

# Lite Series

## Industrial Router

### UR32S

*Milesight*

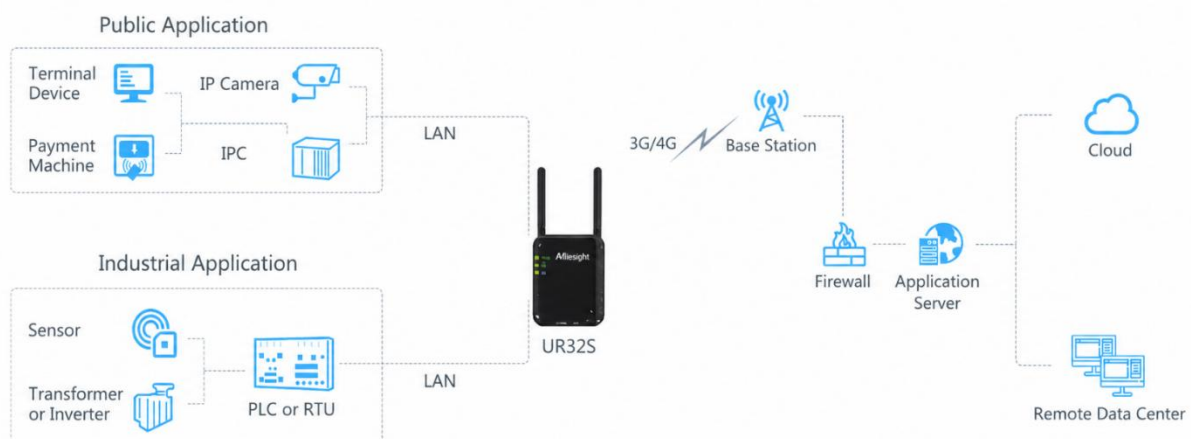


UR32S is a cost-effective industrial cellular router with embedded intelligent features that are designed for multifarious M2M/IoT applications. Global WCDMA and 4G LTE carrier supported make this drop-in connectivity a great help for operators in maximizing uptime. UR32S also has 2 fast Ethernet ports, 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



## ◆ 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°F to +158°F

### 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<br>(Optional) | 2 × 802.3 af/at PoE PSE on LAN Ports<br>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 |
|--------------------|------|

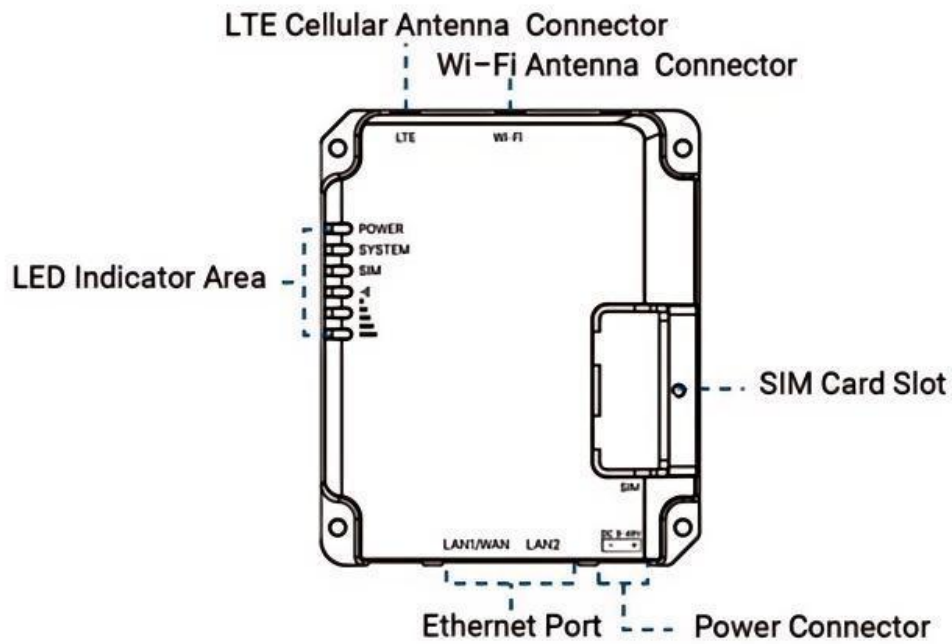
|                       |                                                                  |
|-----------------------|------------------------------------------------------------------|
| Housing & Color       | Metal, Black                                                     |
| Dimension             | 108 x 90 x 26 mm (4.25 x 3.54 x 1.02 in)                         |
| Installation          | Desktop, Wall or DIN Rail Mounting                               |
| <b>Environmental</b>  |                                                                  |
| 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                          |
| <b>Approvals</b>      |                                                                  |
| 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

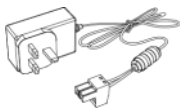
|                        |                                                                                                                                                                  |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Network</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, 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                                                            |
| <b>Wi-Fi Interface</b> |                                                                                                                                                                  |

|                      |                                                                                                                              |
|----------------------|------------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                                         |
| <b>Security</b>      |                                                                                                                              |
| 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                                                                                            |
| <b>VPN</b>           |                                                                                                                              |
| 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                                                                                                                      |
| <b>Management</b>    |                                                                                                                              |
| 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.                                                                    |

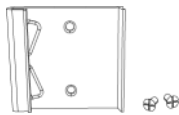
## ◆ Hardware Overview



## ◆ Accessories



1 × Power Adapter



1 × DIN Rail Clip Kit



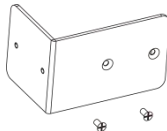
4 × Wall Mounting Kits



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)

