UR41

Mini Industrial Router

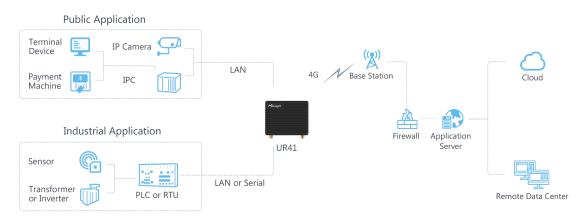




Milesight mini industrial router UR41 supports 4G connection, and also satisfies multi-type local data access requirements through rich industrial interfaces, including DI, DO, RS232 or RS485. UR41 make it easy for forming a reliable, secure, and maintainable solution through its built-in watchdog and 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 d evice accessed by supporting AAA (Radius, TACACS+, LDAP, local Authentication) and multiple levels of user authority

Easy Maintenance

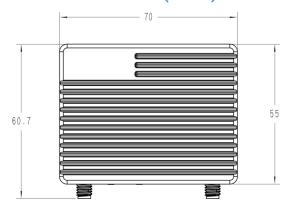
- DeviceHub provides easy setup, mass configuration, and centralized management of remote devices
- The user-friendly web interface design and more than one option of upgrade help administrators to manage the device as easy as pie
- WEB GUI and CLI enable the admin to achieve simple management and quick configuration among a large quantity of devices
- Efficiently manage the remote routers on the existing platform through the industrial standard SNMP and TR069

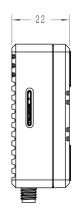
◆ Specifications

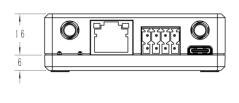
Hardware System	
CPU	ARM Cortex-A7, 528 MHz
Memory	128 MB DDR3 RAM and 128 MB Flash
Cellular Interface	
Network	4G LTE (CAT 4)/WCDMA/GSM
Antenna Connector	$1 \times 50 \Omega$ SMA Connector (Center PIN: SMA Female)
SIM Slot	1 (Nano SIM-4FF)
Ethernet Interface	
Numbers	1 × 10/100 Mbps LAN Port
Mode	Full or Half Duplex (Auto-Sensing)
GNSS	
Antenna Connector	$1 \times 50 \Omega$ SMA Connector (Center PIN: SMA Female)
Technology	GPS/GLONASS/Beidou/Galileo/QZSS
Serial Interface	
Number	1 × RS232 or 1 x 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	
	IPv4/IPv6, PPP, PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, RIPv1/v2,
Network Protocols	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,
-	

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 Transparent(TCP_Client/Server, UDP), Modbus Client/Server, Modbus Client/Server, Modbus RTU to Modbus TCP) Power Supply and Consumption Power Connector 2-pin 3.5 mm Terminal Block 1. 5-24 VDC, with Surge-Protection and Reverse Polarity Protection 2. 5v/1A by USB Type-C Port Power Consumption 1. 5-24 VDC, with Surge-Protection and Reverse Polarity Protection 2. 5v/1A by USB Type-C Port Power Consumption 1. 5-24 VDC, with Surge-Protection and Reverse Polarity Protection 2. 5v/1A by USB Type-C Port Male Initial Surge-Protection and Reverse Polarity Protection 2. 5v/1A by USB Type-C Port Power Consumption Power Consumption Male Initial Surge-Protection and Reverse Polarity Protection 2. 5v/1A by USB Type-C Port Male Initial Surge-Protection 2. 5v/1A by USB Type-C Port Male Initial Surge-Protection 2. 5v/1A by USB Type-C Port Metable Metable Surger Metable Metable Surger Metable Metable Surger Metable Metable Surger		DoS&DDoS Protection, Filtering(IP&Domain)	
Multilevel Authority Serial Port Transparent(TCP Client/Server, UDP), Modbus Client/Server, Modbus Client/Server, Modbus RTU to Modbus TCP) Power Supply and Consumption Power Connector 2-pin 3.5 mm Terminal Block 1. 5-24 VDC, with Surge-Protection and Reverse Polarity Protection 2. 5V/1A by USB Type-C Port Idle: 78mA@12V Power Consumption 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 1-chemical Power of the Habs's	Management	Web, CLI, SMS, On-demand dial up, SNMP v1/v2/v3, DeviceHub	
Serial Port Transparent(TCP Client/Server, UDP), Modbus Client/Server, Modbus RTU to Modbus TCP) Client/Server, Modbus Client/Server, 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 Idle: 78mA@12V Power Consumption 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	AAA	Radius, Tacacs+, LDAP, Local Authentication	
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Power Supply and Consumption	Serial Port	Transparent(TCP Client/Server, UDP), Modbus Client/Server, Modbus	
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 Idle: 78mA@12V Power Consumption 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 Storage -40°C to +60°C (-40°F to +140°F) Temperature Ethernet Isolation 1.5 kV RMS Relative Humidity 0% to 95% (Non-condensing) Approvals Regulatory CE, FCC		Gateway (Modbus RTU to Modbus TCP)	
Power Input 1. 5-24 VDC, with Surge-Protection and Reverse Polarity Protection 2. 5V/1A by USB Type-C Port Idle: 78mA@12V Power Consumption 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 Storage Temperature Storage Temperature Ethernet Isolation Relative Humidity O% to 95% (Non-condensing) Approvals Regulatory CE, FCC	Power Supply and Consumption		
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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 Storage Temperature Ethernet Isolation 1.5 kV RMS Relative Humidity 0% to 95% (Non-condensing) Approvals Regulatory Color Metal, Black IP30 Metal, Black		Idle: 78mA@12V	
Physical CharacteristicsIngress ProtectionIP30Housing & ColorMetal, BlackWeight103gDimension70 x 55 x 22 mm (2.76 x 2.17 x 0.87 in) (Antenna Connector Excluded)InstallationDesktop, Wall MountingEnvironmentalOperating Temperature-40°C to +60°C (-40°F to +140°F)Storage Temperature-40°C to +85°C (-40°F to +185°F)Ethernet Isolation1.5 kV RMSRelative Humidity0% to 95% (Non-condensing)ApprovalsRegulatoryCE, FCC		Data link: 226mA (peak)@12V	
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Housing & Color 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 Storage Temperature Ethernet Isolation 1.5 kV RMS Relative Humidity Approvals Regulatory CE, FCC	Physical Characteristics		
Weight103gDimension70 x 55 x 22 mm (2.76 x 2.17 x 0.87 in) (Antenna Connector Excluded)InstallationDesktop, Wall MountingEnvironmentalOperating Temperature-40°C to +60°C (-40°F to +140°F)Storage Temperature-40°C to +85°C (-40°F to +185°F)Ethernet Isolation1.5 kV RMSRelative Humidity0% to 95% (Non-condensing)ApprovalsRegulatoryCE, FCC	Ingress Protection	IP30	
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	Housing & Color	Metal, Black	
Installation Desktop, Wall Mounting Environmental Operating Temperature Storage Temperature Ethernet Isolation Relative Humidity Approvals Regulatory Desktop, Wall Mounting -40°C to +60°C (-40°F to +140°F) -40°C to +60°C (-40°F to +185°F) 1.5 kV RMS (Non-condensing)	Weight	103g	
Environmental Operating Temperature Storage Temperature Ethernet Isolation Relative Humidity Approvals Regulatory CE, FCC	Dimension	70 x 55 x 22 mm (2.76 x 2.17 x 0.87 in) (Antenna Connector Excluded)	
Operating Temperature Storage Temperature Storage Temperature 1.5 kV RMS Relative Humidity O% to 95% (Non-condensing) Approvals Regulatory CE, FCC	Installation	Desktop, Wall Mounting	
Temperature Storage -40°C to +60°C (-40°F to +140°F) Temperature Ethernet Isolation Relative Humidity Approvals Regulatory CE, FCC	Environmental		
Temperature Storage -40°C to +85°C (-40°F to +185°F) Temperature Ethernet Isolation 1.5 kV RMS Relative Humidity 0% to 95% (Non-condensing) Approvals Regulatory CE, FCC	Operating	40°0 to 160°0 (40°F to 1140°F)	
Temperature Ethernet Isolation 1.5 kV RMS Relative Humidity 0% to 95% (Non-condensing) Approvals Regulatory CE, FCC	Temperature	-40 C to +60 C (-40 F to +140 F)	
Temperature Ethernet Isolation 1.5 kV RMS Relative Humidity 0% to 95% (Non-condensing) Approvals Regulatory CE, FCC	Storage	40°C to 105°C (40°F to 1105°F)	
Relative Humidity 0% to 95% (Non-condensing) Approvals Regulatory CE, FCC	Temperature	-40 C to +65 C (-40 F to +165 F)	
Approvals Regulatory CE, FCC	Ethernet Isolation	1.5 kV RMS	
Regulatory CE, FCC	Relative Humidity	0% to 95% (Non-condensing)	
	Approvals		
Environmental RoHS	Regulatory	CE, FCC	
	Environmental	RoHS	

Dimensions(mm)







Accessories



1 × Power Adapter



1 × 8-Pin Pluggable **Terminal**



1 x 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)



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













Support email: iot.support@milesight.com