

QP35 Industrial Cellular Router

Reliable and Remote-Manageble for Large Scale M2M Deployment

High Speed LTE Networking Platform

- Make and recieve analogue phone calls
- Wifi for any data transfer
- Run PoE devices
- Runs on almost any DC voltage
- Dual SIM for backup for critical uptime
- Offsite monitoring to notify of offline status



The QP35 is a cost-effective industrial cellular router with embedded intelligent software features that are designed for multifarious M2M/IoT applications. Global WCDMA and 4G LTE carrier supported make this drop-in connectivity a great help for operators in maximizing uptime.

Integrating embedded cellular modem and dual SIM function, the QP35 provides 3G/4G cellular network with 150 Mbps download and 50 Mbps uplink, it also has 5 fast Ethernet ports and supports Wi-Fi that compliance with 802.11b/g/n standard. All these capabilities deliver users an uninterrupted internet access.

Easy deployment and comprehensive remote device management makes QP35 versatile in most of IoT/M2M applications.

Benefits

- Dual SIM cards for backup between multiple carriers networking and global 2G/3G/LTE options make it easy to get connected
- Flexible modular design provides users with different connection modules like Ethernet, I/O, serial port, Wi-Fi, GPS for connecting diverse field assets
- FXS port for telephone communication
- Embedded Python SDK for second development
- Rugged enclosure, optimized for DIN rail or shelf mounting
- 3-year warranty included

Security & Reliability

- Automated failover/failback between Ethernet and Cellular (dual SIM)
- Enable unit with security frameworks like
 IPsec/OpenVPN/GRE/L2TP/PPTP/DMVPN
- Embed hardware watchdog, able to automatically recover from various failure, ensure highest level of availability
- To establish a secured mechanism on centralized authentication and authorization of device access by supporting AAA (Radius, TACACS+, LDAP, local Authentication) and multiple levels of user authority

Easy Maintenance

- Ursalink DeviceHub provides easy setup, mass configuration, and centralized management of remote devices
- The user-friendly web interface design and more than one option of upgrade help administrator to manage the device as easy as pie
- Web GUI and CLI enable the admin to achieve simple management and quick configuration among a large quantity of devices
- Efficiently manage the remote routers on the existing platform through the industrial standard SNMP

Capabilities

- Link remote devices in an environment where communication technologies are constantly changing
- Support 802.11b/g/n, as AP or client mode, to establish versatile wireless network or be the backup WAN link for 3G/4G
- Support rich protocols like SNMP, Modbus bridging, RIP, OSPF
- Support wide operating temperature ranging from -40°C to +70°C/-40°F to +158°F

▶ Application Example



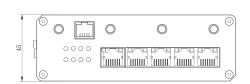
Specifications

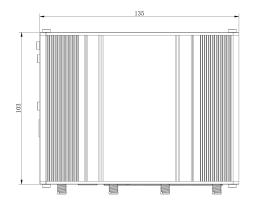
Hardware System		
CPU	528 MHz, ARM Cortex A7	
Memory	128 MB Flash, 128 MB DDR3 RAM	
Storage	1 × Micro SD	
Ethernet Interface		
Ports	5 × RJ-45	
Property	1 × WAN +4 × LAN (PoE PSE Optional)	
Physical Layer	10/100 Base-T (IEEE 802.3)	
Data Rate	10/100 Mbps (Auto-Sensing)	
Interface	Auto MDI/MDIX	
Mode	Full or half duplex (Auto-Sensing)	
Cellular Interfaces		
Connectors	$2 \times 50 \Omega$ SMA (Center PIN: SMA Female)	
SIM Slots	2	
Wi-Fi Interface (Optional)		
Connectors	$1 \times 50 \Omega$ SMA (Center PIN: SMA Male)	
Standards	IEEE 802.11b/g/n	
Tx Power	802.11b: 16 dBm +/-1.5 dBm (11 Mbps)	
	802.11g: 14 dBm +/-1.5 dBm (54 Mbps)	
	802.11n: 13 dBm +/-1.5 dBm (65 Mbps, HT20/40 MCS7)	
Modes	AP and Client mode	
Security	WPA/WPA2 authentication, WEP/TKIP/AES encryption	

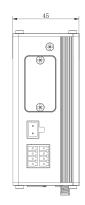
GPS (Optional)		
Connectors	$1 \times 50 \Omega$ SMA (Center PIN: SMA Female)	
Protocols	NMEA 0183	
Voice Interface (Optional)		
Port	1 × RJ-11 (also be used for landline telephone's power supply)	
Standards	ITU Q.512 (SLIC), ITU K.20 (overcurrent and overvoltage protection)	
Subscriber line interface circuit (SLIC)		
Ring voltage	40 to 90 Vpk configurable	
Ring frequency	20 to 25 Hz	
Ring waveform	sine wave	
Maximum ring load	2 ringer equivalence numbers (RENs)	
On-hook voltage (tip/ring)	-46 to -56V	
Off-hook current	18 to 20mA	
Terminating impedance	configurable	
Serial Interface		
Ports	1 × RS232 + 1 × RS485	
Connector	Terminal block	
Baud Rate	300bps to 230400bps	
10		
Connector	Terminal block	
Digital	$1 \times DI + 1 \times DO$	
Software		
Network Protocols	PPP, PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, RIPv1/v2, OSPF, DDNS, VRRP,	
	HTTP, HTTPS, DNS, ARP, QoS, SNTP, Telnet, VLAN, SSH, etc.	
VPN Tunnel	DMVPN/IPsec/OpenVPN/PPTP/L2TP/GRE	
Access Authentication	CHAP/PAP/MS-CHAP/MS-CHAPV2	
Firewall	ACL/DMZ/Port Mapping/MAC Binding/SPI/URL Filter/IP Passthrough	
Management	Web, CLI, SMS, On-demand dial up, DeviceHub	
AAA	RADIUS, TACACS+, LDAP, Local Authentication	
Multilevel Authority	Multiple Levels of User Authority	
Reliability	VRRP, WAN Failover, Dual SIM Backup	
Serial Port	Transparent (TCP Client/Server, UDP), Modbus Gateway (Modbus RTU to	
	Modbus TCP)	
Power Supply and Consumption		
Power Input Connector	2-pin with 5.08 mm terminal block	
Input Voltage	9-48 VDC (48 V power input is needed for PoE output)	

Power Output	4 × 802.3 af/at PoE output	
Physical Characteristics		
Ingress Protection	IP30	
Housing & Weight	Metal, 485 g	
Dimensions	135 x 103 x 45 mm (5.31 x 4.06 x 1.77 in)	
Mounting	Desktop, Wall or DIN Rail Mounting	
Others		
Reset Button	1 × RESET	
LED Indicators	$1 \times POWER$, $1 \times SYSTEM$, $1 \times SIM$, $1 \times Wi-Fi$, $1 \times VPN$, $3 \times Signal strength$	
Environmental		
Operating Temperature	-40°C to +70°C (-40°F to +158°F) Reduced Cellular Performance Above 60°C	
Storage Temperature	-40°C to +85°C (-40°F to +185°F)	
Ethernet Isolation	1.5 kV RMS	
Relative Humidity	0% to 95% (non-condensing) at 25°C/77°F	

▶ Product Images/Dimensions (mm)







Ordering Information

Model	QP35
Air Interface	LTE(LTE-FDD/LTE-TDD)/CDMA(CDMA
	1x/EVDO)/TD-SDMA/DC-HSPA+/HSPA+/HSUPA/HSDPA/WCDMA/EDGE/GPRS/GSM
4G	-EC: B1/B3/B5/B7/B8/B20/B28A@FDD LTE
	-AF: B2/B4/B5/B12/B13/B14/B66/B71@FDD LTE
	-AU: B1/B2/B3/B4/B5/B7/B8/B28@FDD LTE, B40@TDD LTE
	-J: B1/B3/B8/B18/B19/B26 @FDD LTE, B41@TDD LTE
	-CE: B1/B3/B5/B8@FDD LTE, B38/B39/B40/B41@TDD LTE
3G	-EC: B1/B8@WCDMA
	-AF: B2/B4/B5@WCDMA
	-AU: B1/B2/B5/B8 WCDMA
	-J: B1/B6/B8/B19@WCDMA
	-CE: B1/B8@WCDMA, B34/B39@TD-SCDMA, BC0@CDMA2000 1×/EVDO
2G	-EC: B3/B8@GSM
	-AU: B2/B3/B5/B8@GSM
	-CE: 900/1800@GSM

^{*:} Any other frequency bands requirements please contact us.

