

IOT-R75W

Industrial 5G Cellular Router with Dual 5G SIM Cards and RS232/485 IoT Integration



Outstanding Features

- Industrial-grade quad-core CPU ARM Cortex-A55 with big memory
- Global 5G (NSA/SA)/4G LTE network with dual SIM cards for backup between multiple carrier networks
- Strong Wi-Fi performance with 2 x 2 MIMO 802.11 a/b/g/n/ac/ax, up to 1.8Gbps
- Gigabit Ethernet ports for lightning transmission of data
- Automated failover/failback between Ethernet, Cellular (dual SIM), and Wi-Fi
- Embeds hardware watchdog to automatically recover from various failures, ensure the highest level of availability
- Provide 1xRS232, 1xRS485, 1x DI, 1xDO for IoT integration
- Secure VPN connection (OpenVPN, IPsec, PPTP, L2TP)
- Support wide voltage input 9 ~ 48V DC
- Rugged design with a wide temperature range from -30°C to +60°C or -22°F to +140°F
- Support Cloud upgrade and remote management

Specification

Hardware System	
CPU	Quad-core ARM Cortex-A55, 2 GHz
Memory	1 GB DDR4x RAM and 1 GB NAND Flash
Extendable Storage	1 × M.2 NVMe SSD Interface
Cellular Interface	
Network	5G NR SA & NSA/4G LTE/WCDMA
Frequency	5G Sub-6: N1/N3/N5/N7/N8/N20/N28/N38/N40/N41/N77/N78 LTE FDD: B1/B3/B5/B7/B8/B20/B28/B32 LTE TDD: B38/B40/B41/B42/B43 WCDMA: B1/B5/B8
Antenna	4 × 50 Ω SMA Connectors (Center PIN: SMA Female)
SIM Slot	2 (Mini SIM-2FF)
Ethernet Interface	
Numbers	5 × 10/100/1000 Mbps
Property	1 × WAN +4 × LAN
Mode	Full or Half Duplex (Auto-Sensing)
Wi-Fi Interface	
Antenna	4 × 50 Ω SMA Connectors (Center PIN: RP-SMA Female)
Standards	IEEE 802.11b/g/n/ax 2 × 2 MIMO, 2.4 GHz IEEE 802.11a/n/ac/ax 2 × 2 MIMO, 5 GHz
Max Bit Rate	2.4 GHz: 600 Mbps, 5 GHz: 1200 Mbps
Modes	AP and Client Mode
Security	WEP/WPA/WPA2 authentication, WEP/TKIP/AES encryption
GNSS	
Antenna	1 × 50 Ω SMA Connector (Center PIN: SMA Female)
Technology	GPS/GLONASS/Beidou/Galileo/QZSS
Protocol	NMEA 0183
Serial Interface	
Numbers	1 × RS232 + 1 × RS485
Connector	3.5 mm Terminal Block
Baud Rate	300bps to 230400bps
DI/DO	
Numbers	1 × DI (Dry Contact) + 1 × DO (Wet Contact), Galvanic Isolation
Connector	3.5 mm Terminal Block
Maximum V/A	0.3A@30VDC (DO)
Others	
USB	1 × USB 3.0 (Type-C) for Power Supply, Network Supply and Debug
Reset Button	1 × RESET
LED Indicators	1 × SYSTEM, 1 × SIM1, 1 × SIM2
Built-in	Watchdog, Timer
Software	
Network Protocols	IPv4/IPv6, TCP, UDP, DHCP, HTTP, HTTPS, ARP, NTP, DNS, ARP, SSH, VLAN, etc.
VPN	IPsec, OpenVPN, LT2P, PPTP
Security	Access Control, DMZ, Port Forwarding, SYN-Flood Protection, Filtering (IP & MAC & Domain)
Management	Web, DeviceHub, VPN
Reliability	WAN Failover, Dual SIM Backup
Serial Port	Transparent (TCP Client/Server, UDP), Modbus Master, Modbus Gateway (Modbus RTU to Modbus TCP)
Power Supply and Consumption	
Power Connector	2-pin 3.5 mm Terminal Block
Power Input	1. 9-48 VDC, with Surge-Protection and Reverse Polarity Protection 2. 5V, 3A by Type-C Port
Power Consumption	Without Wi-Fi: Typical 2.8 W, Max 5.5 W With Wi-Fi: Typical 7 W, Max 13.7 W
Physical Characteristics	
Ingress Protection	IP30
Housing	Metal
Dimension	135 × 115 × 36.4 mm (5.31 × 4.53 × 1.43 in)
Installation	Desktop, Wall or DIN Rail Mounting
Environmental	
Operating Temperature	-30°C to +60°C (-22°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) at 25°C/77°F

Dimensions (mm)

