SIERRA WIRELESS®

FIRSTNET READY™

AirLink® RV55 Rugged LTE-A Pro Router
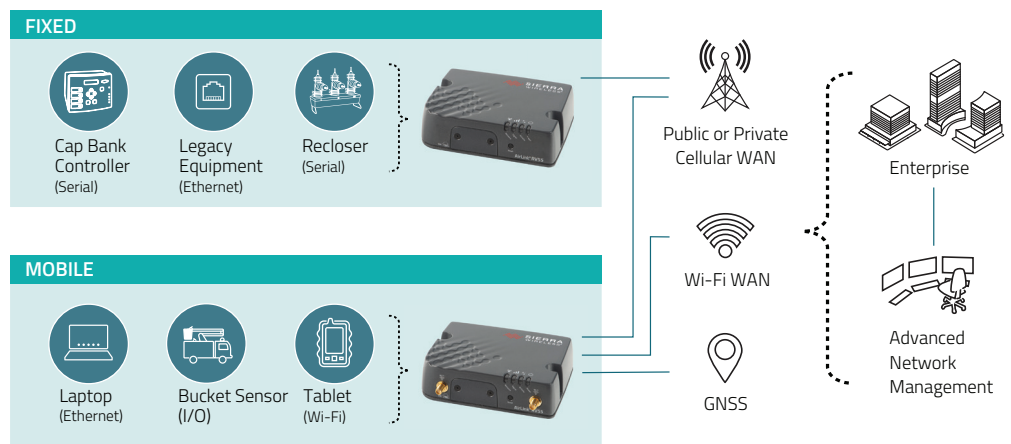
BENEFITS

- 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 access[1]

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.

FIXED

Cap Bank Controller (Serial)
Legacy Equipment (Ethernet)
Recloser (Serial)

MOBILE

Laptop (Ethernet)
Bucket Sensor (I/O)
Tablet (Wi-Fi)

Public or Private Cellular WAN
Wi-Fi WAN
GNSS

Enterprise
Advanced Network Management

cdce
MOBILE IoT INTEGRATION

	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 **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, CBRS 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, CBRS B48, 1700(B66)	2100(B1), 1900(B2), 1800(B3), AWS(B4), 850(B5), 900(B8), 700(B12), 700(B13), 700(B17), 850 (B18), 850(B19), 800(B20), 850(B26),700(B28)
3G HSPA/HSPA+ **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 **Frequency Bands**			850, 900, 1800, 1900
APPROVALS			
Regulatory	FCC, IC, PTCRB	GCF, CE, RCM	FCC, IC, PTCRB, GCF, CE, RCM
Carrier	Verizon, AT&T/FirstNet FIRSTNET READY	Planned: Telstra	Planned: Verizon, AT&T
PART NUMBER **Regulatory**	1104303 / 1104302 (Wi-Fi)	1104332 / 1104331 (Wi-Fi)	1104333

	Specification		**Specification**
HOST INTERFACES	10/100/1000 Ethernet (RJ45)	**SATELLITE NAVIGATION (GNSS)**	30 Channel GPS and GLONASS Receiver
	RS-232 serial port (DB-9)		Acquisition Time: 1 s Hot Start
	USB 2.0 Micro-B Connector		Accuracy: <2 m (50%), <5 m (90%), <0.2 m/s
	3 SMA antenna (cellular, diversity, Active GNSS)		Tracking Sensitivity: -160 dBm
	2 RP-SMA antenna (1x1 Wi-Fi, Optional)		Reports: NMEA 0183 V3.0, TAIP, RAP, XORA
	LTE-M/NB-IoT: 1 SMA (cellular) only, no GNSS or Wi-Fi		Multiple Redundant Servers
	Active GPS antenna support		Reliable Store and Forward
WI-FI (Optional)	Dual Band 2.4/5GHz Wi-Fi	**SECURITY**	Remote Authentication (LDAP, RADIUS, TACACS+, DMZ)
	Dual Radio, 802.11 b/g/n/ac (Wave2 Client Mode)		Inbound and Outbound Port filtering
	Support for 10 clients, WPA2 Enterprise per radio		Inbound and Outbound Trusted IP
	Output power 16dBm		MAC Address Filtering
	Configurable as Dual Band Access Point (AP) or AP+Client Mode		PCI compatible
	Single SSID Support per radio		Secure Firmware Update
	Captive Portal	**NETWORK MANAGEMENT**	Secure mobile network & asset management application available in the cloud or licensed platform in the enterprise data center
INPUT/OUTPUT	Configurable I/O pin on power connector		Fleet wide firmware upgrade delivery
	• Digital Input ON Voltage: 2.7 to 36 VDC		Router configuration and template management
	• Configurable Pull-up for dry contact input		Router staging over the air and local Ethernet connection
	• Digital Open Collector Output > sinking 500 mA		Over-the-air software and radio module firmware updates
	• Analog Input: 0.5-36 VDC		Device Configuration Templates
LAN (ETHERNET/USB)	DHCP Server		Configurable monitoring and alerting
	IP Passthrough		Remote provisioning and airtime activation (where applicable)
	VLAN	**ROUTER MANAGEMENT**	ALMS
	Host Interface Watchdog		Local web user interface
	PPPoE		AT Command Line Interface (Telnet/SSH/Serial)
SERIAL	TCP/UDP PAD Mode		SMS Commands
	Modbus (ASCII, RTU, Variable)		SNMP
	PPP	**EVENTS ENGINE**	Custom event triggers and reports
	DNP3 Interoperability		Configurable interface, no programming
	Dual Serial option (with an accessory)		Event Types: Digital Input, Network Parameters, Data Usage, Timer, Power, Device Temperature and Voltage
NETWORK AND ROUTING	Network Address Translation (NAT)		Report Types: RAP, SMS, Email, SNMP Trap, TCP (Binary, XML, CSV)
	Port Forwarding		Event Actions: Drive Relay Output
	Policy Routing		
	NEMO/DMNR		
	VRRP		
	Reliable Static Route		
	Dynamic DNS		
	Verizon PNTM		
	IPV6 Gateway		

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VPN	IPsec, GRE, and OpenVPN Client	**ENVIRONMENTAL**	Operating Temperature: -40°C to +70°C / -40°F to +158°F
	Up to 5 concurrent tunnels		Operating Temperature (Wi-Fi variant): -30°C to +70°C / -22°F to +158°F
	Split Tunnel		
	Dead Peer Detection (DPD)		Storage Temperature: -40°C to +85°C / -40°F to +185°F
	FIPS 140-2 compatible		Humidity: 95% RH @ 60°C
APPLICATION FRAMEWORK	ALEOS Application Framework (AAF)		Military Spec MIL-STD-810G conformance to shock, vibration, thermal shock, and humidity
	LUA Scripting Language		IP64 rated ingress protection
POWER	Input Voltage: 7 to 36 VDC	**INDUSTRY CERTIFICATIONS**	Safety: IECEE Certification Bodies Scheme (CB Scheme), UL 60950**
	LTE Idle Power: 900mW (75 mA @ 12VDC)		Vehicle Usage: E-Mark (UN ECE Regulation 10.04), ISO7637-2, SAE J1455 (Shock & Vibration)
	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		Hazardous Environments: Class 1 Div 2**
	Built-in protection against voltage transients including 5 VDC engine cranking and +200 VDC load dump		Environmental: RoHS, REACH, WEEE
	Ignition Sense with time delay shutdown	**SUPPORT AND WARRANTY**	Includes 1st Year AirLink Complete: • AirLink Management Service (ALMS)
	Configurable features and ports to optimize power consumption		• Direct 24/7 Technical Support • 3-year standard warranty; optional 2-year warranty extension
DIMENSIONS	119 mm x 33 mm x 85 mm (102 mm including wi-fi connectors)		1-day Accelerated Hardware Replacement available through participating resellers
	4.69 in x 1.34 in x 3.35 in (3.70 in including connectors)	**ACCESSORIES**	In the Box: DC Power Cable, and Quick Start Guide
	Weight: 320 g		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
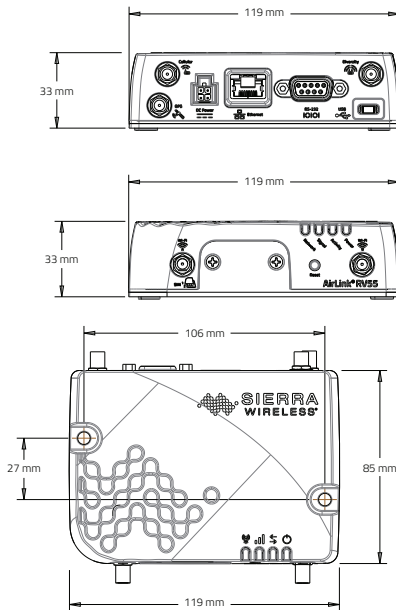
AirLink Networking Solution - Related Products

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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