with high-speed connectivity

Yacht Dock
Quality communications for improved dock operations

Wildlife Rescue
Enhanced rescue efforts for wild animals

Research Station
Fulfilling the vision of scientific innovation

Rural School
Empowering rural children for their future

Outdoor Restaurant
Reliable network delivers fantastic customer experience

Oil Field
Reliable connectivity in harsh environments

Features and Advantages

Unleash the Power of 5G

The ODU2002 brings you high-speed Internet without waiting. With blazing-fast 5G, download speeds of up to 4.76Gbps, upload speeds of up to 1.25Gbps, and the ability to fall back to high-speed LTE Cat 19.

Worry-free Connectivity

The ODU2002 ensures "always-online" connectivity with features like 5G/wired backup, cellular failover, dual SIM switching, optional eSIM, and fault self-recovery. This guarantees network stability and minimizes the risk of network failure.

Harsh Outdoor Environments

The ODU2002 boasts an IP67 rating, with wide temperature tolerance. It offers GPS, PoE power reception, an external high-performance 5G antenna, and flexible wall/pole installation. These features ensure exceptional performance, especially in challenging outdoor environments.
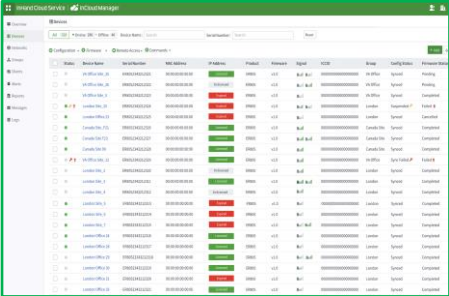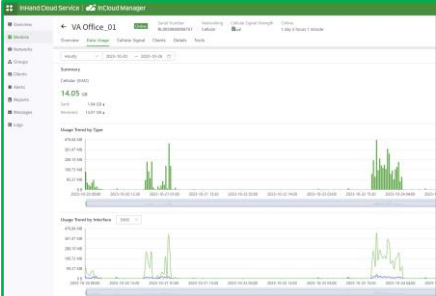

Cloud-Managed Networking Solution

The 5G ODU, paired with the InCloud Manager, empowers effortless cloud management of distributed sites at scale. Enjoy real-time network monitoring and heightened management efficiency from any location, breaking free from constraints.
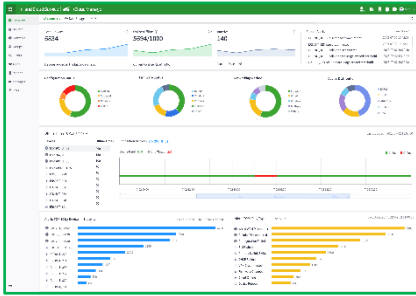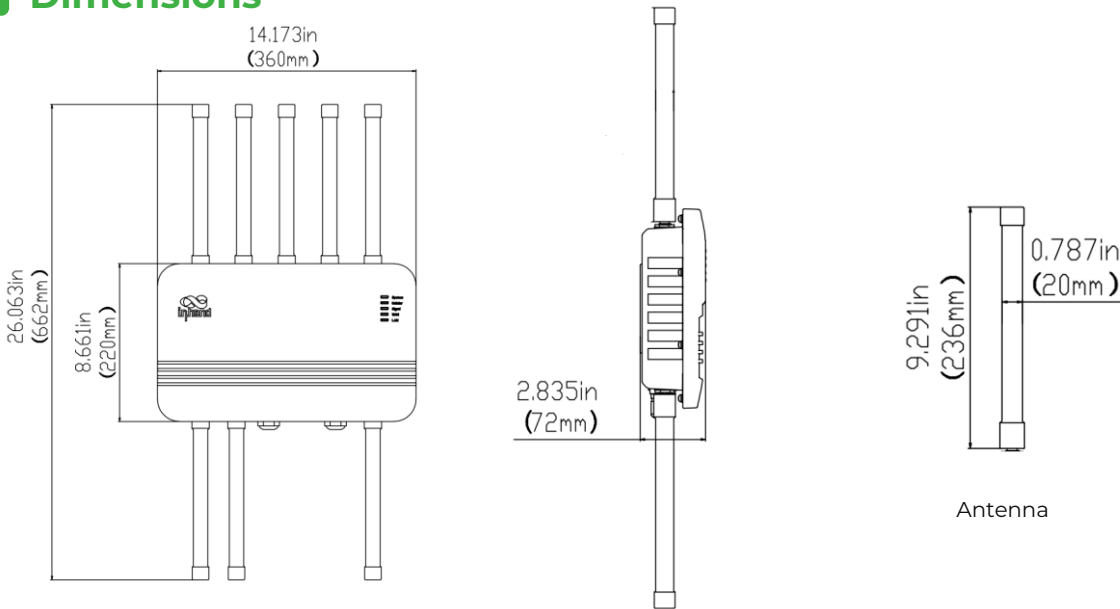

Centralized Management

Real-time Monitoring

Visualized Network

Dimensions

14.173in (360mm)

26.063in (662mm)

8.661in (220mm)

2.835in (72mm)

9.291in (236mm)

0.787in (20mm)

Antenna

Dimensions: 14.17 * 8.66 * 26.06(in) / 360 * 220 * 72(mm)

InHand Networks

Product Specifications

5G ODU2002 Hardware Specifications

Hardware Platform

Throughput	Up to 2Gbps	Recommended No. of Users	200

Interfaces

Ethernet Port	2*2.5 GbE RJ45; WAN/LAN switchable, Dual-LAN PoE in LAN Port		
USB	1*Type-C 2.0	GNSS	GPS/GLONASS/ Beidou/Galileo/QZSS
SIM	2*SIM, Nano 4FF SIM slot, Hot plug	RESET	Reset button
Ground Terminal	1*GND	Lights	System, Cellular, Signal, WAN, LAN
Antenna Interface	TNC-type connectors; 6*Sub 6, 1*GNSS, 1*Wi-Fi		

Cellular

Cellular Rate	5G: 4.76Gbps (DL)/1.25Gbps (UL) 4G: 1.6Gbps (DL)/200Mbps (UL)		
5G Antenna Freq. Range	600-5000MHz		
5G Antenna Gain	6.46 dBi		

Wi-Fi

Radio Frequency	Single band 2.4GHz	Max Transmission Bandwidth	150Mbps
Transfer Protocol	802.11 b/g/n	Maximum Output Power	17dBm

Power Supply

Power	Power over Ethernet (PoE) - 802.3at	Power Consumption	≤15W

Mechanical Features

Installation	Wall mounting, pole mounting	Dimensions & Weight	360 * 220 * 72(mm), 14.17 * 8.66 * 20.06(in) 2.87kg
Housing & Cooling	Metal & Fanless		

Environment

Working Temp.	-30°C to 70°C (-22°F to 158°F)	Storage Temp.	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% (non-condensing)	Ingress Protection	IP67
Salt Mist	IEC60068-2-52		

EMC

Electrostatic Discharge Immunity	EN61000-4-2, level 3	RFI Radio Frequency Immunity	EN61000-4-3, level 3
Electrical Fast Transient/ Burst Immunity	EN61000-4-4, level 3	Surge	EN61000-4-, level 3
Immunity to Conducted Disturbances	EN61000-4-6, level 3	RE/CE	Class A, Margin 3dB

Physical Properties

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

Certification

Certification	FCC, IC, PTCRB, Verizon, T-Mobile, CE	Warranty	3 years

5G ODU2002 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

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

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	Supports 2.4G Wi-Fi
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

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: ODU2002–<WMNN>		
	<WMNN>: Type & Module		
ODU2002-NAVA	(For North America，Verizon) 5G Sub 6: n2/5/7/12/14/25/30/41/48/66/71/77/78 LTE-FDD: B2/4/5/7/12/13/14/17/25/26/29/30/66/71 LTE-TDD: B41/46/48 WCDMA: B2/4/5		
ODU2002-NATM	(For North America，T-Mobile) 5G Sub 6: n25/41/66/71 LTE FDD: B2/4/5/12/66/71 LTE TDD: B41 LAA:B46		
ODU2002-EUNR	(For Europe/Australia/Asia) 5G Sub 6：n1/3/5/7/8/20/28/38/40/41/71/77/78/79 LTE FDD: B1/3/5/7/8/20/28/32/71 LTE TDD: B38/40/41/42/43		

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
- 802.11ac dual-band, 1200Mbps
- SD-WAN, VLAN, VPN networking

5G FWA Router

- High-speed 5G, DL 4.76Gbps, UL 1.25Gbps
- 2.5G ETH, WAN/LAN
- Wi-Fi 6, 802.11 ax, 3600Mbps
- Link backup, redundancy, load balancing
- Easy to deploy, easy to install

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

3650 Concorde Pkwy, Suite 200,
Chantilly, VA 20151, USA
T: +1 (703) 348-2988
E: info@inhand.com
www.inhand.com