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F3836 LTE/WCDMA WIFI ROUTER TECHNICAL SPECIFICATION

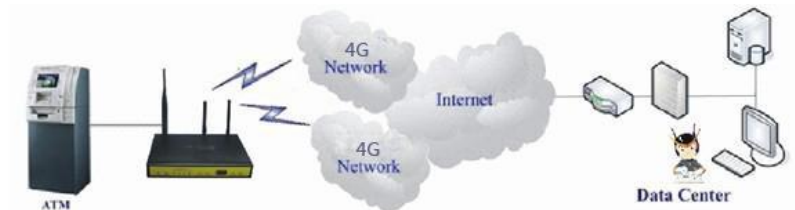


General

F3836 LTE/WCDMA WIFI ROUTER is a kind of cellular terminal device that provides large data transmission function by public LTE/WCDMA 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
- ◆ 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

- ◆ 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 multiple WAN access methods, including static ip, DHCP, PPPOE, 3G/UMTS/4G/LTE, dhcp-4G
- ◆ Support double link backup between LTE/WCDMA and WAN(PPPOE, ADSL) (optional)
- ◆ Support VPN client(PPTP, L2TP, IPSEC)(only for VPN version)
- ◆ Support VPN server(PPTP, L2TP, IPSEC)(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

- ◆ WIFI support 802.11b/g/n. support AP, client, Adhoc, Repeater, Repeater Bridge mode.
- ◆ WIFI support WEP,WPA,WPA2 encryption,Support 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 |
|-------------------|--|
| Standard and Band | Support:LTE FDD 2600/2100/1800/900/800MHz (Band 1/3/7/8/20) 700/850/1700/1900/2100MHz (Band 2/4/5/13/17/25)(optional) Support:DC-HSPA+/HSPA+/HSDPA/ HSUPA/WCDMA/UMTS 2100/1900/900/850/800MHz(Band 1/2/5/6/8) Support:EDGE/GPRS/GSM 850/900/1800/1900MHz |
| Bandwidth | LTE FDD(Download speed:100Mbps, upload speed:50Mbps) /HSUPA:5.76Mbps(upload speed)/ HSDPA:7.2Mbps(download speed:) UMTS:384Kbps (download speed/upload speed) HSPA+: 42Mbps(download speed) 5.76Mbps(upload speed) |
| TX power | <23dBm |
| RX sensitivity | <-93.3dBm |

WIFI Specification

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

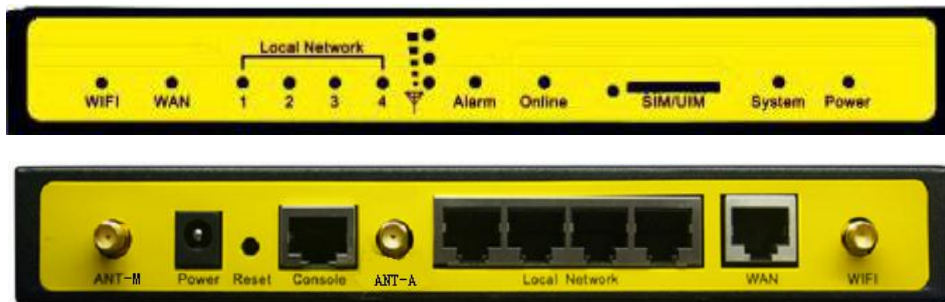
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| | IEEE802.11n: 150Mbps (max) |
| Security | WEP, WPA, WPA2, etc. WPS (optional) |
| TX power | 20dBm (11n), 24dBm (11g), 26dBm (11b) |
| RX sensitivity | <-72dBm@54Mbps |

Hardware System

| Item | Content |
|-------|--------------------------|
| CPU | Industrial 32bits CPU |
| FLASH | 16MB(Extendable to 64MB) |
| DDR2 | 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", "Alarm", "Local Network", "WAN", "WIFI", "Signal Strength" |
| Antenna | Cellular: 2 Standard SMA female interface, 50 ohm, lightning protection(optional) WIFI: 1 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 overvoltage 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 | <500mA (12V) |

Physical Characteristics

| Item | Content |
|------------|---------------------------------|
| Housing | Iron, providing IP30 protection |
| Dimensions | 206x135x28 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) |