## **YF360**

# 4G Band 28 Cellular Router 4xLAN, 1xWAN, 1xRS232/RS485



YF360 is a Cellular WIFI Router that provides fast data transmission by public 4G networks. It adopts high-powered industrial 32-bits CPU and embedded real time operating system. It features Ethernet, Serial (RS232 or RS485/RS422) and WIFI ports that can conveniently and transparently connect devices to a cellular network, allowing you to connect to your existing peripheral devices with minimal configuration. It has been widely used on M2M applications, such as self-service terminal industry, intelligent transportation, smart grid, industrial automation, telemetry, finance, POS, water supply, environment protection, weather, and so on.

#### **Designed for Industrial Applications**

- 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 a 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)

## **Cellular Specifications**

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: 36.8Kbps(DL/UL)
	GPRS: 85.6Kbps
TV	-00 JD
TX power	<23dBm
RX sensitivity	<-93.3dBm

## **GPS Specifications (Optional)**

Item	
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:
Acquisition	Cold starts: 9S
	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

#### Hardware

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

## **WiFi Specifications**

Item	
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@54Mpbs

## **Interface Types**

Item	
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, lighting
	protection(optional) WIFI: 1 Standard SMA male interface, 50 ohm, lighting
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	
Standard Power	DC 12V/1.5A
Power range	DC 5~36V

## **Power Consumption**

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

### **Physical Characteristics**

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

## **Operating Environment**

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



