



AirLink® RV55 Rugged LTE-A Pro Router

BENEFITS

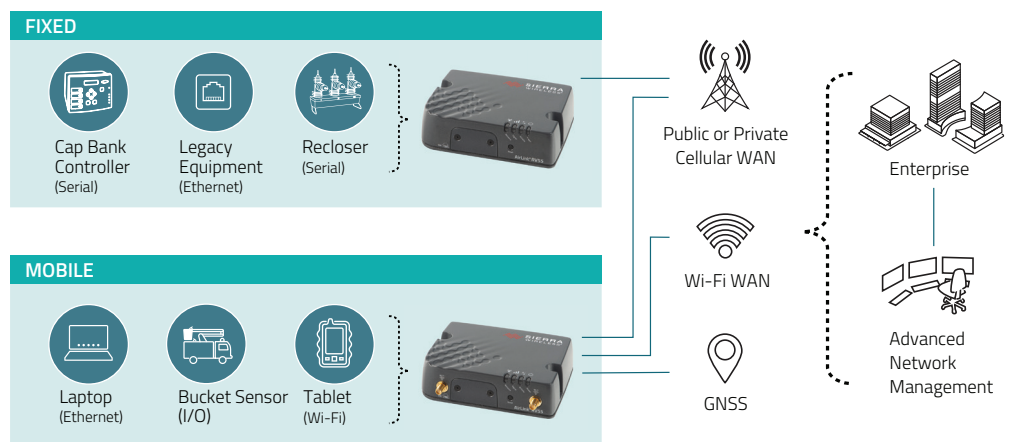
- Centrally managed, secure LTE broadband connectivity for both remote fixed or vehicle applications in harsh environments
- Ultra-Low Power consumption, ideal for solar or battery powered installations.
- Connect your field workers and devices with flexible dual Wi-Fi, and ethernet
- Reduces complexity in connecting legacy equipment with dual-serial, ethernet, and multi-protocol support
- Powerful remote cloud-based or on-premises management solutions
- Proven reliability and over 3 million AirLink routers and gateways deployed
- Peace of mind - included 3-year warranty, direct 24/7 support, and device management access¹

Compact, Industrial Grade, Low Power LTE-Advanced Connectivity

The AirLink® RV55 is the industry's most rugged, compact, LTE-Advanced Pro router. Simple to install, and easy to manage, the RV55 router is designed for connecting critical remote assets, infrastructure, and vehicle fleets. The RV55 is especially well suited for applications in energy, utilities, smart city and public safety. The RV55 provides real-time remote connectivity for SCADA, distribution management systems and metering.

The RV55 high-performance LTE-Advanced Pro connectivity, Wi-Fi and GNSS and location-based applications and dual connectivity for vehicle fleets and mobile workforce. An LTE-M/NB-IoT variant is perfectly suited for hard to reach conditions.

The RV55 supports an extensive range of LTE bands worldwide, and its LTE-Advanced Pro capabilities deliver up to 600 Mbps downlink speeds. The RV55 also supports new unlicensed LTE bands (eg. CBRS) to support dedicated Private LTE service.



¹ 1st year of 24/7 Direct Technical Support and device management access included in purchase at no additional charge.

RV55			
North America		Global	Global
LTE-A Pro			LTE-M/ NB-IoT
LTE CATEGORY	Cat 12		Cat M1/NB1
Peak D/L	(Up to 600 Mbps DL)		Cat-M1: 300kbps Cat-NB1: 27kbps
Peak U/L	(Up to 150 Mbps UL)		Cat-M1: 375kbps Cat-NB1: 65kbps
4G LTE	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, CBR5 B48, 1700(B66)		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, CBR5 B48, 1700(B66)
Frequency Bands	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, CBR5 B48, 1700(B66)		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(B28), 700(B29), 2300(B30), 1500(B32), TDD B41, TDD B42, TDD B43, TDD B46, CBR5 B48, 1700(B66)
3G HSPA/HSPA+	2100(B1), 1900(B2), AWS(B4), 850(B5), 800(B6), 900(B8), 1700(B9), 850(B19)		2100(B1), 1900(B2), AWS(B4), 850(B5), 800(B6), 900(B8), 1700(B9), 850(B19)
Frequency Bands*	2100(B1), 1900(B2), AWS(B4), 850(B5), 800(B6), 900(B8), 1700(B9), 850(B19)		2100(B1), 1900(B2), AWS(B4), 850(B5), 800(B6), 900(B8), 1700(B9), 850(B19)
2G EDGE/GSM/GPRS			850, 900, 1800, 1900
Frequency Bands			850, 900, 1800, 1900
APPROVALS			
Regulatory	FCC, IC, PTCRB		FCC, IC, PTCRB, GCF, CE, RCM
Carrier	Verizon, AT&T/FirstNet		Planned: Verizon, AT&T
			
PART NUMBER	1104303	1104332	1104333
Regulatory	1104302 (Wi-Fi)	1104331 (Wi-Fi)	

	Specification
HOST INTERFACES	10/100/1000 Ethernet (RJ45) RS-232 serial port (DB-9) USB 2.0 Micro-B Connector 3 SMA antenna (cellular, diversity, Active GNSS) 2 RP-SMA antenna (1x1 Wi-Fi, Optional) LTE-M/NB-IoT: 1 SMA (cellular) only, no GNSS or Wi-Fi Active GPS antenna support
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
INPUT/OUTPUT	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
LAN (ETHERNET/USB)	DHCP Server IP Passthrough VLAN Host Interface Watchdog PPPoE
SERIAL	TCP/UDP PAD Mode Modbus (ASCII, RTU, Variable) PPP DNP3 Interoperability Dual Serial option (with an accessory)
NETWORK AND ROUTING	Network Address Translation (NAT) Port Forwarding Policy Routing NEMO/DMNR VRRP Reliable Static Route Dynamic DNS Verizon PNTM IPv6 Gateway

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

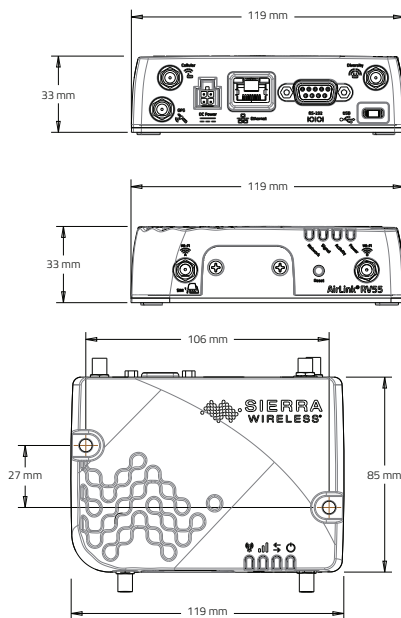
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VPN	IPsec, GRE, and OpenVPN Client Up to 5 concurrent tunnels Split Tunnel Dead Peer Detection (DPD) FIPS 140-2 compatible
APPLICATION FRAMEWORK	ALEOS Application Framework (AAF) Lua Scripting Language
POWER	Input Voltage: 7 to 36 VDC LTE Idle Power: 900mW (75 mA @ 12VDC) Standby Mode Power: 53 mW (4.4 mA @ 12 VDC) triggered on low voltage, I/O or periodic timer 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
DIMENSIONS	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

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
INDUSTRY CERTIFICATIONS	Safety: IECCE Certification Bodies Scheme (CB Scheme), UL 60950** Vehicle Usage: E-Mark (UN ECE Regulation 10.04), ISO7637-2, SAE J1455 (Shock & Vibration) Hazardous Environments: Class 1 Div 2** Environmental: RoHS, REACH, WEEE
SUPPORT AND WARRANTY	Includes 1st Year AirLink Complete: • AirLink Management Service (ALMS) • Direct 24/7 Technical Support • 3-year standard warranty; optional 2-year warranty extension 1-day Accelerated Hardware Replacement available through participating resellers
ACCESSORIES	In the Box: DC Power Cable, and Quick Start Guide 2000579 AC Adapter, 12VDC 6000659 DIN Rail Mounting Brackets 6001110 Cellular Paddle Antenna 6001111 Wi-Fi 2.4/5GHz Paddle Antenna See website for more antenna options.

*For carrier specific band support please refer to the hardware user guide.
** Ambient temperatures of -30C to +60C

DIMENSIONS



AirLink Networking Solution - Related Products

AIRLINK NETWORK MANAGEMENT SOLUTIONS

AIRLINK MANAGEMENT SERVICE (ALMS)



- Secure, Cloud-based network and asset management
- Remotely deploy, configure, monitor and manage AirLink devices
- Carrier-grade, high availability, secure, global infrastructure

AIRLINK MANAGER / MOBILITY MANAGER (AM/AMM)



- Deployable in the enterprise data center (on-premises) or in the cloud
- Advanced, end-to-end network and asset management for both fixed and mobile networks.
- Remote, real-time configuration, control and troubleshooting of AirLink devices

AIRLINK VPN APPLIANCE

AIRLINK CONNECTION MANAGER



- VPN appliance built from the ground up for Airlink routers & gateways
- Simplify deployment and management of your VPN solution, extending the enterprise to the network edge for fixed and mobile endpoints
- Carrier agnostic – ACM doesn't require fixed and/or public IP
- Compatible with FIPS 140-2, and always-onVPN capability

About Sierra Wireless

Sierra Wireless (NASDAQ: SWIR) (TSX: SW) is an IoT pioneer, empowering businesses and industries to transform and thrive in the connected economy. Customers Start with Sierra because we offer a device-to-cloud solution, comprised of embedded and networking solutions seamlessly integrated with our IoT services. OEMs and enterprises worldwide rely on our expertise in delivering fully integrated solutions to reduce complexity, turn data into intelligence and get their connected products and services to market faster. Sierra Wireless has more than 1,400 employees globally and operates R&D centers in North America, Europe and Asia. For more information, visit www.sierrawireless.com.

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