



# 5G Industrial CPE

F-NR200



## Introduction

F-NR200 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

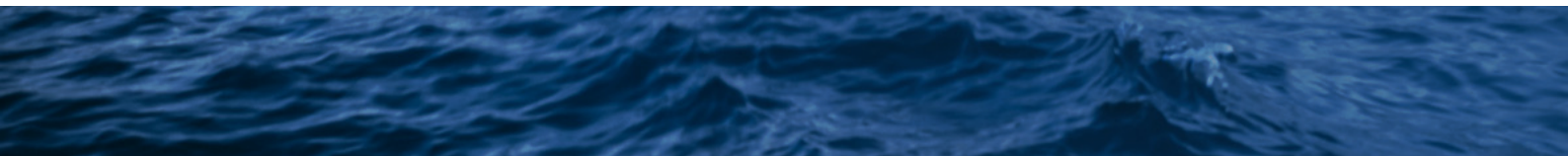
- High-performance industrial-grade wireless module
- High-performance industrial-grade 32-bit communication processor
- Metal shell, protection grade IP68. Metal housing and system safety isolation
- Wide power input DC 9~36V

### 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

### 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/UM card interface built-in 15KV ESD protection
- Built-in reverse phase protection and over voltage protection for power interface



## High Performance

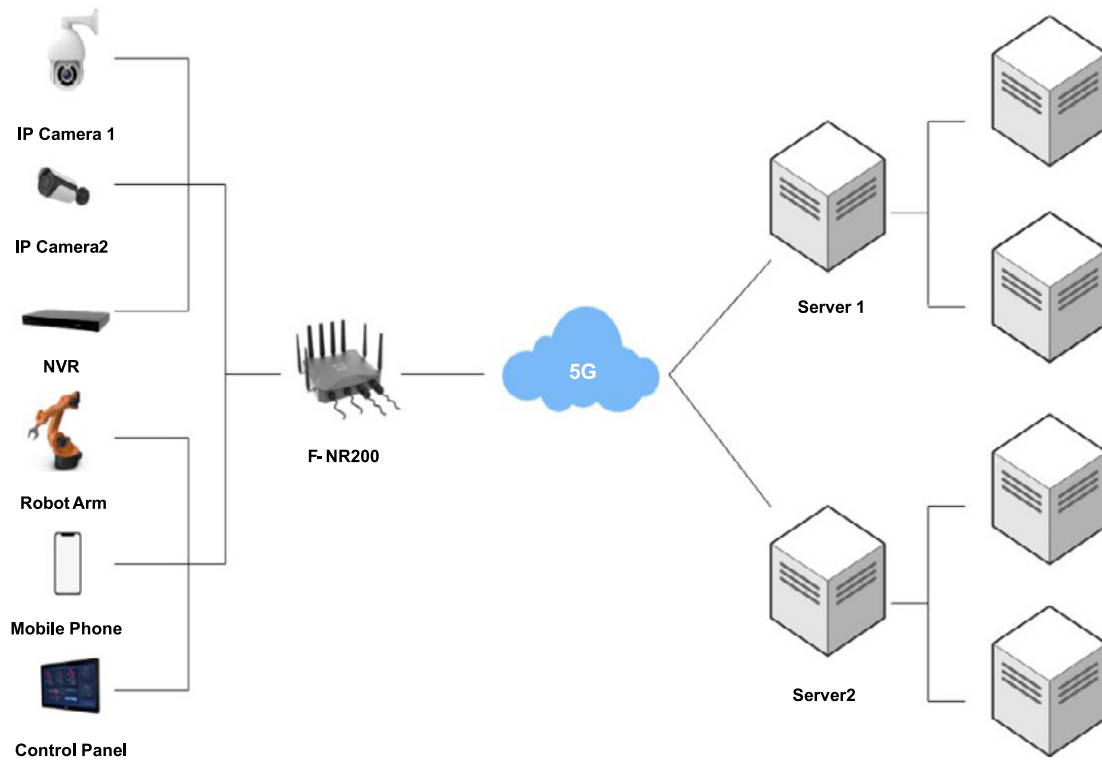
- Multiple WAN connection methods, include Static IP/ DHCP/PPPOE/DHCP-4G/5G
- 3G/4G/5G and wired WAN dual link backup optional
- VPN Tunnel: PPTP/L2TP/IPSEC/OPENVPN/GRE
- Remote management SYSLOG/SNMP/TELNET/SSH/ HTTPS
- Support local upgrade and remote upgrade
- Import and export configuration files
- 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	
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 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
Power	< 23dBm
Sensitivity	<-97dBm
WIFI Specification	
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
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
Power Supply	
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



## Dimension

