Lite Series

Industrial Router

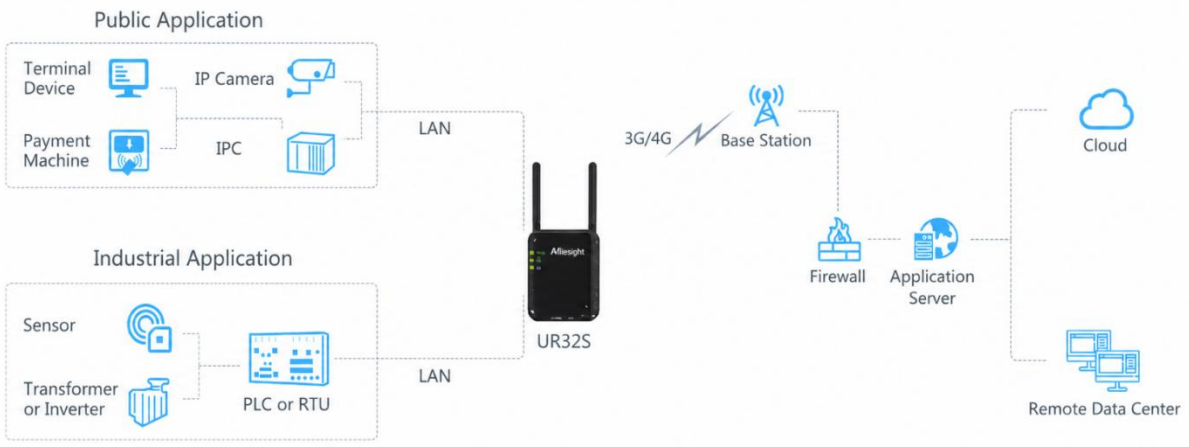
UR32S

UR32S 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. UR32S also has 2 fast Ethernet ports, which delivers users an uninterrupted internet access.

Integrating watchdog and multi-link failover detection, UR32S provides stable communications. Combining Milesight Development Platform, DeviceHub and MilesightVPN, UR32S can help you manage network easily and efficiently.

Easy deployment and comprehensive remote device management makes UR32S versatile in most of IoT/M2M applications.

◆ Application Example



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◆ Features

Reliable 3G/4G Network

- Global 4G LTE CAT4/3G network with multiple carrier networks
- Automated failover/failback between Ethernet and cellular (SIM card)
- Multiple APN interfaces for simultaneous access to different network services

Industrial-Grade Design

- NXP industrial grade processor
- Rugged enclosure with IP30 protection for harsh environment
- DIN rail or shelf mounting
- Support wide operating temperature ranging from -40°C to +70°C/-40℉ to +158℉

Security & Reliability

- Secure transmission with VPN tunnels like IPsec/OpenVPN/GRE/L2TP/PPTP /DMVPN/WireGuard/ZeroTier
- Embeds hardware watchdog to automatically recover from various failures, ensure highest level of availability
- Supports access control lists, DMZ, DDoS Protection, Filters, SPI firewalls, etc
- Establishes a secured mechanism on centralized authentication and authorization of device access by supporting AAA (Radius, TACACS+, LDAP, local Authentication 802.1x) and multiple levels of user authority

Easy Maintenance

- DeviceHub and Development Platform provide 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
- Provide power to 802.3af/at standard PoE devices and support power management

◆ Hardware Specifications

Hardware System	
CPU	ARM Cortex-A7， 528 MHz
Memory	128 MB DDR3 RAM and 128MB Flash
Cellular Interface	
Network	4G LTE (CAT 4)/WCDMA/GSM (Differ as regions)
Antenna Connector	1 × 50 Ω SMA Connectors (Center PIN: SMA Female)
SIM Slots	1 × SIM Slot (Mini SIM-2FF), 1.8V/3V
Tx Power	LTE: Class 3 (23 dBm ± 2 dB)
Ethernet Interface	
Numbers	2 × RJ45 10/100 Mbps
Property	1 × WAN + 1 × LAN or 2 × LAN
Mode	Full or half duplex (Auto-Sensing)
Ethernet Isolation	1.5 kV RMS
PoE (Optional)	2 × 802.3 af/at PoE PSE on LAN Ports
Wi-Fi Interface	
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)
Others	
Reset Button	1 × RESET
LED Indicators	1 × POWER, 1 × SYSTEM, 1 × SIM, 3 × Signal strength
Power Connector	1 × 2-pin 5.08 mm Terminal Block, with Surge-Protection and Reverse Polarity Protection
Built-in	Watchdog, Timer
Power Supply and Consumption	
Power Input	9-48 VDC (48V is needed for PoE output)
Power Output (Optional)	2 × 802.3 af/at PoE PSE on LAN Ports Per Port 30W Max., Total 60W Max.
Power Consumption	Typical 1.8 W, Max 2.2 W (In Non-PoE mode)
Physical Characteristics	
Ingress Protection	IP30

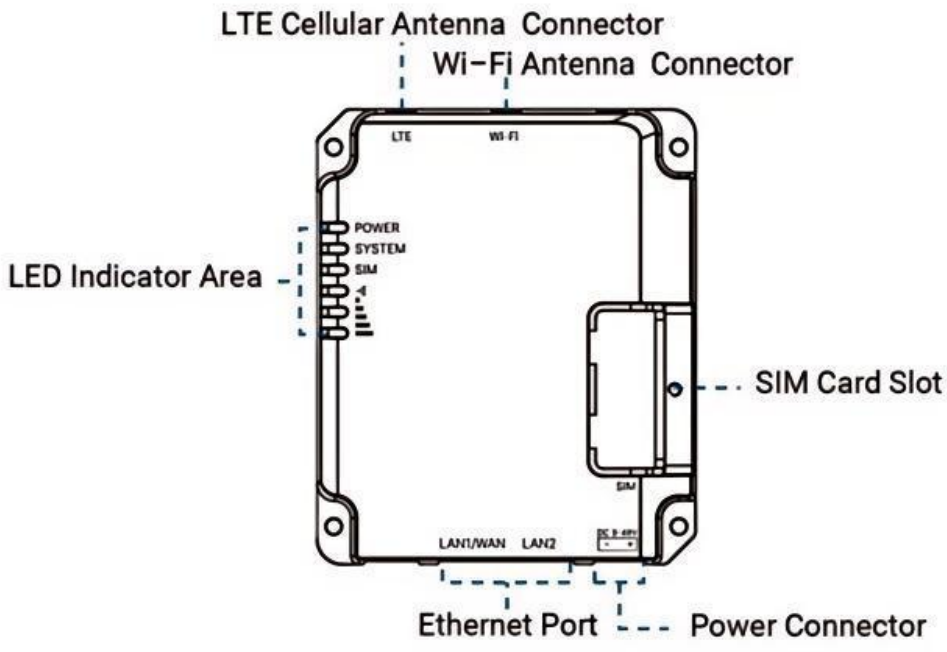
Housing & Color	Metal, Black
Dimension	108 x 90 x 26 mm (4.25 x 3.54 x 1.02 in)
Installation	Desktop, Wall or DIN Rail Mounting
Environmental	
Operating Temperature	-40°C to +70°C (-40°F to +158°F) Reduced Cellular Performance Above 60°C
Storage Temperature	-40°C to +85°C (-40°F to +185°F)
Relative Humidity	0% to 95% (non-condensing) at 25°C/77°F
Approvals	
Regulatory	CE, CE (RED), FCC, RCM, Telec
Environmental	RoHS
EMC	EN 55032, EN 55035
EMS	IEC 61000-4-2 Level 3 IEC 61000-4-3 Level 2 IEC 61000-4-4 Level 2 IEC 61000-4-5 Level 2 IEC 61000-4-6 Level 3 IEC 61000-4-8 Level 1 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
Safety	EN62368-1

◆ Software Specifications

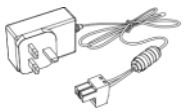
Network	
Network Protocols	IPv4/IPv6, PPP, PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, RIPv1/v2, OSPF, DDNS, VRRP, HTTP, HTTPS, DNS, ARP, QOS, SNTP, Telnet, VLAN, SSH, MQTT, MQTTS, TR069, etc.
Routing	Static Routing, Priority Based Routing, RIP, OSPF
DDNS	Supported >16 service providers, others can be configured manually
QoS	Upload/Download Bandwidth Limit
IP Passthrough	Support to assign Cellular IP address to the device
Reliability	VRRP, WAN Failover
Diagnostics Tools	Ping, Traceroute, TCPDUMP, QXDM, Log Server, Cellular AT Command Debugger, Firewall iptables Debugger
Wi-Fi Interface	

Modes	AP or Client mode
Security	WEP/WPA-PSK/WPA2-PSK/WPA-EAP/WPA2-EAP authentication, TKIP/AES encryption
Wi-Fi Users	Up to 15 simultaneous connections
MAC Filter	Blacklist, Whitelist
Security	
Firewalls	Access Control, DMZ, Port Mapping, MAC Binding, SPI Firewalls, DoS&DDoS Protection, Filtering(IP&Domain)
VLAN	Port and tag-based VLAN separation
AAA	Radius, Tacacs+, LDAP, Local Authentication, 802.1x
Multilevel Authority	Multiple Levels of User Authority
VPN	
OpenVPN	Multiple Clients and a Server Support
IPsec	Multiple Clients and a Server Support
GRE	GRE Tunnel Support
L2TP	L2TP Client Support
PPTP	PPTP Client Support
DMVPN	DMVPN Spoke Support
WireGuard	Support
ZeroTier	Support
Management	
Configuration	Web, CLI (SSH/Telnet), SMS, On-demand dial up, SNMP v1/v2c/v3, TR069, DeviceHub, Milesight Development Platform, HTTP(s) API
Update	Web, DeviceHub, Milesight Development Platform
Device Management	DeviceHub, Milesight Development Platform, MilesightVPN
SNMP	SNMP v1/v2/v3, Support SNMP Trap
TR069	Support
SMS	Send/Receive SMS, SMS Control, SMS Configuration
Event Alarm	System Restart/Reboot, Network Up/Down, Link Switch, etc.

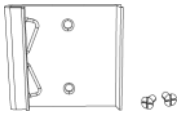
◆ Hardware Overview



◆ Accessories



1 × Power Adapter

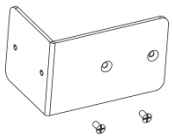


1 × DIN Rail Clip Kit

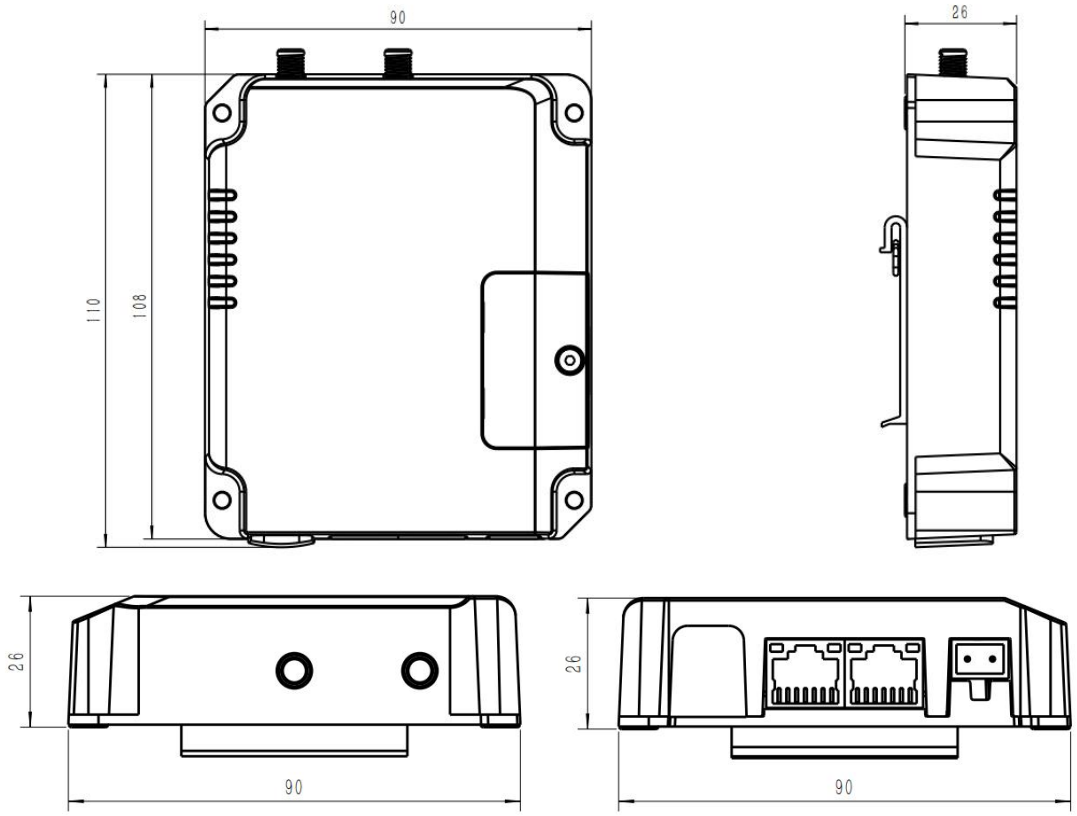
4 × Wall Mounting Kits

1 × Magnetic Cellular Antenna

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



1 × DIN Mounting Bracket Kit **(Optional)**

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

◆ Dimensions(mm)