



UR35 Industrial Cellular Router

Reliable and Remote-Manageble
for Large Scale M2M Deployment

High Speed LTE Networking Platform



The Ursalink UR35 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 UR35 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 UR35 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

- Uرسالink 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 × 50 Ω SMA (Center PIN: SMA Female)
SIM Slots	2
Wi-Fi Interface (Optional)	
Connectors	1 × 50 Ω 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 × 50 Ω 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

IO

Connector	Terminal block
Digital	1 × DI + 1 × DO

Software

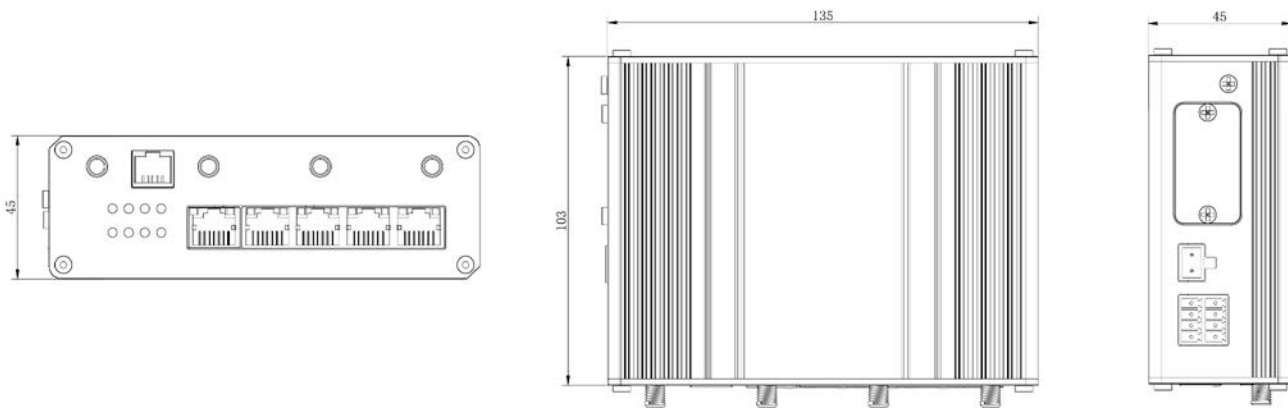
Network Protocols	PPP, PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, RIPv1/v2, OSPF, DDNS, VRRP, HTTP, HTTPS, DNS, ARP, QoS, SNTP, Telnet, VLAN, SSH, etc.
VPN Tunnel	DMVPN/IPsec/OpenVPN/PPTP/L2TP/GRE
Access Authentication	CHAP/PAP/MS-CHAP/MS-CHAPV2
Firewall	ACL/DMZ/Port Mapping/MAC Binding/SPI/URL Filter/IP 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 Consumption	Typical 3.9 W, Max 4.6 W (In Non-PoE mode)

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 × POWER, 1 × SYSTEM, 1 × SIM, 1 × Wi-Fi, 1 × VPN, 3 × 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	UR35
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 1x/EVDO
2G	-EC: B3/B8@GSM -AU: B2/B3/B5/B8@GSM -CE: 900/1800@GSM

*: Any other frequency bands requirements please contact us.