

F-NR100

Specifications

VER	Class
V1.0.8	

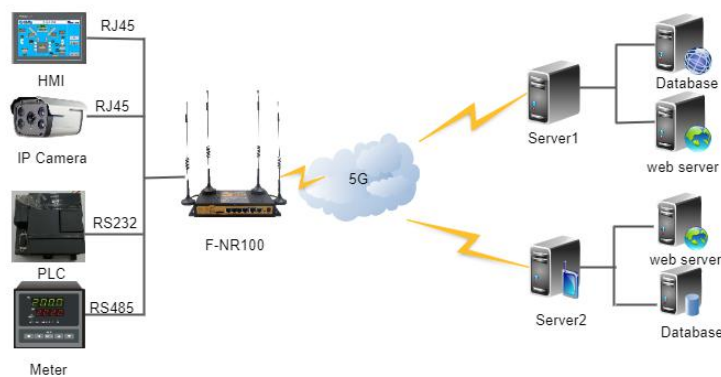


F-NR100 is a wireless communication router for the Internet of Things. It uses public 3G / 4G / 5G networks to provide users with wireless long-distance large data transmission functions.

This product uses a high-performance industrial-grade 32-bit communication processor and industrial-grade wireless module. It uses an embedded real-time operating system as the software support platform.

This product has been widely used in the M2M industry in the IOT industry chain, such as smart grid, smart transportation, smart home, finance, mobile POS terminal, supply chain automation, industrial automation, smart building, fire protection, public safety, environmental protection, weather, Digital medical, remote sensing survey, military, space exploration, agriculture, forestry, water affairs, coal mining, petrochemical and other fields.

Application



Features

Industrial Design

- ◆ High-performance industrial-grade wireless module
- ◆ High-performance industrial-grade 32-bit communication processor
- ◆ Metal shell, protection grade IP30 . Metal housing and system safety isolation
- ◆ Wide power input DC 9~36V

Reliable

- ◆ 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

- ◆ 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

Function

- ◆ Multiple WAN connection methods, include static IP,DHCP, PPPOE, 3G/UMTS/4G/LTE, dhcp-4G
- ◆ 3G/4G/5G and wired WAN dual link backup (optional)
- ◆ VPN client (PPTP/L2TP/IPSEC) (only available in VPN version)
- ◆ VPN sever (PPTP/L2TP/IPSEC) (only available in VPN version)
- ◆ 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
- ◆ WIFI support 802.11b/g/n/ac,support WIFI AP /AP Client/bridge mode etc (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
- ◆ Support TCP/IP/UDP/FTP (Optional) /HTTP and other network protocols
- ◆ Support SPI firewall
- ◆ Support URL filter
- ◆ Support IPV6/IPV4

Wireless

Project	Content
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
Bandwidth	5G NR: DL 3.4Gbps, UL 350Mbps LTE Cat20: DL 2.0Gbps, UL 150Mbps HSPA+: DL 42Mbps, UL 5.76Mbps
Power	<23dBm
Sensitive	<-97dBm

WIFI

Project	Content
Frequency	IEEE802.11b/g/n, 2.4G, AP mode , Station mode (Option) IEEE802.11ac, 5.8G, AP mode , Station mode(Optional)
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

Project	Content
CPU	Industrial-grade 32-bit communication processor
FLASH	Nor flash 16MB NAND flash 128MB
DDR3	512MB

Interface

Project	Content
WAN	1 x 1000M ETH port, auto adapt MDI/MDIX, built in 1.5KV ESD
LAN	4 x 1000M ETH port, auto adapt MDI/MDIX, built in 1.5KV ESD
Console	1 x RS232 , Built in 15KV 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"
Antenna	Cellular: 4 x SMA female , characteristic impedance 50 ohms WIFI: 2 x SMA male, characteristic impedance 50 ohms
SIM/UIM	Standard drawer type, 1.8V/3V SIM/UIM card, built-in 15KV ESD protection
Power	2.5mm DC interface built-in power reverse protection
TF card	Micro SD card interface
Reset Button	Through this button, the parameter configuration can be restored to the factory

● Power Supply

Project	Content
Standard	DC 12V/1.5A
Range	DC 9~36V
Consumption	<1.2A (12V)

● Physical

Project	Content
shell	Metal shell, IP30
Size	244x135.5x35.8 mm (Does not include antenna and mounting parts)
Weight	980g

● Others

Project	Content
Operating temperature	-35~+75°C (-31~+167°F)
Storage temperature	-40~+85°C (-40~+185°F)
Relative humidity	95%(No condensation)

● Order info

Model	Content
F-NR100	Cellular (5G NR), 2.4G/5.8G WIFI, SIM*1