URSALINK

UR51 Industrial Cellular Router

Reliable and Remote-Manageable

for Large Scale M2M Deployment

The Ursalink UR51 is a cost-effective industrial cellular router with embedded intelligent software 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.

Integrating embedded cellular modem and dual SIM function, the UR55 provides 3G/4G cellular network with 150 Mbps download and 50 Mbps uplink. It also has 1 PoE port and 1 serial port (RS232/485) to connect various end devices, which makes UR51 versatile.

Easy deployment and comprehensive remote device management makes UR51 particularly suitable for light industrial and business applications like ATMs, kiosk, digital signage and so on.

▶ Benefits

- Dual SIM cards for backup between multiple carriers networking and global 2G/3G/LTE options make it easy to get connected
- Flexible modular design provides users with different connection modules like Ethernet, serial port, GPS, for connecting diverse field assets
- Rugged enclosure, optimized for DIN rail or shelf mounting
- 3-year warranty included

▶ Security & Reliability

- Automated failover/failback between Ethernet and Cellular (dual SIM)
- Enable unit with security frameworks like IPsec/OpenVPN/GRE/L2TP/PPTP/DMVPN
- Embed hardware watchdog, able to automatically recover from various failure, ensure highest level of availability
- To establish 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

▶ Easy Maintenance

- Ursalink Device Management Platform 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 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

▶ Capabilities

- Link remote devices in an environment where communication technologies are constantly changing
- Support rich protocols like SNMP, MQTT, Modbus bridging, RIP, OSPF
- Support wide operating temperature ranging from -40°C to +70°C/-40℉ to +158℉

*COMING SOON

▶ Application Example
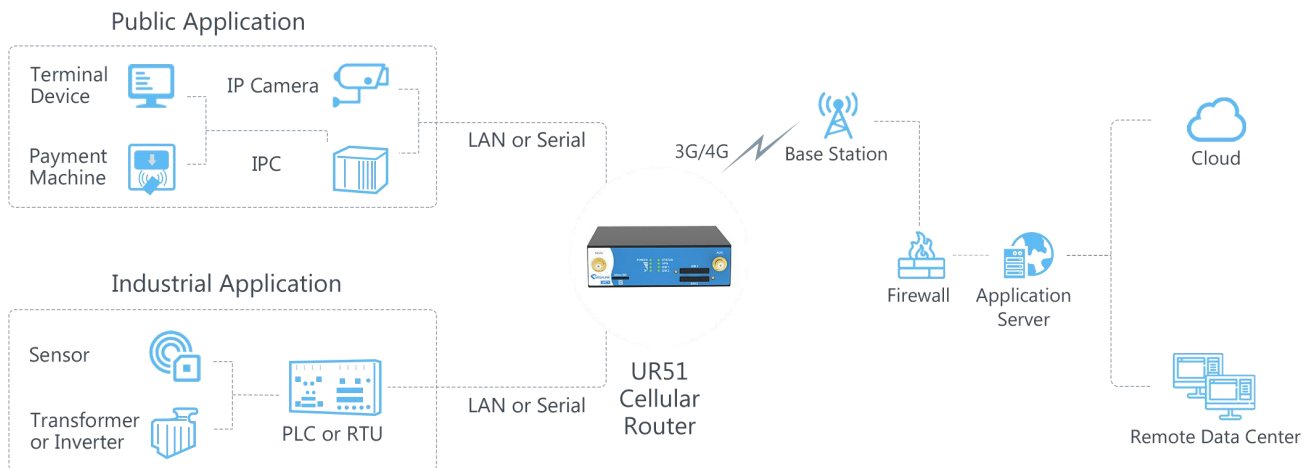
▶ Specifications

Cellular Interfaces	
Connectors	2 × 50 Ω SMA (Center PIN: SMA Female)
SIM Slots	2
Hardware System	
CPU	528 MHz, ARM Cortex A7
Memory	128 MB Flash, 128 MB DDR3 RAM
Storage	1 × Micro SD
Ethernet Interface	
Port	1 × RJ-45
Property	1 × LAN (Optional: PoE Output)
Physical Layer	10/100 Base-T (IEEE 802.3)
Data Rate	10/100 Mbps (Auto-Sensing)
Interface	Auto MDI/MDIX
Mode	Full or half duplex (Auto-Sensing)
Serial Interface	
Port	1 × RS232 or 1 × RS485
Connector	DB9 female terminal block
Baud Rate	300bps to 230400bps
GPS (Optional)	
Connector	1 × 50 Ω SMA (Center PIN: SMA Female)
Sensitivity	-167dBm@Tracking, -149dBm@Acquisition, -161dBm@Re-acquisition
Position Accuracy	<2.5m CEP
Protocols	NMEA 0183, PMTK

Software

Network Protocols	PPP, PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, RIPv1/v2, OSPF, DDNS, VRRP, HTTP, HTTPS, DNS, ARP, QOS, SNTP, Telnet, VLAN, SSH, etc.
VPN Tunnel	DMVPN/IPsec/OpenVPN/PPTP/L2TP/GRE
Access Authentication	CHAP/PAP/MS-CHAP/MS-CHAPV2
Firewall	ACL/DMZ/Port Mapping/MAC Binding
Management	Web, CLI, SMS, On-demand dial up
AAA	Radius, TACACS+, LDAP, Local Authentication
Multilevel Authority	Multiple Levels of User Authority
Reliability	VRRP, WAN Failover, Dual SIM Backup
Serial Port	Transparent (TCP Client/Server, UDP), Modbus Gateway (Modbus RTU to Modbus TCP)

Power

Connector	2-pin with 5.08 mm terminal block
Input Voltage	9-48 VDC (48 V Power Input is Needed for 802.3af PoE Output)
Power Output	1 × 802.3af PoE Output
Power Consumption	Typical 1.8 W, Max 2.7 W (In Non-PoE mode)

Physical Characteristics

Ingress Protection	IP30
Housing & Weight	Metal
Dimensions	132 x 103.8 x 45 mm (5.20 x 4.09 x 1.77 in)
Mounting	Desktop, Wall or DIN Rail Mounting

Others

Reset Button	1 × RESET
LED Indicators	1 × POWER, 1 × STATUS, 1 × VPN, 1 × SIM1, 1 × SIM2, 3 × Signal Strength
Built-in	Watchdog, RTC
Certifications	RoHS, CE, FCC
EMC	IEC 61000-4-2 Level 3 IEC 61000-4-3 Level 4 IEC 61000-4-4 Level 3 IEC 61000-4-5 Level 4 IEC 61000-4-6 Level 3 IEC 61000-4-8 Level 4

Environmental

Operating Temperature	-40°C to +70°C (-40℉ to +158℉) Reduced Cellular Performance Above 60°C
Storage Temperature	-40°C to +85°C (-40℉ to +185℉)
Ethernet Isolation	1.5 kV RMS
Relative Humidity	0% to 95% (non-condensing) at 25°C/77℉

▶ Product Images/Dimensions (mm)
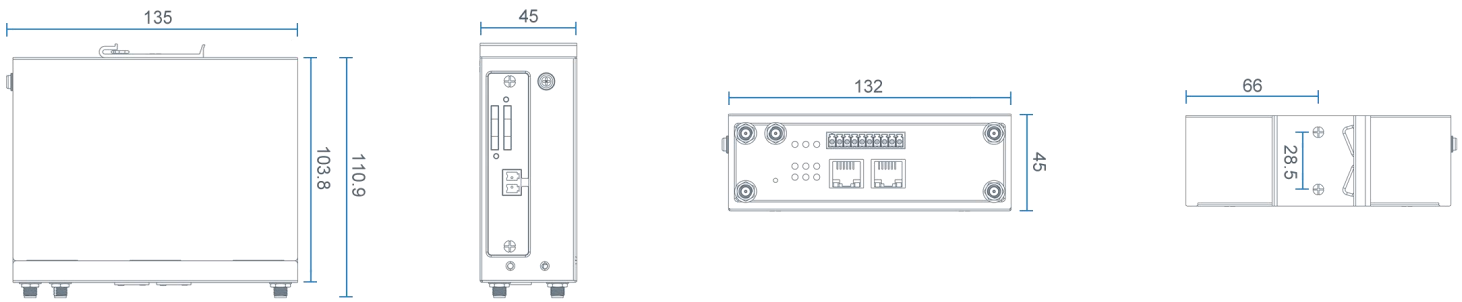
▶ Ordering Information

Model	4G LTE	3G	GPS	Serial Port
UR51-L-G	√		√	√
UR51-L	√			√
UR51-U-G		√	√	√
UR51-U		√		√

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