GO2SIM

HARDWARE

// PRO SERIES INDUSTRIAL ROUTER

INDUSTRIAL 4G CELLULAR ROUTER

UR32



POWERED BY MILESIGHT // SUPPLIED BY GO2SIM

DUALFLEX

SINGLE APN * SINGLE IP ADDRESS ACROSS BOTH SIMS

PRE-CONFIGURED BY GO2SIM * 2 x GLOBAL ROAMING SIMS FITTED

PLUG & PLAY

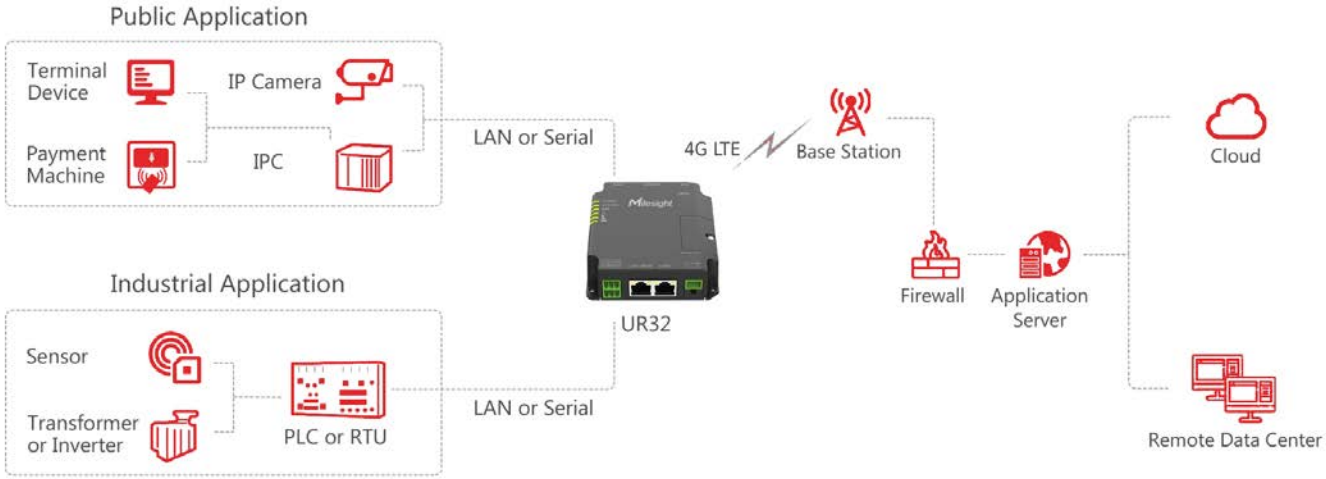
FULLY MANAGED

UR32 is a cost-effective industrial cellular router with embedded intelligent features that are designed for multifarious M2M/IoT applications. Global 4G LTE carrier support make this drop-in connectivity a great help for operators in maximizing uptime.

Integrating embedded cellular modem and dual SIM function, the UR32 provides 4G LTE cellular connectivity with maximum 150 Mbps download and 50 Mbps uplink, it also has 2 fast Ethernet ports and supports Wi-Fi that complies with 802.11b/g/n standard. All these capabilities deliver users an uninterrupted internet access.

Easy deployment and comprehensive remote device management makes UR32 versatile in most of IoT/M2M applications.

// 00 APPLICATION EXAMPLE



// 01 FEATURES

// SUPPLIED BY GO2SIM WITH DUALFLEX

HARDWARE

PRE-CONFIGURED BY GO2SIM

Every UR32 is set up by the Go2Sim team before it ships, then fully maintained and managed by us. Plug and play: power up, online.

2 × DUALFLEX GLOBAL ROAMING SIMS

Both SIM slots are fitted with Go2Sim DualFlex global roaming SIMs, with automatic dual-SIM failover — if one path drops, the router switches to the other.

APN

SINGLE APN

One APN across both DualFlex SIMs — nothing to reconfigure when the router switches from one SIM to the other.

IP

SINGLE IP ADDRESS

One IP address across both DualFlex SIMs, so your platform always reaches the router at the same address, whichever SIM is active.

BENEFITS

- NXP industrial grade processor
- Global 4G LTE CAT4 network with dual SIM cards for backup between multiple carrier networks
- Embedded Python SDK for secondary development
- Flexible modular design provides users with different connection modules like Ethernet, I/O, serial port, Wi-Fi, GPS for connecting diverse field assets
- Provide power to 802.3af/at PoE devices and support power management (optional)
- Rugged enclosure, optimized for DIN rail or shelf mounting
- 3-year warranty included

SECURITY & RELIABILITY

- Automated failover/failback between Ethernet, Cellular (dual SIM) and Wi-Fi
- 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
- Establishes a secured mechanism on centralized authentication and authorization of device access by supporting AAA (Radius, TACACS+, LDAP, local Authentication) and multiple levels of user authority

CAPABILITIES

- Link remote devices in an environment where communication technologies are constantly changing
- Support 802.11 b/g/n, as AP or client mode, to establish versatile wireless network or be the backup WAN link for 4G LTE
- Support rich protocols like SNMP, TR069, MQTT, Modbus bridging, RIP, OSPF
- Provide power to 802.3af/at standard PoE devices and support power management
- Support wide operating temperature ranging from -40°C to +70°C/-40°F to +158°F

EASY MAINTENANCE

- Fully maintained and managed by Go2Sim as part of an all-inclusive service — no management platform for you to learn or run
- Plug and play: arrives pre-configured with DualFlex SIMs fitted — connect power and your devices and it comes online
- Remote configuration, firmware updates and monitoring handled by the Go2Sim team
- Industrial standard SNMP and TR069 support for integration with your existing platforms

670+	190+	100K+	70
NETWORKS	COUNTRIES	IOT APPLICATIONS MANAGED	GLOBAL DATA CENTRES

// 02 HARDWARE SPECIFICATIONS

HARDWARE SYSTEM

CPU	ARM Cortex-A7, 528 MHz
Memory	128 MB DDR3 RAM and 128 MB Flash
Extendable Storage	1 × Micro SD Slot

CELLULAR INTERFACE

Network	4G LTE (CAT 4)
Antenna Connector	2 × 50 Ω SMA Connectors (Center PIN: SMA Female)
SIM Slots	2 × SIM Slot (Mini SIM-2FF), 1.8V/3V
DualFlex SIMs	Supplied fitted with 2 × Go2Sim DualFlex global roaming SIMs — one in each slot
Single APN	One APN across both DualFlex SIMs — no reconfiguration when the router switches SIM
Single IP Address	One IP address across both DualFlex SIMs — the router stays reachable at the same address whichever SIM is active

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 (OPTIONAL)

Antenna Connector	1 × 50 Ω SMA Connector (Center PIN: RP-SMA Female)
Standards	IEEE 802.11 b/g/n, 2.4 GHz
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)

GNSS (OPTIONAL)

Antenna Connector	1 × 50 Ω SMA Connector (Center PIN: SMA Female)
Technology	GPS/GLONASS/BDS/Galileo/QZSS
Positioning Accuracy	2.5 m CEP (Open Air)

SERIAL PORT

Numbers	1 × RS232 (RS485 Hardware Optional)
Connector	3.5 mm Terminal Block
Baud Rate	300 bps to 230400 bps

DI/DO

Numbers	1 × DI + 1 × DO, Galvanic Isolation
Connector	3.5 mm Terminal Block
Digital Input	Dry Contact
Digital Output	Wet Contact, maximum 0.3A@30VDC

OTHERS

Reset Button	1 × RESET

OTHERS (cont.)

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 1.9 W, Max 2.4 W (In Non-PoE mode)

PHYSICAL CHARACTERISTICS

Ingress Protection	IP30
Housing & Color	Metal, Black
Weight	271 g
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, FCC, RCM, NBTC, JATE, Telec
Carrier	Verizon
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, EN 300 328
Safety	EN 62368-1

// 03 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, RIP, OSPF
DDNS	Supported >16 service providers, others can be configured manually
QoS	Upload/Download Bandwidth Limit
IP Passthrough	Support to assign WAN IP address to the device on LAN

NETWORK (cont.)

Reliability	VRRP, WAN Failover, Dual SIM Backup
Diagnostics Tools	Ping, Traceroute, TCPDUMP, QXDM, Log Server, Cellular AT Command Debugger, Firewall iptables Debugger

WI-FI INTERFACE (OPTIONAL)

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

GNSS (OPTIONAL)

Protocol	NMEA0183, PMTK
Mode	Support reading by Serial Port, MQTT, TCP Client/Server, UDP Server

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

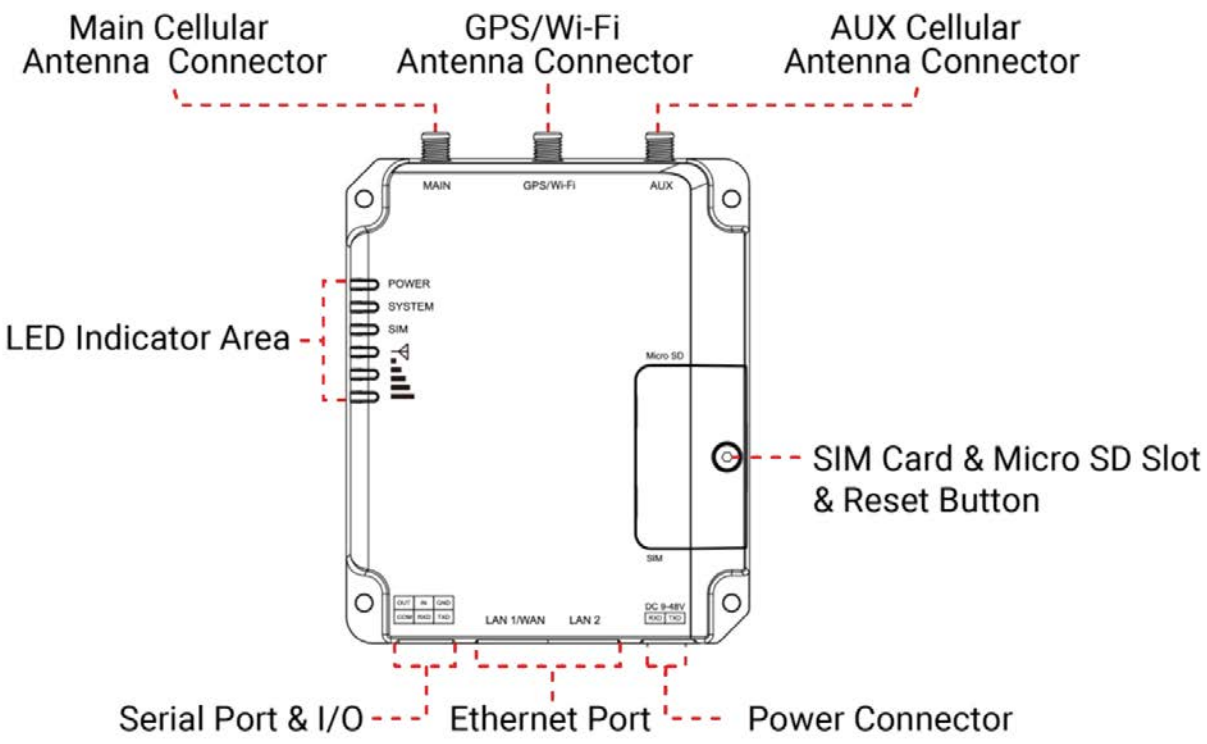
OTHERS

Serial Mode	Transparent (TCP Client/Server, UDP Server, MQTT Client), Modbus Server/Client, Modbus Gateway (Modbus RTU to Modbus TCP)
Digital Input	Support reading by SMS, Email, CLI, Modbus TCP/RTU Server, MQTT
Digital Output	Support triggering by DI, SMS, CLI, Modbus TCP/RTU Server, MQTT
App	Python SDK

MANAGEMENT

Configuration	Pre-configured and remotely managed by Go2Sim. Supports Web, CLI (SSH/Telnet), SMS, On-demand dial up, SNMP v1/v2c/v3, TR069, HTTP(s) API
Update	Firmware and configuration updates managed remotely by Go2Sim
Device Management	Fully maintained and managed by Go2Sim as an all-inclusive service
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.

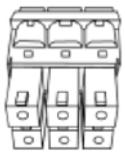
// 04 HARDWARE OVERVIEW



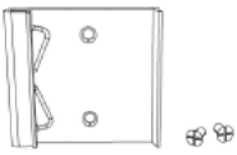
// 05 ACCESSORIES



1 × Power Adapter



1 × 6-Pin Pluggable Terminal



1 × DIN Rail Clip Kit



4 × Wall Mounting Kits



2 × Magnetic Cellular Antennas



1 × Wi-Fi Antenna
WI-FI VERSION ONLY



1 × GPS Antenna
GPS VERSION ONLY



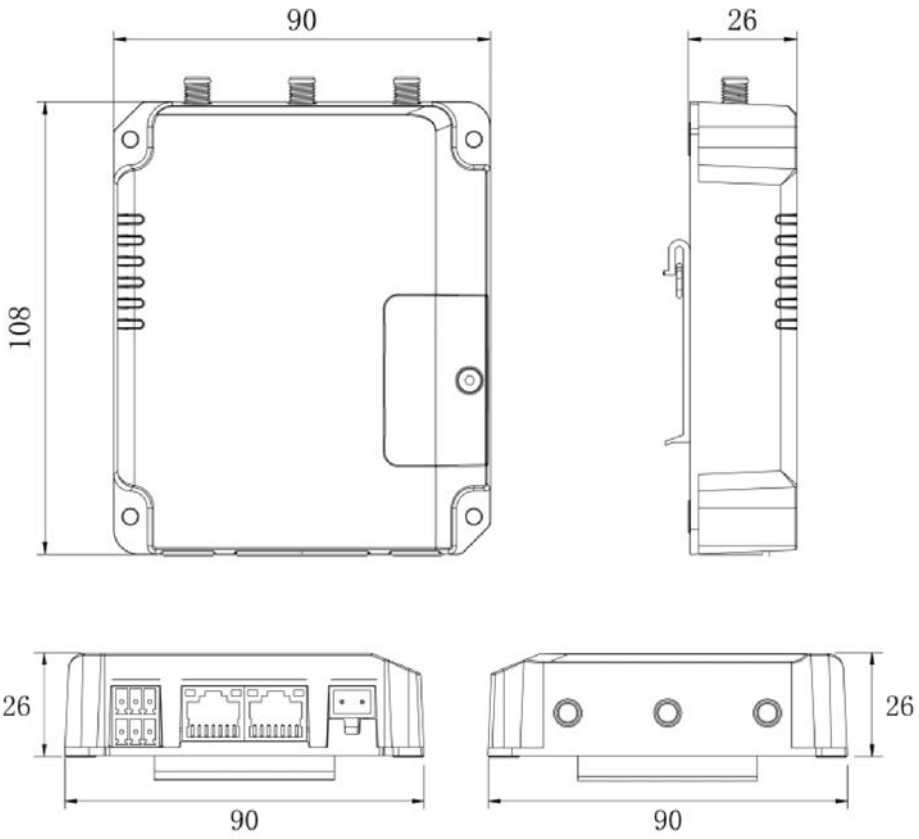
2 × Stubby Cellular Antennas
OPTIONAL



2 × Go2Sim DualFlex Global Roaming SIMs
PRE-INSTALLED

*Note: Contact Go2Sim if you need any other special accessories or customised accessories.

// 06 DIMENSIONS (MM)



// 07 SUPPLIED READY 2 GO

01
TELL US YOUR DEPLOYMENT

Share your application, locations and management needs with the Go2Sim team.

02
WE CONFIGURE IT

Your UR32 is pre-configured by Go2Sim and fitted with 2 × DualFlex global roaming SIMs.

03
PLUG IN. POWER UP. ONLINE.

Install on the desk, wall or DIN rail — it connects out of the box, with DualFlex dual-SIM failover, a single APN and a single IP address.

CONNECTIVITY THAT DOESN'T FAIL.

TALK TO GO2SIM SALES sales@go2sim.com go2sim.com

// PRE-CONFIGURED · DUALFLEX DUAL ROAMING SIMS · SINGLE APN · SINGLE IP · FULLY MANAGED

