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F7134S GPS+GPRS WIFI ROUTER TECHNICAL SPECIFICATION

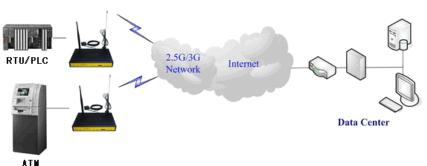


General

F7134S GPS+GPRS WIFI ROUTER is a kind of cellular terminal device that provides data transmission function by public GPRS network,multimedia information storage and release capabilities,support GPS function.

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 one device to a cellular network, allowing you to connect to your existing serial, Ethernet and WIFI devices with only basic configuration. Also, it supports GPS function.

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
- ◆ High-powered industrial GPS module
- 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 multimedia information storage and release
- Support WIFI portal authentication and QOS
- Support access control and advertisement release including text,picture,flash and stream media
- ◆ Support multiple WAN access methods, including static IP, DHCP, L2TP, PPTP, PPPOE
- ◆ Support GPS function
- ◆ Support double link backup between GPRS 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, HTTP, POP3, OICQ, TELNET, FTP, SNMP, SSHD, etc.
- ◆ Schedule Reboot, Schedule Online and Offline,etc.

Product Specification

Cellular Specification

| Item | Content |
|-------------------|---|
| Cellular Module | Industrial cellular module |
| Standard and Band | EGSM900/GSM1800MHz, GSM850/900/1800/1900MHz(optional) |
| | Compliant to GSM phase 2/2+ |
| | GPRS class 10, class 12(optional) |
| Bandwidth | 85.6Kbps |
| TX power | GSM850/900: <33dBm |
| | GSM1800/1900: <30dBm |
| RX sensitivity | <-107dBm |

GPS Specification

| Item | Content |
|---------------|------------------------------|
| GPS Module | Industrial GPS module |
| Receiver Type | 50-channle |
| | GPS L1 (1575.42MHz) C/A code |
| | SBAS: WAAS,EGNOS,MSAS,GAGAN |
| | Support GALILEO |



| Max. update rate | 4 Hz |
|------------------|------------------------------|
| Accuracy | Position: 2.5m CPE |
| | SBAS: 2.0m CPE |
| Acquisition | Cold starts: 29S |
| | Warm starts: 29S |
| | Aided starts: <1S |
| | Hot starts: <1S |
| Sensitivity | Tracking: -160dBm |
| | Reacquisition: -160dBm |
| | Cold starts: -144dBm |
| Timing accuracy | RMS: 30ns |
| | 99%: <60ns |
| | Granularity: 21ns |
| Time pulse | Configurable, 0.25 to 1000Hz |

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 |
| TF | 32GB(Extendable to 64GB) |

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", "GPS", "TF", "WAN", "WIFI", "Signal Strength" |



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| Antenna | Cellular: Standard SMA female interface, 50 ohm |
| | WIFI: Standard SMA male interface, 50 ohm |
| | GPS: standard SMA female interfaces, 50 ohm |
| SIM/UIM | Standard 3V/1.8V user card interface, 15KV ESD protection |
| TF | Standard TF card interface |
| Power | Vehicle 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 5~35V |
| Consumption | <650mA (12V) |

Physical Characteristics

| Item | Content |
|------------|---------------------------------|
| Housing | Iron, providing IP30 protection |
| Dimensions | 206x135x28 mm |
| Weight | 790g |

Environmental Limits

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