

# UR41

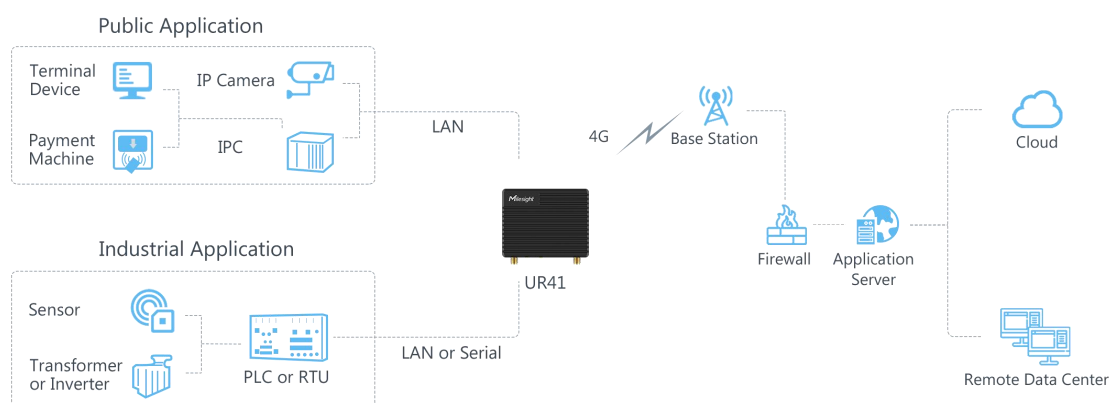
## Mini Industrial Router



Milesight mini industrial router UR41 supports 4G connection, and also satisfies multi-type local data access requirements through rich industrial interfaces, including DI, DO, RS232 or RS485. UR41 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 is more flexible in a variety of installation and deployment scenarios. UR41 adopts a power-saving design with both idle mode and standby mode for providing users with an energy-saving option. UR41 could be managed and monitored remotely by Milesight DeviceHub, UR41 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 CAT4/3G 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 or wall 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

<b>Hardware System</b>	
CPU	ARM Cortex-A7, 528 MHz
Memory	128 MB DDR3 RAM and 128 MB Flash
<b>Cellular Interface</b>	
Network	4G LTE (CAT 4)/WCDMA/GSM
Antenna Connector	1 × 50 Ω SMA Connector (Center PIN: SMA Female)
SIM Slot	1 (Nano SIM-4FF)
<b>Ethernet Interface</b>	
Numbers	1 × 10/100 Mbps LAN Port
Mode	Full or Half Duplex (Auto-Sensing)
<b>GNSS</b>	
Antenna Connector	1 × 50 Ω SMA Connector (Center PIN: SMA Female)
Technology	GPS/GLONASS/Beidou/Galileo/QZSS
<b>Serial Interface</b>	
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
<b>DI/DO</b>	
Numbers	1 × DI (dry contact) + 1 × DO (wet contact), Galvanic Isolation
Connector	3.5mm Terminal Block
Maximum V/A	0.3A@30VDC (DO)
<b>Others</b>	
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
<b>Software</b>	
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, SSH, MQTT, 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: 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

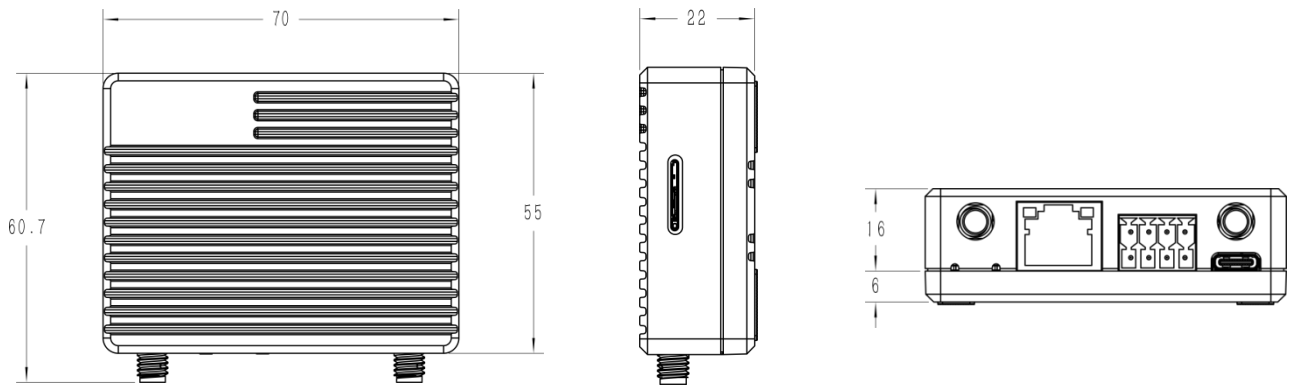
### Environmental

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)

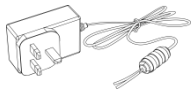
### Approvals

Regulatory	CE, FCC
Environmental	RoHS

## ◆ Dimensions(mm)



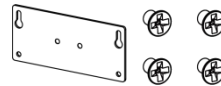
## ◆ Accessories



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 Antennas



1 × GPS Antenna



1 × 108mm Stubby Cellular Antenna  
**(Optional)**



1 × Mini Stubby Cellular Antenna  
**(Optional)**



1 × USB 2.0 Cable  
**(Optional)**

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

