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| File No. | File version | confidential |
| | V1.0 | |

F3446 WCDMA Dual-SIM WIFI ROUTER TECHNICAL SPECIFICATION

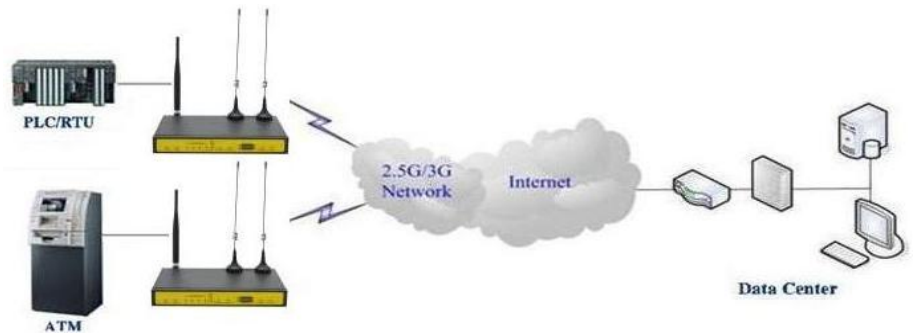


General

F3446 WCDMA Dual-SIM WIFI ROUTER is a kind of cellular terminal device that provides data transmission function by public WCDMA/HSDPA/HSUPA/HSPA+ network.

It adopts high-powered industrial 32-bits CPU and embedded real time operating system. It supports RS232 (or RS485/RS422), Ethernet and WIFI port that can conveniently and transparently connect devices to a cellular network, allowing you to connect to your existing serial, Ethernet and WIFI devices with only basic configuration.

It has been widely used on M2M fields, such as intelligent transportation, smart grid, industrial automation, telemetry, finance, POS, water supply, environment protection, post, weather, and so on.



Product Feature

Design for Industrial Application

- ◆ High-powered industrial cellular module
- ◆ High-powered industrial 32bits CPU
- ◆ Adapt dual SIM design to ensure the stable and reliable of the router
- ◆ Support low-consumption mode, including sleep mode, scheduled online/offline mode, scheduled power-on/power-off mode(optional)
- ◆ Housing: iron, providing IP30 protection.
- ◆ Power range: DC 5~36V

Stability and Reliability

- ◆ Support hardware and software WDT
- ◆ Support auto recovery mechanism, including online detect, auto redial when offline to make router always online
- ◆ Ethernet port: 1.5KV magnetic isolation protection

- ◆ RS232/RS485/RS422 port: 15KV ESD protection
- ◆ SIM/UIM port: 15KV ESD protection
- ◆ Power port: reverse-voltage and overvoltage protection
- ◆ Antenna port: lightning protection(optional)

Standard and Convenience

- ◆ Support standard RS232(or RS485/RS422), Ethernet and WIFI port that can connect to serial, Ethernet and WIFI devices directly
- ◆ Support standard WAN port and PPPOE protocol that can connect to ADSL directly
- ◆ Support intellectual mode, enter into communication state automatically when powered

- ◆ Provide management software for remote management
- ◆ Support several work modes
- ◆ Convenient configuration and maintenance interface(WEB or CLI)

High-performance

- ◆ Support master card and smart card double link switching function
- ◆ Support multiple WAN access methods, including static IP, DHCP, L2TP, PPTP,PPPOE,2G/3G
- ◆ Support double link backup between WCDMA and WAN(PPPOE, ADSL) (optional)
- ◆ Support VPN client(PPTP, L2TP, OPENVPN, IPSEC and GRE)(only for VPN version)
- ◆ Support VPN server(PPTP, L2TP, OPENVPN, IPSEC and GRE)(only for VPN version)
- ◆ Support local and remote firmware upgrade,import and export configure file
- ◆ Support NTP, RTC embedded
- ◆ Support multiple DDNS provider service
- ◆ Support VLANs, MAC Address clone, PPPoE Server

- ◆ WIFI support 802.11b/g/n. support AP, client, Adhoc, Repeater, Repeater Bridge and WDS(optional) mode
- ◆ WIFI support WEP,WPA,WPA2 encryption,Support RADIUS authentication and MAC address filter.
- ◆ Support multi online trigger ways, including SMS, ring and data. Support link disconnection when timeout
- ◆ Support APN/VPDN
- ◆ Support DHCP server and client, firewall, NAT, DMZ host , URL block, QoS, ttraff,statistics, real time link speed statistics etc
- ◆ Full protocol support , such as TCP/IP, UDP, ICMP, SMTP(optional), HTTP, POP3(optional), OICQ(optional), TELNET, FTP(optional), SNMP, SSHD, etc
- ◆ Schedule Reboot, Schedule Online and Offline,etc

Product Specification

Cellular Specification

| Cellular Module | Industrial cellular module |
|-------------------|---|
| Cellular Module | Industrial cellular module |
| Standard and Band | UMTS/WCDMA/HSDPA/HSUPA/HSPA+ 850/1900/2100MHz, 850/900/1900/2100MHz(optional) GSM 850/900/1800/1900MHz GPRS/EDGE CLASS 12 |
| Bandwidth | DC-HSPA+: Download speed 42Mbps, Upload speed 5.76Mbps HSPA+: Download speed 21Mbps, Upload speed 5.76Mbps HSDPA: Download speed 7.2Mbps, HSUPA: Upload speed 5.76Mbps UMTS: 384Kbps |
| TX power | <24dBm |
| RX sensitivity | <-109dBm |

WIFI Specification

| Item | Content |
|-----------|---|
| Standard | IEEE802.11b/g/n |
| Bandwidth | IEEE802.11b/g: 54Mbps (max) IEEE802.11n: 150Mbps (max) |

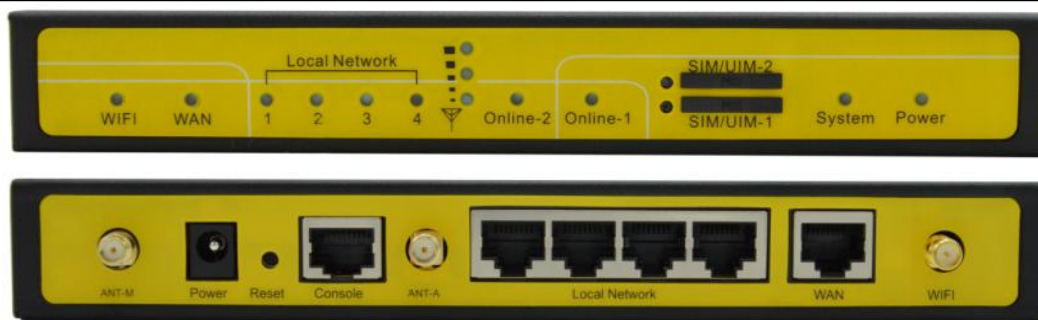
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|----------------|---------------------------------------|
| Security | WEP, WPA, WPA2, etc WPS (optional) |
| TX power | 20dBm(11n),24dBm(11g),26dBm(11b) |
| RX sensitivity | <-72dBm@54Mbps |

Hardware System

| Item | Content |
|-------|--------------------------|
| CPU | Industrial 32bits CPU |
| FLASH | 16MB(Extendable to 64MB) |
| SDRAM | 128MB |

Interface type

| Item | Content |
|-----------|--|
| WAN | 1 10/100 Mbps WAN port(RJ45), auto MDI/MDIX, 1.5KV magnetic isolation protection |
| LAN | 4 10/100 Mbps Ethernet ports(RJ45), auto MDI/MDIX, 1.5KV magnetic isolation protection |
| Serial | 1 RS232(or RS485/RS422) port, 15KV ESD protection Data bits: 5, 6, 7, 8 Stop bits: 1, 1.5(optional), 2 Parity: none, even, odd, space(optional), mark(optional) Baud rate: 2400~115200 bps |
| Indicator | "Power", "System", "Online-1", "Online-2", " Local Network ", "WAN", "WIFI", "Signal Strength" |
| Antenna | Cellular:2 Standard SMA female interface, 50 ohm, lightning protection(optional) WIFI: Standard SMA male interface, 50 ohm, lightning protection(optional) |
| SIM/UIM | Standard 3V/1.8V user card interface, 15KV ESD protection |
| Power | Standard 3-PIN power jack, reverse-voltage and over-voltage protection |
| Reset | Restore the router to its original factory default settings |


Power supply

| Item | Content |
|----------------|-------------|
| Standard Power | DC 12V/1.5A |
| Power range | DC 5~36V |

Consumption

| Working | Consumption |
|---------|-------------|
|---------|-------------|

| condition | |
|-------------------|------------------|
| Standby | 272~295mA@12VDC |
| Communication | 283~360mA@12VDC |
| Schedule Shutdown | 2.57~4.2mA@12DVC |

Physical Characteristics

| Item | Content |
|------------|---------------------------------|
| Housing | Iron, providing IP30 protection |
| Dimensions | 207x135x28 mm |
| Weight | 790g |

Environmental Limits

| Item | Content |
|-----------------------|------------------------|
| Operating Temperature | -35~+75°C(-31~+167°F) |
| Storage Temperature | -40~+85°C (-40~+185°F) |
| Operating Humidity | 95% (unfreezing) |