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## YF360 Series GPRS/3G/4G WIFI ROUTER TECHNICAL SPECIFICATION

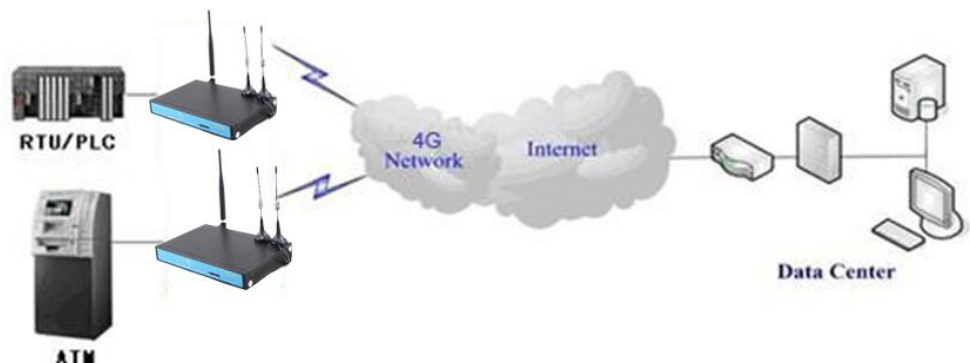


### General

YF360 Series Cellular WIFI ROUTER is a kind of cellular terminal device that provides large data transmission function by public UMTS/HSDPA/HSUPA/HSPA+/LTE 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 self-service terminal industry, 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 over-voltage 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, OPENVPN, IPSEC and GRE)
- ◆ Support VPN server(PPTP, L2TP, OPENVPN, IPSEC and GRE)
- ◆ 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 multiple 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, traffic 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.
- ◆ Support GPS function (Optional)

**Product Specification** -----

**Cellular Specification**

Cellular Module	Industrial cellular module
Standard and Band	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B20 (2100/1900/1800/1700/850/2600/900/800MHz) FDD: B2/B4/B5/B13/B17/B25/B26 (Optional), B1/B2/B3 /B5/B7/B8/B20/B28 (Optional) LTE TDD: B38/B39/B40/B41 HSPA+/HSUPA/HSDPA/WCDMA/UMTS 2100/1900/900/850MHz EDGE/GPRS/GSM 1900/1800/900/850MHz
Bandwidth	LTE(DL:150Mbps,UL:50Mbps) HSPA+: 21Mbps(Download speed) 5.76Mbps(Upload speed) HSUPA:5.76Mbps(Upload speed) HSDPA:7.2Mbps(Download speed) UMTS:384Kbps (DL/UL) CDMA2000 1X EVDO: 3.1Mbps(DL)/1.8Mbps(UL) EDGE: 236.8Kbps(DL/UL) GPRS: 85.6Kbps
TX power	<23dBm
RX sensitivity	<-93.3dBm

**GPS Specification (Optional)**

Item	Content
GPS Module	Industrial GPS module
Receiver Type	50-channel 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	20dBm (11n), 24dBm (11g), 26dBm (11b)
RX sensitivity	<-72dBm@54Mbps

**Hardware System**

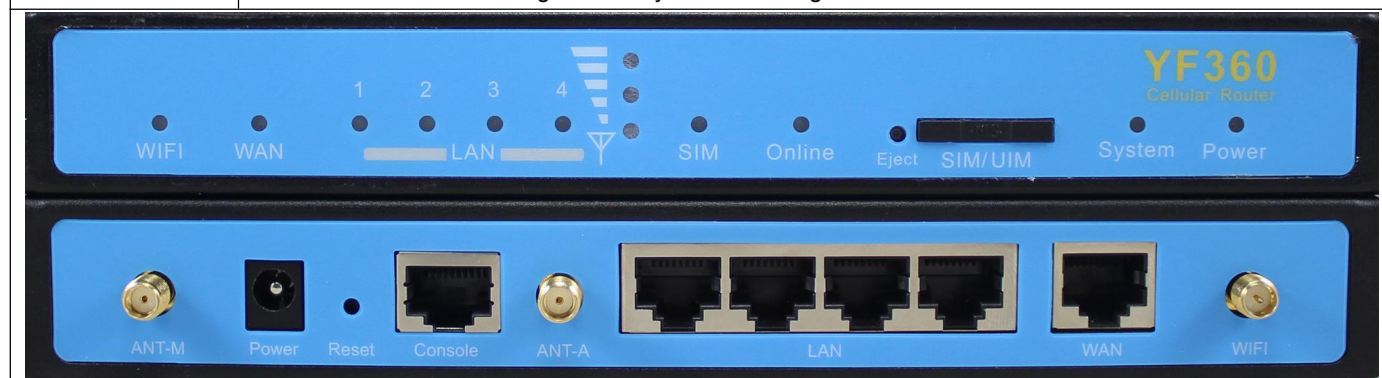
Item	Content
CPU	Industrial 32bits CPU
FLASH	16MB(Extendable to 64MB)
DDR2	128MB

**Interface type**

Item	Content
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## YF360 Series Cellular WIFI Router Technical Specification

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 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 condition	Consumption
Standby	280~330mA@12VDC
Communication	325~562mA@12VDC
Schedule Shutdown	2.57~4.2mA@12DVC

### 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)

**Selection and Ordering Data**

YF360 Series 2G/3G/4G Cellular Router 1x WAN, 4 x LAN, 1 x RS232/RS485

Model No.	Description
YF360-L	4G LTE FDD Router
YF360-LT	4G LTE TDD Router
YF360-H	3G HSPA+/HSUPA/WCDMA/UMTS Router
YF360-EV	CDMA2000 EVDO Router
YF360-E	EDGE Router
YF360-G	GSM/GPRS Router