

# F3936-3436H

WCDMA/HSDPA/HSUPA/HSPA+ ROUTER

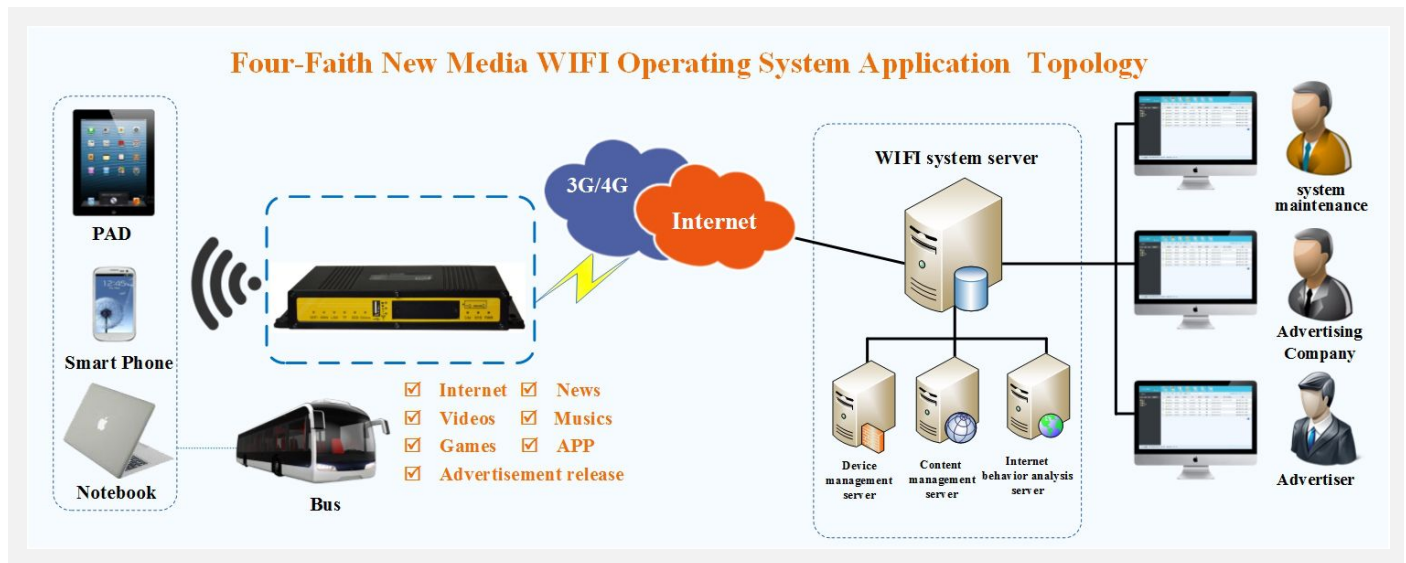
Technical Specification



F3936-3436H is a vehicle WIFI new media operating terminal and it integrates the advanced 3G/4G/WIFI communication technology, local large-capacity storage and multimedia advertising push technology. The passengers can use smart phones, PAD and notebook to enjoy freely the local videos, news, music, games, and quickly connecting the Internet, etc. And media operators may carry out more value added services.

F3936-3A36H has been already widely used in public transportation, tourism, finance and medical industries, such as urban public transport, customized bus, bus stations, tour bus, long-distance passenger bus, tourist attractions, bank, hospital and so on.

## Application Topology



## Product Specification

### Design for Vehicle Application

- High-powered 32bits CPU
- Vehicle power supply design, support under-voltage, over-voltage, over-current, reverse connection, short circuit, surge protection
- Wide Power range: DC 9~36V
- Wide Operating Temperature ( -35~+75°C )
- Aviation plug for power input
- Metal shell, high heat radiating and anti collision performance
- Shockproof design, suitable for vehicle vibrating environment
- Security structure design for TF/SIM card

### Stability and Reliability

- Support hardware and software WDT to ensure the stability of the system
- Support auto recovery mechanism, including online detect, auto redial when offline to make router always online
- Data storage with SSD, ensure the data security and stability on high speed read and write
- Ethernet port: 1.5KV magnetic isolation protection
- RS232/RS485/RS422 port: 15KV ESD protection
- SIM/UIM port: 15KV ESD protection
- Antenna port: lightning protection(optional)

### Standard and Convenience

- Support all kinds of the Intelligent WIFI terminals
- Smart data terminal, enter into communication state automatically when powered
- Provides standard wired WAN port and wireless 3G/4G network interface
- Small size device, rapid establishment of wireless network to use
- Provide powerful business platform for equipment management, content management and release, report management, user behavior statistics analysis, authority management, alarm management, billing system (optional) and other functions

## High-performance

- Support website redirection, local captive portal, remote captive portal(optional)
- Support various authentication ways, including mobile phone number authentication, Wechat authentication, Weibo authentication, QQ authentication and without authentication.
- Support WIFI channel hopping for anti-interference
- Support English SSID
- Support SSD(Solid State Disk) and TF card for local storage(TF card is optional)
- WIFI TX power is configurable for optimized wireless coverage
- Support WEB server. Supports PHP, XML, and database storage(optional)
- Support WIFI inspector
- Support black/white list of URL, account, IP address, MAC address
- Support traffic statistics. Support monitoring of device traffic, user traffic and online duration monitoring.
- Support user's surfing behavior record, local PV/UV statistics and transmit these data to server at real time for data statistics analysis.
- Support real time log auditing based on user's URL access
- Local information contains advertisement, news, APP, video, music, etc. Support various video formats and streaming media delivery
- Local information update support whole update and incremental update, support grouping update, support break-point resume and outage resume, support A/B backup, support update via 3G/4G, FTP, station WIFI(optional) and USB dongle(optional)
- Support remote firmware upgrade, including upgrade on single device, devices in patch and automatic upgrade(optional), support break-point resume, outage resume(optional), support firmware upgrade with USB dongle(optional).
- Support remote configuration, including configuration on single device, devices in patch and custom configuration on both online and offline devices. support firmware upgrade with USB dongle(optional).
- Support monitoring device status at real time, including CPU, memory, signal strength, network status, storage and alarm
- Supports completed functionality of router
- Support SPI firewall, access restriction, URL filter, QoS, NAT, etc
- Support NTP, schedule reboot and schedule boot/shutdown with in built RTC
- Support various WAN connection types, including static IP, DHCP, PPPoE, 3G / 4G, etc
- Support 3G/4G network and Ethernet WAN for backup(optional)
- Support VPN client and VPN server(PPTP, L2TP, OPENVPN, IPSEC and GRE(only VPN version supports))

## Product Specification

Cellular Specification	
Item	Content
Cellular Module	<b>High-performance cellular module</b>
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, 2.4G, 2*2 MIMO,AP model, Station model(optional)
Bandwidth	IEEE802.11b/g: 108Mbps (max) IEEE802.11n: 300Mbps (max)
Security	WEP, WPA, WPA2, etc. WPS (optional)
TX power	20dBm (11n) , 21.5dBm (11g) , 26dBm (11b)
RX sensitivity	<-75dBm@54Mbps
Hardware System	
Item	Content
CPU	High-performance 32bits CPU
FLASH	32MB(Extendable to 64MB)
DDR2	256MB
SSD	128GB(Extendable to 2TB)
TF	32GB(optional)
Interface type	
Item	Content
WAN	1 10/100 Mbps WAN port(RJ45), auto MDI/MDIX, 1.5KV magnetic isolation protection
LAN	1 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: 8(optional 5, 6, 7,) Stop bits: 1, 1.5(optional), 2 Parity: none, even, odd, space(optional), mark(optional) Baud rate: 2400~115200 bps
Indicator	“PWR”、“SYS”、“SIM”、“Online”、“SSD”、“TF”、“LAN”、“WAN”、“WIFI”, "Signal Strength"



Antenna	Cellular: 1 Standard SMA female interface, 50 ohm, lightning protection(optional) WIFI: 2 standard SMA male interface, 50 ohm, lightning protection(optional)
SIM/UIM	Standard 3V/1.8V user card interface, 15KV ESD protection
USB	Standard A type USB host interface,support USB 2.0 High-speed
TF	Standard TF card interface
Power	Aviation plug
Reset	Restore the router to its original factory default settings



## Power supply

Item	Content
Standard Power	DC 12V/1.5A
Power range	DC 9~36V
Working current	3G: <750mA (12V)
Standby current	3G: <550mA (12V)

## Physical Characteristics

Item	Content
Housing	Metal shell, shock proof design, suitable for vehicle vibrating environment
Dimensions	244x139x36 mm
Weight	940g

## Other Specification

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

## Antenna Photograph



**3G/4G Antenna**



**2.4/5.8G WIFI Antenna**