

AirLink® RV55

Ultra Low Power 4G Router

The AirLink® RV55 delivers LTE and Wi-Fi connectivity for vehicles and remote fixed assets operating in harsh environments. With ultra-low power consumption, the RV55 is ideal for solar/battery powered installations.

Single/Dual Serial	4G LTE Cat-12 or Cat-4
GNSS	Dual 1x1 Wi-Fi 5
IP64 Rated	1x Ethernet (1 Gbps)
AirLink Complete	



AirLink® RV55 – Router Specifications

	North America	EMEA	Global
CELLULAR			
Peak D/L	RV55 LTE – Up to 150 Mbps, Cat 4 (WP7610 WP7607) RV55 LTE-A PRO – Up to 600 Mbps, Cat 12 (EM7511 EM7565)	RV55 LTE – Up to 150 Mbps, Cat 4 (WP7610 WP7607) RV55 LTE-A PRO – Up to 600 Mbps, Cat 12 (EM7511 EM7565)	RV55 LTE – Up to 150 Mbps, Cat 4 (WP7610 WP7607) RV55 LTE-A PRO – Up to 600 Mbps, Cat 12 (EM7511 EM7565)
Peak U/L	RV55 LTE – Up to 50 Mbps RV55 LTE-A PRO – Up to 150 Mbps	RV55 LTE – Up to 50 Mbps RV55 LTE-A PRO – Up to 150 Mbps	RV55 LTE – Up to 50 Mbps RV55 LTE-A PRO – Up to 150 Mbps

4G LTE

Frequency Bands	RV55 LTE – 1900(B2), AWS(B4), 850(B5), 700(B12), 700(B13), 700(B17), 1700(B66) RV55 LTE-A PRO – 2100(B1), 1900(B2), 1800(B3), AWS(B4), 850(B5), 2600(B7), 900(B8), 1800(B9), 700(B12), 700(B13), 700(B14), 850(B18), 850(B19), 800(B20), 850(B26), 700(B29), 2300(B30), 1500(B32), TDD B41, TDD B42, TDD B43, TDD B46, CBRS B48, 1700(B66)	RV55 LTE – 2100(B1), 1800(B3), 2600(B7), 900(B8), 800(B20), 700(B28)	RV55 LTE-A PRO – 2100(B1), 1900(B2), 1800(B3), AWS(B4), 850(B5), 2600(B7), 900(B8), 1800(B9), 700(B12), 700(B13), 850(B18), 850(B19), 800(B20), 850(B26), 700(B28), 700(B29), 2300(B30), 1500(B32), TDD B41, TDD B42, TDD B43, TDD B46, CBRS B48, 1700(B66)
------------------------	---	---	--

3G HSPA/HSPA+

Frequency Bands*	RV55 LTE – 1900(B2), AWS(B4), 850(B5) RV55 LTE-A PRO – 2100(B1), 1900(B2), AWS(B4), 850(B5), 800(B6), 900(B8), 1700(B9), 850(B19)	RV55 LTE – 2100(B1), 900(B8)	RV55 LTE-A PRO – 2100(B1), 1900(B2), AWS(B4), 850(B5), 800(B6), 900(B8), 1700(B9), 850(B19)
-------------------------	--	-------------------------------------	--

2G EDGE/GSM/GPRS

Frequency Bands	RV55 LTE – 900, 1800
------------------------	-----------------------------

APPROVALS

Regulatory**	RV55 LTE – FCC, IC, PTCRB RV55 LTE-A PRO – FCC, IC, PTCRB	RV55 LTE – GCF, CE	RV55 LTE-A PRO – FCC, IC, PTCRB, GCF, CE, RCM, IFT, Anatel
Carrier**	55 LTE – Verizon, AT&T, T-Mobile RV55 LTE-A PRO – Verizon, AT&T/FirstNet, US Cellular, T-Mobile, Telus, Rogers, Bell, Southern Linc		RV55 LTE-A PRO – Verizon, AT&T, Telstra (Planned)

PART NUMBER

Part Number	RV55 LTE – 1104335 RV55 LTE-A PRO – 1104303, 1104302 (Wi-Fi), 1104302 (Wi-Fi)	RV55 LTE – 1104337	RV55 LTE-A PRO – 1104332, 1104331 (Wi-Fi), 1104331 (Wi-Fi)
--------------------	--	---------------------------	---

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

**All approvals are either granted or in progress. Call for the latest approval status.

HOST INTERFACES

10/100/1000 Ethernet (RJ45)
 RS-232 serial port (DB-9)
 USB 2.0 Micro-B Connector
 3 SMA antenna (cellular, diversity, GNSS)
 2 RP-SMA antenna (1×1 Wi-Fi, Optional)
 Active GPS antenna support

SECURITY

Remote Authentication (LDAP, RADIUS, TACACS+, DMZ)
 Inbound and Outbound Port filtering
 Inbound and Outbound Trusted IP
 MAC Address Filtering
 PCI compatible
 Secure Firmware Update

WI-FI (OPTIONAL)

Dual Band 2.4/5GHz Wi-Fi
 Dual Radio, 802.11 b/g/n/ac (Wave2 Client Mode)
 Support for 10 clients, WPA2 Enterprise per radio
 Output power 16dBm
 Configurable as Dual Band Access Point (AP) or AP+Client Mode
 Single SSID Support per radio
 Captive Portal

SATELLITE NAVIGATION (GNSS)

LTE-A Pro Variant: 30 Channel GPS and GLONASS Receiver (Tracking Sensitivity: -160dBm)
 LTE Variant: 48 Channel Dedicated GNSS Receiver (Tracking Sensitivity: -162 dBm)
 Accuracy: <2 m (50%), <5 m (90%), <0.2 m/s
 Acquisition Time: 1s Hot Start
 Reports: NMEA 0183 V3.0, TAIP, RAP, XORA
 Multiple Redundant Servers
 Reliable Store and Forward

ENVIRONMENTAL

Operating Temperature -40°C to +70°C / -40°F to +158°F

Operating Temperature (Wi-Fi variant) -30°C to +70°C / -22°F to +158°F

Storage Temperature -40°C to +85°C / -40°F to +185°F

Humidity 95% RH @ 60°C

Military Spec MIL-STD-810G conformance to shock, vibration, thermal shock, and humidity
 IP64 rated ingress protection

POWER**Input/Operating Voltage**

Input Voltage: 7 to 36 VDC
 Configurable I/O pin on power connector
 Digital Input ON Voltage: 2.7 to 36 VDC
 Configurable Pull-up for dry contact input
 Digital Open Collector Output > sinking 500 mA
 Analog Input: 0.5-36 VDC

Power Modes

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
 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

NETWORK AND ROUTING

Network Address Translation (NAT)
 Reliable Static Route
 Port Forwarding Dynamic DNS
 Policy Routing Verizon PNTM
 NEMO/DMNR IPV6 Gateway
 VRRP

VPN**

IPsec, GRE, and OpenVPN Client
 Up to 5 concurrent tunnels
 Split Tunnel
 Dead Peer Detection (DPD)
 FIPS 140-2 compatible

INDUSTRY CERTIFICATION**Safety**

IECEE Certification Bodies Scheme (CB Scheme), UL 60950****

Vehicle Usage

E-Mark (UN ECE Regulation 10.04)

Environmental

RoHS, REACH, WEEE
Hazardous Environments: Class 1 Div 2– Ambient temperatures of -30°C to +60°C

Rail Usage

EN50155, ISO7637-2, SAE J1455 (Shock & Vibration)

SUPPORT AND WARRANTY

1 year standard warranty with up to 5 years extended warranty with current AirLink Complete subscription.
 Unrestricted critical firmware updates through at least December 31st, 2029

LAN (ETHERNET/USB)

DHCP Server Host Interface Watchdog
 IP Passthrough PPPoE
 VLAN

SERIAL

TCP/U DP PAD Mode
 Modbus (ASCII, RTU, Variable)
 PPP
 DNP3 Interoperability
 Dual Serial option (with an accessory)

APPLICATION FRAMEWORK

ALEOS Application Framework (AAF)
 LUA Scripting Language

NETWORK MANAGEMENT

Secure mobile network & asset management application available in the cloud or licensed platform in the enterprise data center
 Fleet wide firmware upgrade delivery
 Router configuration and template management
 Router staging over the air and local Ethernet connection
 Over-the-air software and radio module firmware updates
 Device Configuration Templates
 Configurable monitoring and alerting
 Remote provisioning and airtime activation (where applicable)

ROUTER MANAGEMENT

ALMS
 Local web user interface
 AT Command Line Interface (Telnet/SSH/Serial)
 SMS Commands
 SNMP

EVENTS ENGINE

Custom event triggers and reports
 Configurable interface, no programming

Event Types Digital Input, Network Parameters, Data Usage, Timer, Power, Device Temperature and Voltage

Report Types RAP, SMS, Email, SNMP Trap, TCP (Binary, XML, CSV)

Event Actions Drive Relay Output

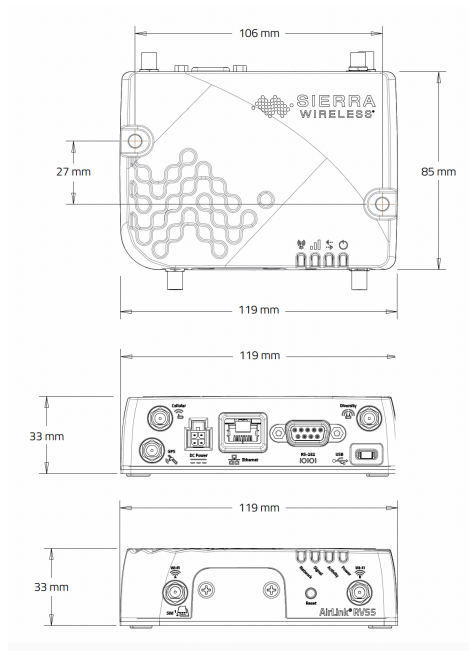
ACCESSORIES

In The Box RV55, DC Power Cable, and Quick Start Guide

Other Accessories (Sold Separately) 2000579 AC Adapter, 12VDC
 6000659 DIN Rail Bracket
 For Antenna options visit: [sierrawireless.com/antennas](https://www.sierrawireless.com/antennas)

DIMENSIONS

AirLink RV55 – Main Body 119 mm x 33 mm x 85 mm (102 mm including wi-fi connectors)
 4.69 in x 1.34 in x 3.35 in (3.70 in including connectors) Weight: 320 g



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

***All approvals are either granted or in progress. Call for the latest approval status*

**** IPsec, GRE and OpenVPN Client are not available in the member states of the EAEU*

***** Ambient temperatures of -30C to +60C*

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Semtech:](#)

[1104331](#) [1104302](#) [1104303](#) [1104332](#) [1104335](#) [1104337](#)