File No.	File version	confidential

# F3434 WCDMA/HSDPA/HSUPA/HSPA+ WIFI ROUTER TECHNICAL SPECIFICATION

General
F3434 WCDMA/HSDPA/HSUPA/HSPA+ 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.
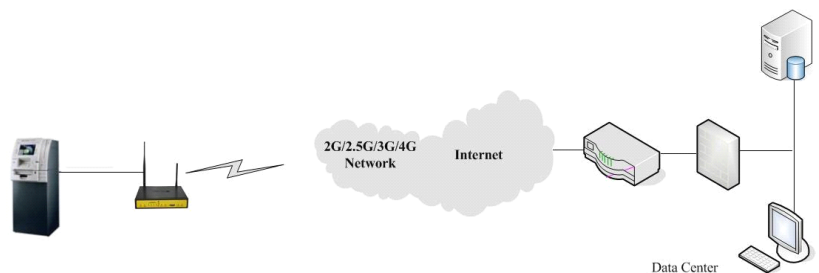
Product Feature --

Design for Industrial Application

◆ High-powered industrial cellular module

◆ High-powered industrial 32bits CPU

◆ 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 5~35V

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 multiple WAN access methods, including static ip, DHCP, L2TP, PPTP,PPPOE,3G/HSPA.
- 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 mulitiple 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
Standard and Band	UMTS/WCDMA/HSDPA/HSUPA/HSPA+ 850/1900/2100MHz, 850/900/1900/2100MHz(optional) GSM850/900/1800/1900MHz GPRS/EDGE CLASS 12
Bandwidth	HSUPA:5.76Mbps(Upload speed)/ HSDPA:7.2Mbps(Download speed)/UMTS:384Kbps (DL/UL)/ HSPA+: 21Mbps(Download speed) 5.76Mbps（Upload speed）
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)
Security	WEP, WPA, WPA2, etc. WPS (optional)
TX power	21.5dBm（11g）, 26dBm（11b）

RX sensitivity	<-72dBm@54Mpbs

Hardware System

Item	Content
CPU	Industrial 32bits CPU
FLASH	8MB(Extendable to 64MB)
SDRAM	64MB

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: Standard SMA female interface, 50 ohm, lighting protection(optional) WIFI: Standard SMA male interface, 50 ohm, lighting 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
USB	Standard A type USB host interface (reserved)
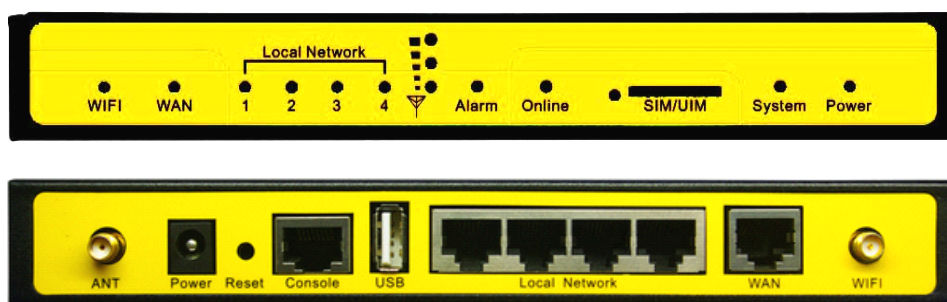
Power supply

Item	Content
Standard Power	DC 12V/1.5A
Power range	DC 5~35V
Consumption	<450mA (12V)

Physical Characteristics

Item	Content
Housing	Iron, providing IP30 protection

Dimensions	206x135x28 mm
Weight	790g

Environmental Limits

Item	Content
Operating Temperature	-35~+75ºC（-31~+167℉）
Storage Temperature	-40~+85ºC (-40~+185℉)
Operating Humidity	95% (unfreezing)