

Embrace 5G, Co-Create the Digital Era.

# InRouter624 series

• Security

• 5G

• Wi-Fi 5

#### · Cloud-Managed



The InRouter624 (IR624) series by InHand Networks is designed to assist enterprises in digital transformation. Integrated with 5G/4G, Wi-Fi, VPN, and more, it offers efficient, secure, and intelligent connectivity solutions for various IoT industries. With a multi-level link detection mechanism, the IR624 ensures stable communication for unattended industrial sites. Paired with InHand Networks' DeviceLive IoT management platform, it aids users in achieving centralized cloud management and remote maintenance. This allows for easy monitoring of device status, reducing deployment costs, and enhancing management efficiency.





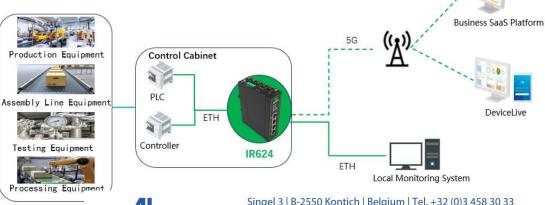
Higher definition imaging, covering finer details to identify problems.



Real-time response to anomalous information, achieving faster and accurate grid control.

Creating a secure, comfortable, and sustainable urban environment.

### Solution



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V5/24

### **Features and Advantages**

#### • Ubiquitous network access: 5G

IR624 features 5G cellular high-speed network access with a downlink speed of up to 2Gbps, providing a comprehensive enhancement to the new network experience. The characteristics of high bandwidth and low latency contribute to building a more powerful and efficient nextgeneration network, allowing you to fully experience the remarkable charm of 5G.



#### • "Always-on" connectivity

IR624 is equipped with various features, including link backup, link detection, dual SIM switching, watchdog, etc., to ensure the reliability and stability of connections. This reduces the risk of network failures, saves network investment costs, and provides a worry-free new experience of network services!



#### • Secure Network Connection

IR624 integrates multiple layers of security policies, including VPN, firewall, and policy routing. It effectively safeguards sensitive data and critical business networks from attacks and threats, providing a secure and trustworthy network environment. While your business rapidly expands, we are dedicated to protecting your digital assets.

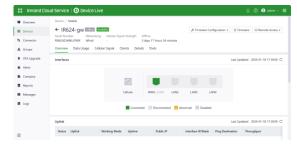


#### Cloud-Managed Networking Solution

The IR624 connects to the InHand Networks DeviceLive IoT device management platform to manage tens of thousands of distributed site devices in real time and grasp device status anytime and anywhere. Additionally, users can remotely connect to on-site devices through DeviceLive for diagnosis, debugging, and repair of distributed on-site devices. This reduces losses caused by equipment failures, making management easier, more efficient, and more economical!

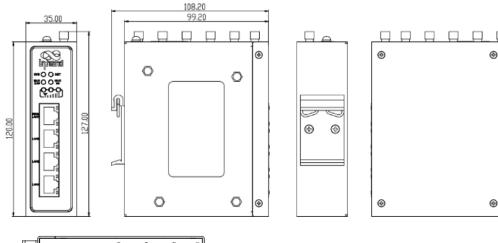


Control Panel



Device Details

### Dimensions (mm)





Industrial Terminal							
V+	V-	TXD	RXD	GND	Α	В	
Power supply		RS232		RS485			



Dimensions: 127 \* 108.2 \* 35mm

## Product Specifications

Hardware Platforr	n					
CPU	8801	мНz				
RAM	2561					
Flash	128N					
Interface						
Cellular	5G,	5G, downlink speed of up to 2Gbps, Sub6(450MHz to 6GHz),				
Celiulai		compatible with 4G/3G				
Ethernet Port		4*10/100/1000Mbps, Ethernet, WAN/LAN/VLAN 1.5KV network isolation transformer protection				
		C9-36V, over-current protection, anti-reverse connection, 2				
Power Supply		industrial terminal				
Serial Port	1 x R	S232 and 1 x RS485				
Reset		et button				
SIM Card		)rawer-type slot, support dual-NANO SIM, 1.8 V/3 V / (Optional)				
Antenna Interface	4 x S	MA for 5G or 2 x S	SMA for 4G , 2 x RP-S	MA for Wi-Fi		
Ground Terminal	Sup	ports				
Indicator	1 x S	ystem, 1 x Cellular	, 1 x 2.4G Wi-Fi, 1 x 5C	G Wi-Fi, 3 x Signal		
Hardware compor	ients					
RTC	Sup	port				
Wi-Fi						
Dual Radio		G / 5GHz Wi-Fi				
Transmission Bandwidth		867 Mbps G: 300 Mbps				
Protocol	802	802.11 ac/a/b/g/n Wave2 MU-MIMO				
Maximum Transmit Power		17dBm G: 17dBm				
Transmission Distance	(Act	50 meters by line of sight (Actual transmission distance depends on environment of the site.)				
Mechanical Featur	es					
Dimensions	127	* 108.2 * 35mm	Weight	544g		
Installation	Din	-rail	Protection Rating	IP30		
Housing	Met	al	Cooling	Fanless		
Power rate						
Standby Power	370	~ 480mA@12V				
Working Power	415	~ 530mA@12V				
Peak Power	530	mA@12V				
Ambient Environm	nent					
Storage Temperature	-40	~ 85℃	Operating Temperature	-20 ~ 70℃		
Ambient Humidity	5~9	95% (no condensi	ng)			
EMC						
Static		EN61000-4-2, lev				
Radiation Electric I		EN61000-4-3, lev				
Pulsed Electric Fie	ld	EN61000-4-4, lev				
Surge		EN61000-4-5, lev	/el 3			
Conducted Disturbance Immunity		EN61000-4-6 ,level 3				
Shock Wave Resistance EN61000-4-12, level 3						
Power Frequency Magnetic Field EN61000-4-8, horizontal / vertical 400A/m (>level 2) Resistance				00A/m (>level 2)		
Resistance						
Resistance Physical Specs		60068-2-27 Vibration Resistance IEC60068-2-6				
	IEC	60068-2-27		IEC60068-2-6		
Physical Specs		60068-2-27 60068-2-32		IEC60068-2-6		

InRouter624 Software Specifications					
Network Connection					
Network Access	APN, VPDN				
Access Authentication	СНАР/РАР				
Network Type	WCDMA, TDD LTE/FDD LTE, 5G NR(SA/NSA) (Please refer to the Ordering Guide for frequencies)				
LAN Protocol	ARP, Ethernet				
WAN Protocol	Static IP, DHCP, PPPoE				
Network Protocol					
Protocol & Application	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, SSL/TLS, ARP, VRRP, PPP, PPPoE, SSH, DHCP Server, DHCP Relay, DHCP Client, DDNS, Telnet, IP Passthrough				
Routing	Static routing				
Security					
Network Security	Support access control, NAT, port mapping and firewall filtering based on MAC/IP/port/protocol Support Policy-Based Routing				
Data Security	IPsec VPN, L2TP VPN				
Reliability					
Backup	Interface backup				
Dual SIM Failover	Supports dual SIM failover				
Link Detection	Sends heartbeat packets to detect, auto redials when disconnected				
Embedded Watchdog	Device runs self-detection, auto recovers from malfunctions				
Wi-Fi					
Working Mode	AP, Client				
Security	Open system, shared key, WPA/WPA2 certification WEP/TKIP/AES encryption				
Wi-Fi Portal	Support				
Intelligence					
DTU Functions	TCP / UDP transparent transmission mode Supports conversion of Modbus RTU to Modbus TCP bridge				
Monitoring & Alerting					
Dash Board	Device information, interface status, and refined traffic statistics				
Link Monitoring	Link delay, jitter, packet loss, and throughput				
Log & Alarm	System logs, diagnostic logs, device events				
QoS					
Traffic Shaping	Support				
Remote maintenance					
Remote Access	Support Web/CLI remote access				
Cloud Management	DeviceLive supports batch management, equipment monitoring, remote maintenance				
Network Diagnostics	Support Ping, Traceroute and network packet capture tools				
Configuration Backup	Support configuration import and export				



Note: The functions marked with \* are not available yet.

### **Ordering Guide**

	Model code: IR624- <wmnn>-<wlan na="">-S</wlan></wmnn>				
Model	<wmnn>: Cellular Type &amp; Module</wmnn>	<wlan na="">: Wi-Fi</wlan>	S: Serial		
IR624-NRF2- <wlan na="">-S</wlan>	(For China, 5G) 5G NR: n1/3*/5/8/28/41/78/79 LTE FDD: B1/3/5/7*/8 LTE TDD: B34/38/39/40/41 WCDMA: B1/5/8	WLAN: Wi-Fi <na>: no Wi-Fi</na>	S: 1*RS232+1*RS485		
IR624-NRF4- <wlan na="">-S</wlan>	(For Europe & APAC, 5G) 5G NR: n1/3/5/7/8/20/28/38/40/41/71/77/78 /66 LTE FDD: B1/3/5/7/8/20/28/71/66 LTE TDD: B38/40/41 WCDMA: B1/3/5/8	WLAN: Wi-Fi <na>: no Wi-Fi</na>	S: 1*RS232+1*RS485		
IR624-LQ20- <wlan na="">-S</wlan>	(For China, 4G LTE CAT4) FDD: B1/3/5/8 TDD: B34/38/39/40/41 WCDMA: B1/5/8 GSM/EDGE: B3/8	WLAN: Wi-Fi <na>: no Wi-Fi</na>	S: 1*RS232+1*RS485		
IR624-FQ58- <wlan na="">-S</wlan>	(For Europe &APAC, 4G LTE CAT4) LTE-FDD: B1/3/5/7/8/20/28 LTE-TDD: B34/38/39/40/41 WCDMA: B1/5/8 GSM: B3/8	WLAN: Wi-Fi <na>: no Wi-Fi</na>	S: 1*RS232+1*RS485		
IR624-EN00- <wlan na="">-S</wlan>	ΝΑ	WLAN: Wi-Fi <na>: no Wi-Fi</na>	S: 1*RS232+1*RS485		

Example: IR624-NRF2-WLAN-S: Four Gigabit Ethernet ports IR624 series cellular router with Wi-Fi, supports IPSec VPN and L2TP VPN, supports RS232 and RS485. Note: the product comes standard with suction cup antenna and Din-rail accessories.



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#### 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.



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