# Pro Series

Industrial Router

UR35

Milesight

UR35 is a cost-effective industrial cellular router with embedded intelligent 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.

◆ **Application Example**
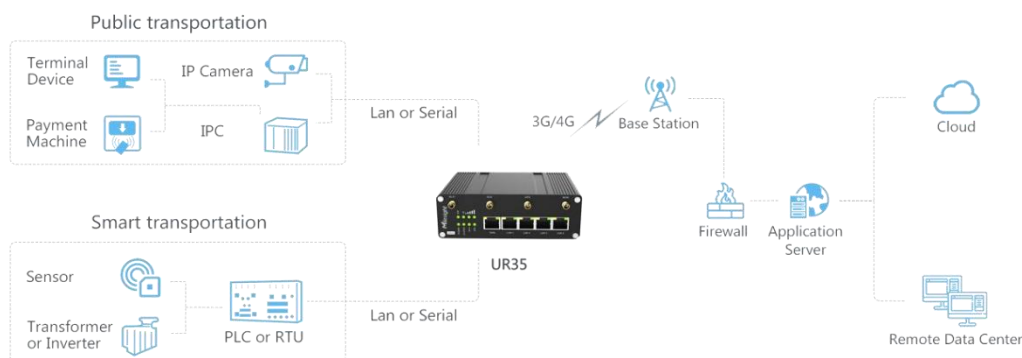
◆ Benefits

- NXP industrial grade processor
- Global 4G LTE CAT4/3G network with dual SIM cards for backup between multiple carrier networks
- Embedded Python SDK for secondary development
- Flexible modular design provides users with different connection modules like Ethernet, I/O, serial port, Wi-Fi, GPS for connecting diverse field assets
- Rugged enclosure, optimized for DIN rail or shelf mounting
- 3-year warranty included

◆ Security & Reliability

- Automated failover/failback between Ethernet, Cellular (dual SIM) and Wi-Fi
- Secure transmission with VPN tunnels like IPsec/OpenVPN/GRE/L2TP/PPTP/DMVPN /WireGuard
- Embeds hardware watchdog to automatically recover from various failure, ensure highest level of availability
- Establishes 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

- 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 and TR069

◆ Capabilities

- Link remote devices in an environment where communication technologies are constantly changing
- Support 802.11 b/g/n, as AP or client mode, to establish versatile wireless network or be the backup WAN link for 4G/3G
- Support rich protocols like SNMP, TR069, MQTT, Modbus bridging, RIP, OSPF
- Provide power to 802.3af standard PoE devices and support power management
- Support wide operating temperature ranging from -40°C to +70°C/-40℉ to +158℉

◆Specifications

Hardware System	
CPU	ARM Cortex-A7，528 MHz
Memory	128 MB DDR3 RAM and 128MB Flash
Extendable Storage	1 × Micro SD Slot

Cellular Interface	
Network	4G LTE (CAT 4)/WCDMA/GSM
Antenna Connector	2 × 50 Ω SMA Connectors (Center PIN: SMA Female)
SIM Slots	2 （Mini SIM-2FF）

Ethernet Interface	
Numbers	5 × 10/100 Mbps
Property	1 × WAN + 4 × LAN
Mode	Full or half duplex (Auto-Sensing)
PoE (Optional)	4 × 802.3 af/at PoE PSE on LAN Ports

Wi-Fi Interface (Optional)	
Antenna Connector	1 × 50 Ω SMA Connector (Center PIN: RP-SMA Female)
Standards	IEEE 802.11 b/g/n，2.4GHz
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 or Client mode
Security	WPA/WPA2 authentication, WEP/TKIP/AES encryption

GPS (Optional)	
Antenna Connector	1 × 50 Ω SMA Connector (Center PIN: SMA Female)
Protocol	NMEA0183, PMTK

Serial Interface

Numbers	1 × RS232 + 1 × RS485 (2 × RS485 Hardware Optional)
Connector	3.5mm Terminal Block
Baud Rate	300bps to 230400bps

DI/DO

Numbers	1 × DI (dry contact) + 1 × DO (wet contact), Galvanic Isolation
Connector	3.5mm Terminal Block
Maximum V/A	0.3A@30VDC (DO)

Others

|	
Reset Button	1 × RESET
LED Indicators	1 × POWER, 1 × SYSTEM, 1 × SIM, 1 × Wi-Fi, 1 × VPN, 3 × Signal strength
Built-in	Watchdog, Timer

Software

Network Protocols	IPv4/IPv6, PPP, PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, RIPv1/v2, OSPF, DDNS, VRRP, HTTP, HTTPS, DNS, ARP, QOS, SNTP, Telnet, VLAN, SSH, MQTT, MQTTS, TR069, etc.
VPN	DMVPN, IPsec, OpenVPN, PPTP, L2TP, GRE, WireGuard, MilesightVPN
Security	Access Control, DMZ, Port Mapping, MAC Binding, SPI Firewalls, DoS&DDoS Protection, Filtering(IP&Domain), IP Passthrough
Management	Web, CLI, SMS, On-demand dial up, SNMP v1/v2/v3, 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 Server/Client, Modbus Gateway (Modbus RTU to Modbus TCP)

Power Supply and Consumption

Power Connector	2-pin 5.08 mm Terminal Block

Input Voltage	9-48 VDC, with Surge-Protection and Reverse Polarity Protection
Power Consumption	Typical 3.9 W, Max 4.6 W (In Non-PoE mode)

Physical Characteristics

Ingress Protection	IP30
Housing & Weight	Metal, 485 g
Dimension	135 x 103 x 45 mm (5.31 x 4.06 x 1.77 in)
Installation	Desktop, Wall or DIN Rail Mounting

Environmental

Operating Temperature	-40°C to +70°C (-40℉ to +158℉) Reduced Cellular Performance Above 60°C
Storage Temperature	-40°C to +85°C (-40℉ to +185℉)
Ethernet Isolation	1.5 kV RMS
Relative Humidity	0% to 95% (non-condensing) at 25°C/77℉

Approvals

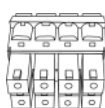| Regulatory	CE, FCC, RCM, JATE, Telec
Environmental	RoHS
EMC	EN 55032, EN 55035 IEC 61000-4-2 Level 3
EMS	IEC 61000-4-3 Level 2 IEC 61000-4-4 Level 3 IEC 61000-4-5 Level 3 IEC 61000-4-6 Level 3 IEC 61000-4-8 Level 4 IEC 61000-4-11 Level 3
Radio Frequency	EN 301 489-1/17/19/52, EN 301 511, EN 301 908-1/2/13, EN 303 413, EN300 328
Safety	EN62368-1

◆Dimensions(mm)
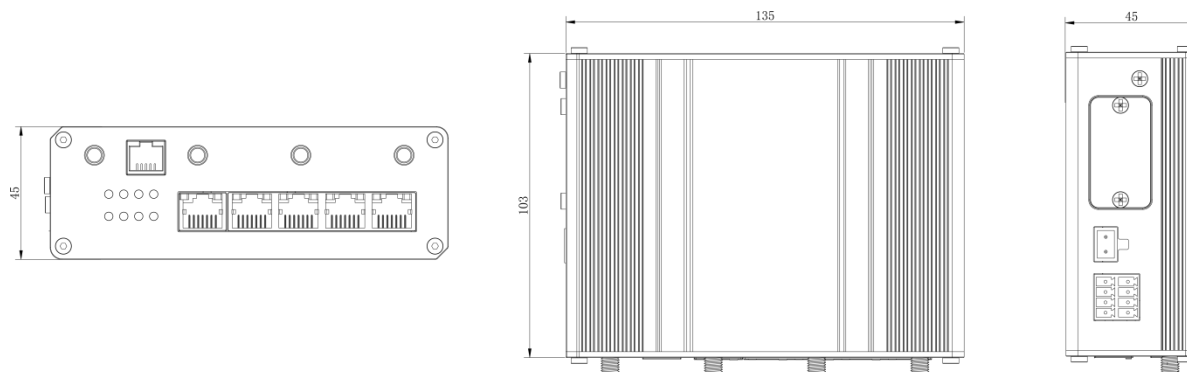
◆Accessories

1 × Power Adapter

1 × 8-Pin Pluggable Terminal
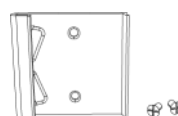
1 × DIN Rail Kit

2 × Magnetic Cellular Antennas

1 × Wi-Fi Antenna
(Wi-Fi Version Only)

1 × GPS Antenna
(GPS Version Only)

2 × Stubby Cellular Antennas
(Optional)

*Note: Contact us if you need any other special accessories or customized accessories.