NEW – Meet the AirLink® XR60, the World's Smallest Rugged 5G Router – Now with 5-Year Warranty, Support and Management. Limited-Time Offer!   **Learn more →**

AirLink® RX55

World's Most Power-Efficient Rugged 4G LTE-A Router*

The AirLink® RX55 is optimized for Industrial IoT with the lowest idle power consumption of its category* and a rugged design for extreme conditions. With advanced networking and industry standard container support capabilities, the RX55 delivers intelligence securely at the edge for mission-critical applications on both public and private networks.

Based on internal study of comparable routers November 2023

Single/Dual Serial	4G LTE-A (Cat-7)
GNSS	Dual 1×1 Wi-Fi 5
IP64 Rated	1x Ethernet (1 Gbps)
AirLink OS with AirLink Complete	

AirLink® RX55 – Router Specifications

KEY FEATURES

Cellular Radios	4G LTE-A
Wi-Fi	Dual 1×1 Wi-Fi 5
Ethernet	1x 1 Gigabit Ethernet Port (RJ45)
Serial	Dual RS-232 serial port (DB9) – Base Model (with optional Y-cable) Single RS-232 serial port (DB9) – Wi-Fi & Wi-Fi Plus Model
GNSS	30 Channel GNSS
CAN	Wi-Fi & Wi-Fi Plus Model
I/O	1 GPIO
USB	USB 2.0 Micro-B
Bluetooth	–
IP Rating	Sealed Aluminum Housing (IP64 Rated)
Services	AirLink Complete
Operating System	AirLink OS
Management System	ALMS

Region	North America	EMEA & APAC
CELLULAR		
Technology	LTE-A	LTE-A
Cellular	4G, 3G	4G, 3G
Peak Downlink (Theoretical)	300 Mbps	300 Mbps
Peak Uplink (Theoretical)	150 Mbps	150 Mbps
Category	Cat-7	Cat-7
Region	NAM	EMEA, APAC
Radio	EM7411	EM7421
MIMO	2×2	2×2
RF Connectors	SMA	SMA
SIM	Dual SIM (Mini-2FF)	Dual SIM (Mini-2FF)

FREQUENCY BANDS

5G Bands	–	–
4G LTE Bands	B2, B4, B5, B7, B12, B13, B14, B25, B26, B41, B42, B43, B48, B66, B71	B1, B3, B7, B8, B20, B28, B32, B38, B40, B41, B42, B43
3G HSPA+ Bands	B2, B4, B5	B1, B5, B8
2G GPRS Bands	–	–
LPWA	–	–

WIRELESS CERTIFICATION

Regulatory	FCC, IC, PTCRB	GCF, CE, RED, RCM
Carrier	Verizon, AT&T, T-Mobile Planned: Bell, Telus, Rogers, CBRS	Planned: Telstra
Public Safety	FirstNet®	–
Part Numbers	1104927 Base 1104928 Wi-Fi 1104934 Wi-Fi Plus	1104929 Base 1104930 Wi-Fi 1104933 Wi-Fi Plus

WI-FI (OPTIONAL)

Wi-Fi Standard	Wi-Fi 5
Access Point	Dual
Client (Depot/WAN)	Yes
Client & AP	Yes
Peak Throughput (Theoretical)	433 Mbps
MIMO	Dual 1×1
Security	WPA2 Enterprise
Clients	10 per radio
SSID	1 per radio
Output Power	16 dBm
Frequency	2.4/5 GHz
RF Connectors	SMA (Reverse Polarity)

ENVIRONMENTAL

Operating Temperature	-40°C to +70°C / -40°F to +158°F -30°C to +70°C / -22°F to +158°F (Wi-Fi variant)
Storage Temperature	-40°C to +85°C / -40°F to +185°F
Humidity	95% RH @ 60°C
Military Specification	MIL-STD-810G (Shock, Vibration, Thermal Shock, Humidity)
IP Rating	IP64

INDUSTRY CERTIFICATIONS

Safety	IECEE Certification Bodies Scheme (CB Scheme)
Vehicle Usage	E-Mark (UN ECE Regulation 10.04), ISO7637-2, SAE J1455 (Shock, Vibration, Electrical)
Environmental Directives	RoHS2, REACH, WEEE, Prop 65
Hazardous Environments	Class 1 Div 2 – Ambient temperatures of -30°C to +60°C IECEx & ATEX
Rail Usage	North America: EN50155 (Pending) EMEA & APAC: EN50155/EN45545 (Rolling Stock)

POWER

Input Voltage	7 to 36 VDC
Power Consumption	LTE Idle Power: 900mW (75 mA @ 12VDC) Standby Mode Power: 53 mW (4.4 mA @ 12 VDC) triggered on low voltage, I/O or periodic timer
Power Modes	Low voltage disconnect to prevent battery drain; Built-in protection against voltage transients including 5 VDC engine cranking and +200 VDC load dump; Ignition Sense with time delay shutdown; Configurable features and ports to optimize power consumption

SECURITY

AAA	802.1x /Radius authentication with Wi-Fi and Ethernet
Firewall	Stateful firewall with port forwarding, DMZ
WLAN Encryption	WPA2/WPA3 Personal/Enterprise
Firmware Update	Secure Firmware Update

NETWORK AND ROUTING

	Cognitive Wireless IPv4 and IPv6 Routing Network Address Translation (NAT) Port Forwarding DHCP Server IP Passthrough LAN Segmentation IPv4 Passthrough and IPv6 Prefix Extension WAN/LAN Connection Policy Management Policy-Based Routing Configurable MTU size Static Routing WAN Ethernet
QoS	Application/Traffic Priority Queuing
WAN Monitors	Connection Failure Recovery

LAN (ETHERNET/USB)

	–

VPN

	Integrated with ACM VPN Server IPsec protocol with IKEv1/IKEv2 FIPS 140-2 Level 1 compliant
Encryption	AES128/AES192/AES256
Hashing	SHA256/SHA384/SHA512
Key Exchange	DHGroup14/15/16/17/18/19/20/21
	LAN to LAN and Host to LAN Up to 10 concurrent tunnels per link MOBIKE protocol IP compression Full/Split Tunnel Dead Peer Detection (DPD)

ROUTER MANAGEMENT INTERFACES

	ALMS Local web user interface REST API (Beta)

EDGE COMPUTING

	Support for Edge Compute Containerized Applications (Beta)
RAM[1,2]	50 MB (Base & Wi-Fi) 200 MB (Wi-Fi Plus)
Storage (Flash)[1]	200 MB (Base & Wi-Fi) 2.8 GB (Wi-Fi Plus)
CPU	Dual Core ARMv7 32-bit
	[1] Approximation available to containers (not device total) [2] Depends on other enabled features

AIRLINK SERVICES

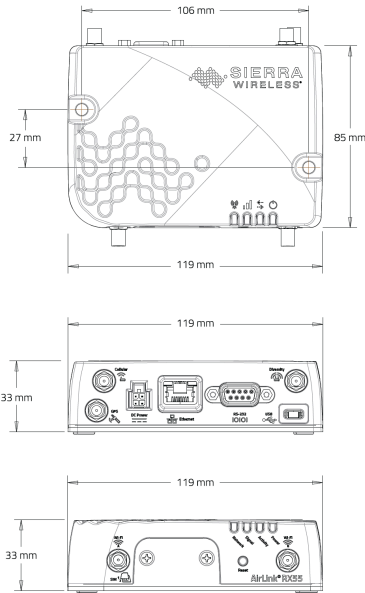|	
Services	AirLink Complete
Support	24/7 with current AirLink Complete subscription
Warranty	1 year standard warranty with up to 5 years extended warranty with current AirLink Complete subscription
Device Management	ALMS with current AirLink Complete subscription
Software Updates	Unrestricted critical firmware updates

RELIABILITY

MTBF	–

ACCESSORIES

In The Box	RX55, DC Power Cable and Quick Start Guide, AirLink Complete Leaflet
Other Accessories (sold separately)	2000579 AC Adapter, 12VDC 6000659 DIN Rail Bracket 6001238 Dual Serial Y-cable 6001479 Serial CAN Y-cable For Antenna options visit: **here**

DIMENSIONS

Size	119 mm x 33 mm x 85 mm (102 mm including Wi-Fi connectors)
Weight	320 g

For carrier specific band support please refer to the hardware user guide.