

UR41(L)

Mini Industrial Router

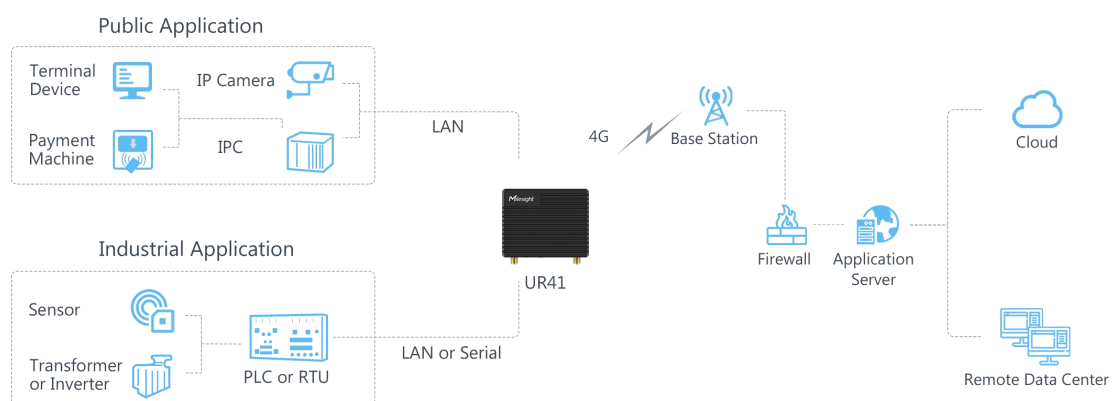
Milesight



Milesight mini industrial router UR41(L) supports 4G connection, and also satisfies multi-type local data access requirements through rich industrial interfaces, including DI, DO, RS232 or RS485. UR41(L) make it easy for forming a reliable, secure, and maintainable solution through its built-in watchdog and secure VPN tunnels, realizing stable data transmission and high-speed mobile connectivity.

With a compact size and industry-grade design, UR41(L) is more flexible in a variety of installation and deployment scenarios. UR41(L) adopts a power-saving design with both idle mode and standby mode for providing users with an energy-saving option. UR41(L) could be managed and monitored remotely by Milesight DeviceHub, UR41(L) could be applied in wide scenarios including vending machines, robots, industrial equipment, and other IoT applications with optimal cost and performance.

◆ Application Example



◆ Features

Highlight Features

- Compact size for suiting small embedded scenarios
- Global 4G LTE network with multiple carrier networks
- Easy to connect with diverse wired devices through DI/DO/RS232/RS485 interfaces
- Power-saving design for both idle mode and standby mode for providing users with an energy-saving option

Industrial-Grade Design

- NXP industrial grade processor
- Rugged enclosure with IP30 protection
- Desk, wall or DIN rail mounting
- Wide operating temperature range from -40° C to 60° C/-40° F to +140° F

Security & Reliability

- Secure transmission with VPN tunnels like IPsec/OpenVPN/GRE/L2TP/PPTP/DMVPN
- Embeds hardware watchdog to automatically recover from various failures, ensuring highest level of availability
- Supports access control lists, DMZ, DDoS Protection, Filters, SPI firewalls
- Establishes a secured mechanism on centralized authentication and authorization of device accessed 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 administrators 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

◆ Specifications

Model	UR41L	UR41
Hardware System		
CPU	ARM Cortex-A7, 528 MHz	
Memory	128 MB DDR3 RAM and 128 MB Flash	
Cellular Interface		
Network	4G LTE (CAT 1)	4G LTE (CAT 4)/WCDMA/GSM
Antenna Connector	1 × 50 Ω SMA Connector (Center PIN: SMA Female)	
SIM Slot	1 (Nano SIM-4FF)	
Ethernet Interface		
Numbers	1 × 10/100 Mbps LAN Port	
Mode	Full or Half Duplex (Auto-Sensing)	
GNSS		
Antenna Connector	---	1 × 50 Ω SMA Connector (Center PIN: SMA Female)
Technology	---	GPS/GLONASS/Beidou/Galileo/QZSS
Serial Interface		
Number	1 × RS232 or 1 × RS485 (Software Switchable)	
Connector	3.5mm Terminal Block	
Terminal Resistor	1 × 120 Ω Resister Switch (for RS485)	
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	
USB	1 × USB 2.0 (Type-C) for Power Supply, Network Supply and Debug	
LED Indicators	1 × SYSTEM, 1 × SIM	
Built-in	Watchdog, Timer	
Software		
Network Protocols	IPv4/IPv6, PPP, SNMP v1/v2c/v3, TCP, UDP, DHCP, RIPv1/v2, OSPF, DDNS, VRRP, HTTP, HTTPS, DNS, ARP, QOS, SNTP, Telnet, SSH, MQTT, MQTTS, TR069, etc.	

VPN	DMVPN, IPsec, OpenVPN, PPTP, L2TP, GRE, MilesightVPN
Security	SPI Firewalls, Access Control (ACL), DMZ, Port Mapping, MAC Binding, DoS&DDoS Protection, Filtering(IP&Domain)
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
Serial Port	Transparent(TCP Client/Server, UDP), Modbus Client/Server, Modbus Gateway (Modbus RTU to Modbus TCP)

Power Supply and Consumption

Power Connector	2-pin 3.5 mm Terminal Block	
Power Input	1. 5-24 VDC, with Surge-Protection and Reverse Polarity Protection 2. 5V/1A by USB Type-C Port	
Power Consumption	Idle: 70mA@12V Data link: 157mA (peak)@12V Standby mode: 6.3 mA@12V	Idle: 78mA@12V Data link: 226mA (peak)@12V Standby mode: 6.3 mA@12V

Physical Characteristics

Ingress Protection	IP30
Housing & Color	Metal, Black
Weight	103g
Dimension	70 x 55 x 22 mm (2.76 x 2.17 x 0.87 in) (Antenna Connector Excluded)
Installation	Desktop, Wall Mounting, DIN Rail Mounting

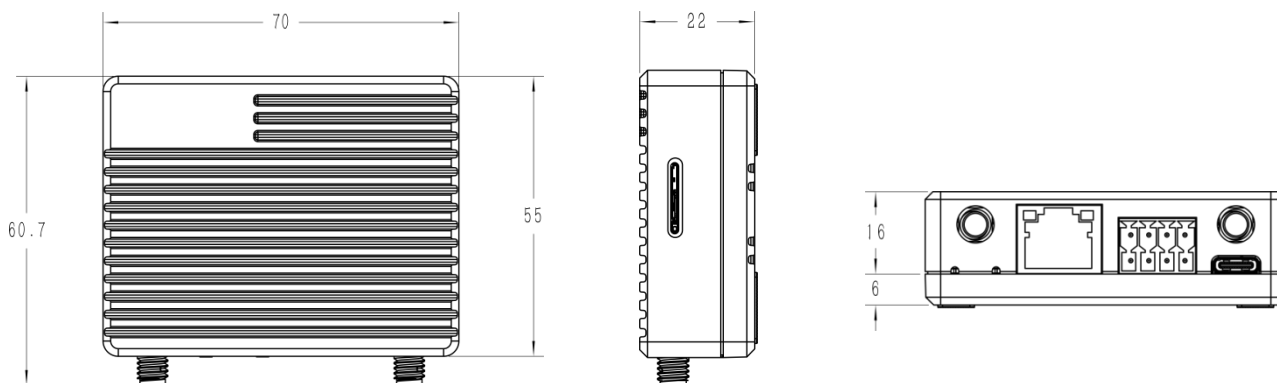
Environmental

Operating Temperature	-40°C to +60°C (-40°F to +140°F)
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)

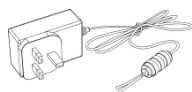
Approvals

Regulatory	CE, FCC
Environmental	RoHS

◆ Dimensions(mm)



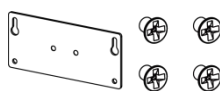
◆ Accessories



1 × Power Adapter



1 × 8-Pin Pluggable
Terminal



1 × Wall Mounting
Bracket with Screws



4 × Wall Mounting
Kits



1 × SIM Card
Ejector Tool



1 × Magnetic
Cellular Antenna



1 × GPS Antenna
(UR41 Only)



1 × 108mm Stubby
Cellular Antenna
(Optional)



1 × Mini Stubby
Cellular Antenna
(Optional)



1 × USB 2.0 Cable
(Optional)



1 × DIN Rail Kit
(Optional)

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