



Introduction

It is a 5G industrial CPE for the Internet of Things (IoT), it uses a high-performance industrial level 32-bit communication processor and wireless module, embedded with the real-time operating system as the software platform, and using 3G/4G/5G cellular network to provide users with wireless long-distance large data transmission function.



Industrial-grade Design

- ▶ High-performance industrial-grade wireless module
- ▶ High-performance industrial-grade 32-bit communication processor
- ▶ Metal shell, protection grade IP68. Metal housing and system safety isolation
- ▶ Wide power input DC 9~36V



Stability & Reliability

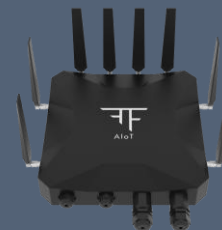
- ▶ WDT Watchdog design to ensure system stability
- ▶ Adopt a complete anti-drop mechanism to ensure that the data terminal is always online
- ▶ Built-in 1.5KV electromagnetic isolation protection for Ethernet interface
- ▶ RS232/RS485 interface power and data isolation, in line with CSA, UL and IEC standards
- ▶ SIM/UIM card interface built-in 15KV ESD protection
- ▶ Built-in reverse phase protection and over voltage protection for power interface



Standard & Convenience

- ▶ Standard RS232, RS485, Ethernet and WIFI Interface
- ▶ Standard WAN port (support standard PPPOE protocol), which can be directly connected to ADSL equipment
- ▶ Intelligent data terminal, can enter data transmission state after power on
- ▶ Easy to use, flexible, multiple working mode options
- ▶ Convenient system configuration and maintenance interface (WEB/CLI)
- ▶ Support wall-mounted, pole-mounted installation

5G Industrial CPE F-NR200



High Performance

- ▶ Multiple WAN connection methods, include Static IP/DHCP/PPPOE/DHCP-4G/5G
- ▶ 3G/4G/5G and wired WAN dual link backup (optional)
- ▶ VPN Tunnel: PPTP/L2TP/IPSEC/OPENVPN/GRE
- ▶ Remote management SYSLOG/SNMP/TELNET/SSH/HTTPS
- ▶ Support local upgrade and remote upgrade
- ▶ Import and export configuration files
- ▶ NTP / Built in RTC
- ▶ MAC address clone
- ▶ 2.4G WIFI support 802.11b/g/n, 5.8G WIFI support 802.11ac
- ▶ Support WIFI AP mode, client mode, bridge mode(optional)
- ▶ WIFI support WEP/WPA/WPA2 encryption
- ▶ Support multiple online and offline trigger modes
- ▶ Support APN/VPDN
- ▶ Support DHCP server/DHCP client/DHCP binding MAC/DDNS/NAT/DMZ/QOS, traffic statistics, real-time display of data transmission rate
- ▶ Support TCP/IP/UDP/FTP/HTTP and other network protocols
- ▶ Support SPI firewall, access control, URL filter
- ▶ Support IPV6/IPV4

Product Specification

Cellular Specification		
Product	5G	5G RedCap
Items	Contents	
Module	Industrial grade wireless module	
Frequency	5G NR: n1/n2/n3/n5/n7/n8/n20/n28/n41/n66/n71/n77/n78/n79 LTE: B1/B2/B3/B4(66)/B5(18/19/26)/B7/B8/B12(17)/B13/B14/B20/B25/B26/B28/B29/B30/B38/B39/B40/B41/B42/B43/ B46/ B48/B71	5G NR: N1/N3/N5/N8/N28/N41/N78/N79 LTE-FDD: B1/B3/B5/B8 LTE-TDD: B34/B38/B39/B40/B41
	Remarks: Different modules support different network standards	
Bandwidth	5G NR: DL 3.4Gbps, UL 350Mbps LTE Cat20: DL 2.0Gbps, UL 150Mbps HSPA+: DL 42Mbps, UL 5.76Mbps	DL: 226Mbps, UL: 120Mbps
Power	< 23dBm	
Sensitivity	<-97dBm	

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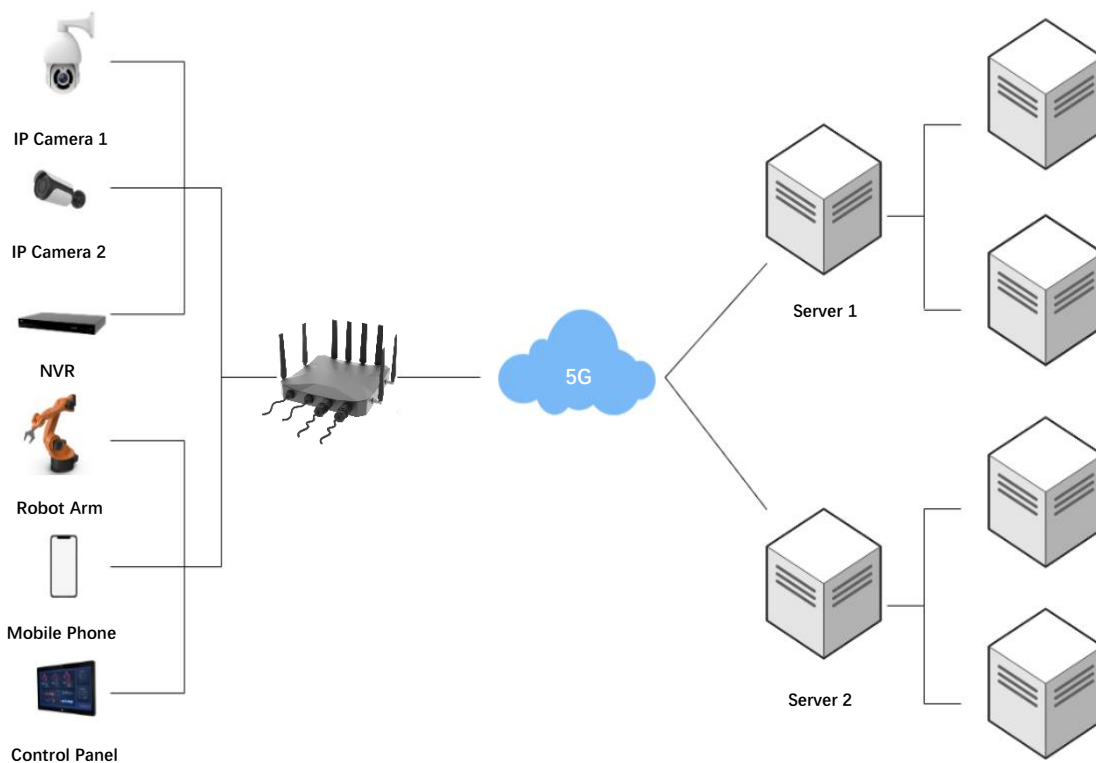
WIFI Specification		
Product	5G	5G RedCap
Items	Contents	
Frequency	IEEE802.11b/g/n, 2.4G, AP mode, Station mode (Option) IEEE802.11ac, 5.8G, AP mode, Station mode (Option)	
Bandwidth	IEEE802.11b/g: 54Mbps IEEE802.11n: 300Mbps IEEE802.11ac: 866Mbps	
Security	WEP, WPA, WPA2 encryption, WPS(optional)	
Power	26dBm (11b) , 21dBm (11ac/MCS7/HT40, 20dBm (11ac/MCS9/HT80)	
Sensitive	<-72dBm@54Mbps	
Hardware System		
Items	Contents	
CPU	Industrial-grade 32-bit communication processor	
FLASH	Nor flash 16MB NAND flash 128MB	
DDR3	512MB	
Interfaces		
Items	Contents	
WAN	1 x 1000M ETH port (RJ45water proof), auto adapt MDI/MDIX, built in 1.5KV ESD	
LAN	1 x 1000M ETH port (RJ45water proof), auto adapt MDI/MDIX, built in 1.5KV ESD	
Optical Fiber	1 x 1000M fiber interface (External all-plastic waterproof interface) Auto adapt MDI/MDIX, built in 1.5KV ESD	
Serial	1 x RS232/RS485 serial port (External all-plastic waterproof interface), built in 1.5KV ESD Data bit:5, 6, 7, 8 Stop bit:1,1.5(optional), 2 Check: NONE, ODD, EVEN, SPACE (optional) and MARK (optional) Baud rate:2400~115200bits/s	
Indicators	"PWR", "SYS", "2.4G", "5.8G", "Online", "Signal" Remarks: Built-in indicator light	
Antenna	Cellular: 4 x waterproof SMA female antenna, characteristic impedance 50 ohms WIFI: 4 x waterproof SMA male antenna, characteristic impedance 50 ohms	Cellular: 2 x waterproof SMA female antenna, characteristic impedance 50 ohms WIFI: 4 x waterproof SMA male antenna, characteristic impedance 50 ohms
SIM/UIM	Standard drawer type, 1.8V/3V SIM/UIM card, built-in 15KV ESD protection	
Power	Terminal interface, built-in power reverse protection	
USB	USB2.0 (Built-in)	
Reset button	Through this button, the parameter configuration can be restored to the factory	

5G Industrial CPE F-NR200



Power Supply		
Product	5G	5G RedCap
Items	Contents	
Standard	DC 12V/1.5A and Support POE (802.3af) power supply	
Range	DC 9~36V	
Consumption	<1.2A (12V)	
Physical Properties		
Items	Contents	
Shell	Metal shell, protection grade IP68	
Size	259x259x45 mm (Does not include antenna and mounting parts)	
Weight	2480g	
Others		
Items	Contents	
Operating Temperature	-35~+75°C (-31~+167°F)	
Storage Temperature	-40~+85°C (-40~+185°F)	
Relative Humidity	95% (No condensation)	

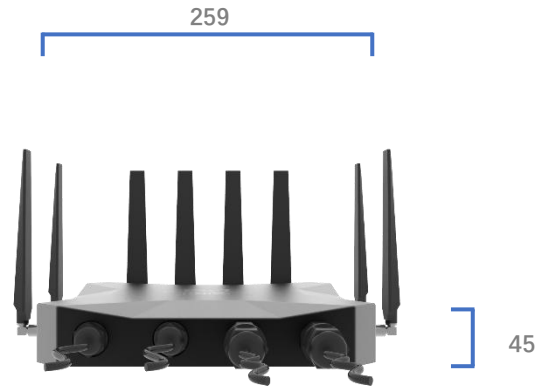
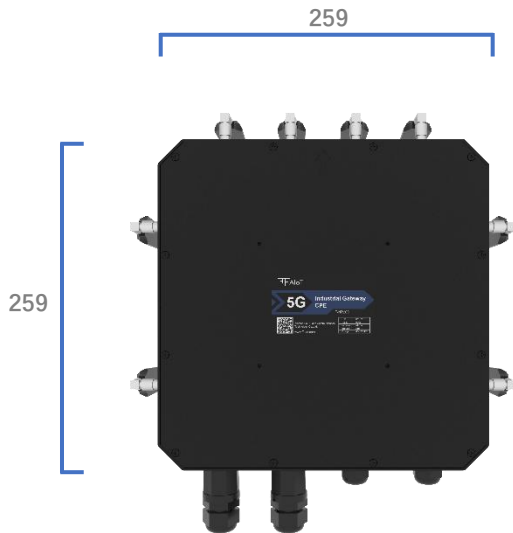
Topology



5G Industrial CPE F-NR200



Dimension (mm)



Note: 5G Redcap version provide 2 cellular antennas

Order Information

Models	Description
F-NR200	Cellular (5G NR), 2.4G/5G WIFI, SIM*1
F-NR200-SIM2	Cellular (5G NR), 2.4G/5G WIFI, SIM*2
F-NR200-5R	Cellular (5G RedCap), 2.4G/5G WIFI, SIM*1