

#### Introduction

YF360D is an intelligent cellular router designed for industrial applications requiring faultless connectivity. It provides a secure, reliable, real-time, remote connectivity for SCADA, distribution management systems, metering, etc. Software-defined, multi-carrier networking, dual SIM models, 802.11n and global 2.5G/3G/HSPA+/LTE options make it easy to get connected. The product has been widely used in the M2M industry of the IoT industrial chain, such as smart grid, intelligent transportation, smart manufacturing, smart home, and finance.

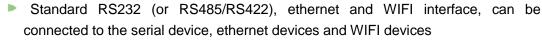


Industrial-grade Design

- High-performance industrial-grade CPU
- High-performance industrial-grade wireless communication module
- Support low-consumption mode, scheduled power-on/power-off mode (Optional)
- Metal casing, IP30 protection level, suitable for most industrial control applications.
- Wide range power input (DC 5~36V)



- Ethernet interface with built-in 15KV ESD
- RS232/RS485 with built-in 15KV ESD
- Multiple protection mechanism to ensure system stability, always keeping online
- Auto recovery mechanism, including online detect and auto redial
- Support hardware and software WDT



- Standard wired WAN interface (support standard PPPOE protocol), Can be connected to ADSL devices directly
- Intelligent data terminal, automatically enter transmission status after power-on
- Powerful central management software for easy device management (optional)
- Easy to use and flexible, has multiple working modes
- Convenient system configuration and maintenance interface (including local and remote WEB or CLI access)
- DIN-Rail mounting, wall mounting or desktop



Stability & Reliability



Standard & Convenience



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- Support 3G/4G and wired WAN dual link backup (Optional)
- Multiple WAN connection methods, include Static IP/DHCP/PPPOE/DHCP-4G
- Support Load Balancer and Load Shunt (Only for dual sim dual module version)
- Support APN/VPDN
- Support NTP, RTC embedded.
- Support multiple DDNS provider service
- Support multiple online trigger ways,including SMS, ring and data. Support link disconnection when timeout
- Support remote management, SYSLOG, SNMP, TELNET, SSHD, HTTPS, etc.
- Support upgrade software from the local and remote maintenance.
- Support various network protocols including TCP/IP, UDP, FTP (optional), HTTP, etc
- Support SPI firewall, access control, URL filtering, etc.
- WIFI 802.11b/g/n. Support AP, client, Adhoc, Repeater, Repeater Bridge mode.
- Support VPN Client/Server (PPTP/L2TP/OPENVPN/IPSEC/GRE)
- Support DHCP server and client, firewall, NAT, DMZ host, URL block, QOS, traffic, statistics, real time link speed statistics etc.
- Schedule Reboot, Schedule Online and Offline, etc.
- Support GPS function (Optional)

#### **Product Specification**

Cellular Specification							
Items	Contents						
	LTE FDD: B1/B3/B5/B7/B8/B20/B28						
	B1/B2/B3/B4/B5/B7/B8/B28 (Optional),						
	B2/B4/B5/B12/B13/B17/B66/B71 (Optional)						
Otan dand and Dand	LTE TDD: B38/B39/B40/B41						
Standard and Band	HSPA+/HSUPA/HSDPA/WCDMA/UMTS 2100/1900/900/850MHz						
	EV-DO: BC0						
	CDMA 1x: BC0						
	EDGE/GPRS/GSM 850/900/1800/1900MHz						
	FDD-LTE: Downstream rate 150Mbps, uplink rate 50Mbps						
	TD-LTE: Downstream rate 130Mbps, uplink rate 35Mbps						
Bandwidth	DC-HSPA+: Downstream rate 42Mbps, uplink rate 5.76 Mbps						
	HSPA+: Downstream rate 21Mbps, uplink rate 5.76 Mbps						
	UMTS: 384Kbps						
Transmit Power	< 23dBm						
Sensitivity	< -93.3dBm						

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Items     Contents       Standard and Band     IEEE802.11b/g/n       Bandwidth     IEEE802.11b/g: 54Mbps (Maximum) (Maximum)       Security     Support WEP, WPA, WPA2 encrypt methods, optional WPS function       Transmit Power     15 ± 2dBm       Sensitivity     < -72dBm @ 54Mbps       Hardware System       Contents       CPU     Industrial-grade CPU       Flash     16MB(Extendable to 64MB)       DDR2     128MB       Interfaces       Items     Contents       WAN Interface     1 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD       LAN Interface     4 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD						
Bandwidth  IEEE802.11b/g: 54Mbps (Maximum)  IEEE802.11n: 144Mbps (Maximum)  Security  Support WEP, WPA, WPA2 encrypt methods, optional WPS function  Transmit Power  Sensitivity  4 -72dBm @ 54Mbps  Hardware System  Items  Contents  CPU  Industrial-grade CPU  Flash  16MB(Extendable to 64MB)  DDR2  128MB  Interfaces  Items  Contents  Contents  Contents  Items  Contents  Items  Contents  Items  Contents  Items  Contents  Lease Con						
Bandwidth  IEEE802.11n: 144Mbps (Maximum)  Security Support WEP, WPA, WPA2 encrypt methods, optional WPS function  Transmit Power 15 ± 2dBm Sensitivity <-72dBm @ 54Mbps  Hardware System  Items Contents  CPU Industrial-grade CPU Flash 16MB(Extendable to 64MB)  DDR2 128MB  Interfaces  Items Contents  Contents  Items Contents  Items Contents  Items Contents						
Security Support WEP, WPA, WPA2 encrypt methods, optional WPS function  Transmit Power Sensitivity 72dBm @ 54Mbps  Hardware System  Items Contents CPU Industrial-grade CPU Flash 16MB(Extendable to 64MB)  DDR2  Interfaces  Items Contents  Contents  Items Items Contents Items Item						
Transmit Power Sensitivity Sensitivity Sensitivity  Items Contents CPU Industrial-grade CPU Flash 16MB(Extendable to 64MB) DDR2 Interfaces  Items Contents  Contents  Items Contents  Items Items Contents Items Contents						
Sensitivity < -72dBm @ 54Mbps  Hardware System  Items Contents  CPU Industrial-grade CPU Flash 16MB(Extendable to 64MB)  DDR2 128MB  Interfaces  Items Contents  WAN Interface 1 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD						
Items CPU Industrial-grade CPU Flash 16MB(Extendable to 64MB) DDR2 128MB  Interfaces  Items Contents  Contents  Items Contents  Table 1 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD						
Items     Contents       CPU     Industrial-grade CPU       Flash     16MB(Extendable to 64MB)       DDR2     128MB       Interfaces     Contents       WAN Interface     1 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD						
CPU Flash 16MB(Extendable to 64MB)  DDR2 128MB  Interfaces  Items Contents  WAN Interface 1 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD						
Flash 16MB(Extendable to 64MB)  DDR2 128MB  Interfaces  Items Contents  WAN Interface 1 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD						
DDR2  Interfaces  Items  Contents  WAN Interface  1 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD						
Interfaces  Items Contents  WAN Interface 1 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD						
Items         Contents           WAN Interface         1 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD	128MB					
WAN Interface 1 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD						
LAN Interface 4 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD						
1 x RS232/RS485 serial interface with built-in 15KV ESD						
Data bits:5, 6, 7, 8 bits						
Serial Stop bits:1, 1.5 (optional), 2 bits						
Error detection: none, even parity, odd parity, SPACE (optional) and MARK (optional)						
	Serial Port Rate: 2400~115200bits/s					
LED Indicators "Power", "System", "Online-1", "Online-2", " Local Network ", "WAN", "WIFI", "Signal Stren	gtn"					
Antenna Interface  Cellular: 2 * Standard SMA female antenna interface, characteristic impedance: 50 Ω  WIFI: Standard SMA male antenna interface, characteristic impedance: 50 Ω						
SIM/UIM Slot 2 * Standard SIM card slot, support 1.8V/3V SIM/UIM card, built-in 15KV ESD						
Power Interface Standard 3-PIN power jack, reverse-voltage and over-voltage protection						
Reset Button Can reset router's configuration to default factory setting by this button						

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Note: There may be differences between models of accessories and interfaces, actual products shall prevail.

Power							
Items	Contents  DC 12V/1.5A						
Input Voltage							
Accepted Range	DC 5~36V						
Power Consumption							
Work Mode	Consumption						
Standby	290 ~ 340mA@12VDC						
Communicating	335~572mA@12VDC						
Schedule Shutdown	2.57~4.2mA@12DVC						
Physical Properties							
Items	Contents						
Casing	Metal casing, IP30 protection level, suitable for most industrial control applications.						
Dimensions	206x135x28 mm (excluding antennas and mountings)						
Weight	790g						
Others							
Items	Contents						
Operating Temperature	-35~+75°C						
Storage Temperature	-40~+85℃						
Relative Humidity	95% (non-condensing)						

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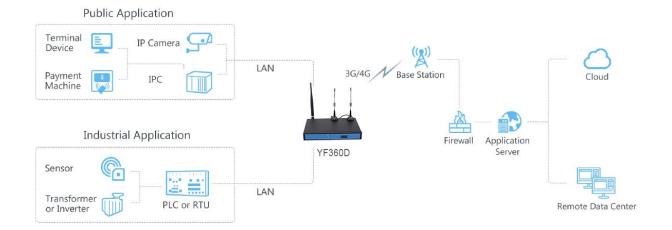
GPS(Optional)	
Items	Contents
GPS Module	Industrial GPS module (Optional Beidou module)
Receiver Type	50 channels  GPSL1 (1575.42MHz) C/A code  Support WAAS and EGNOS, MSAS, GAGAN
<b>Maximum Update Rate</b>	4Hz
Positioning Accuracy	Positioning: 2.5m CPE  SBAS: 2.0m CPE

Tracking: -160 dBm

Re-capture: -160 dBm Cold start: -146 dBm

### **Topology**

Sensitivity



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### **Dimension**





### **Order Information**

Models	Description	WAN	LAN	Cellular Antennas	WIFI Antenna	SIM/UIM	Built-in Module(s)	GPS
YF360D-L	Dual SIM LTE Router	1	4	2	1	2	1	Optional
YF360D-LL	Dual SIM Dual Module LTE Router	1	4	2	1	2	2	Optional

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