SIERRA WIRELESS®
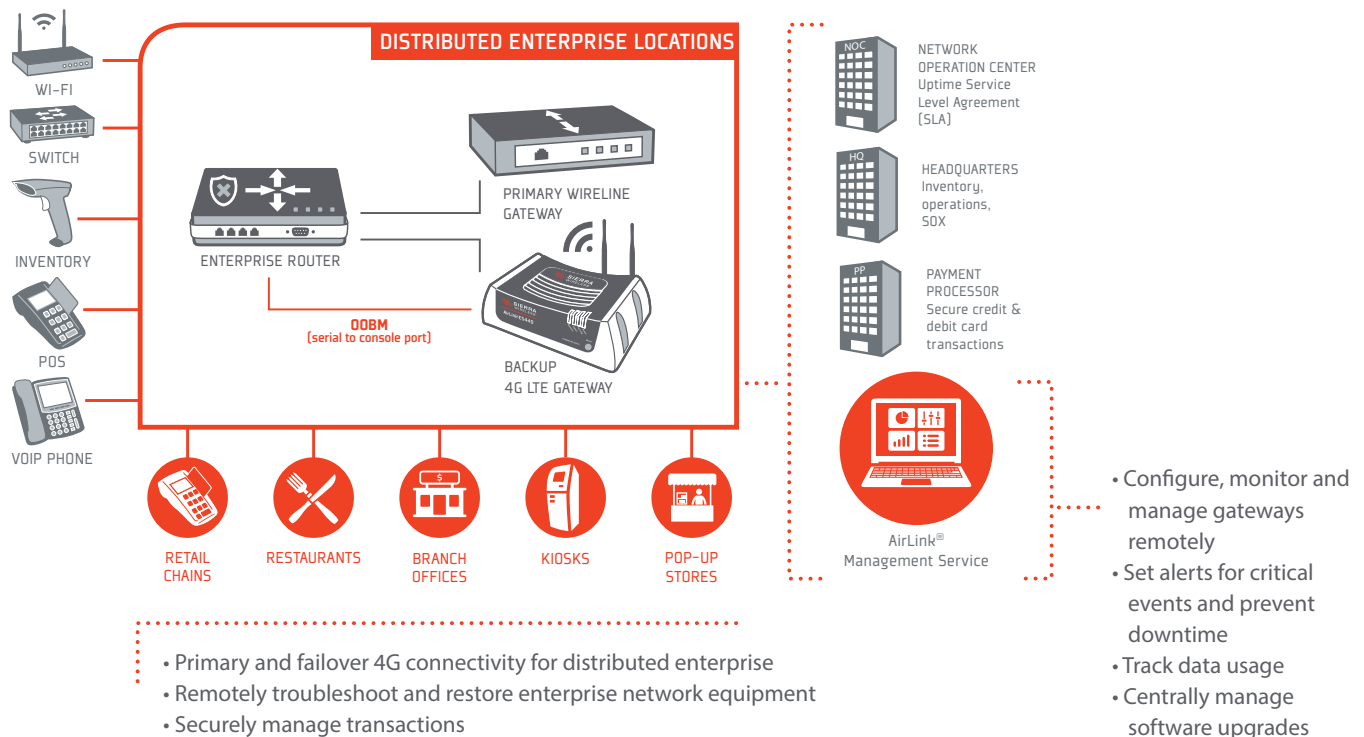
Sierra Wireless AirLink® ES450 Enterprise Gateway

Reliable 4G enterprise connectivity

The AirLink® ES450 is a reliable, secure LTE gateway designed to connect the distributed enterprise. With state-of-the-art global LTE coverage from the proven leader in LTE technology, the ES450 provides broadband connectivity for POS devices and other business critical equipment to ensure you can continue to serve customer requests. Together with AirLink Management Service, you have a one-stop solution to provision devices, monitor cellular data usage, and remotely maintain software versions and configurations.

WI-FI

SWITCH

INVENTORY

POS

VOIP PHONE

DISTRIBUTED ENTERPRISE LOCATIONS

ENTERPRISE ROUTER

OOBM
(serial to console port)

PRIMARY WIRELINE GATEWAY

BACKUP
4G LTE GATEWAY

RETAIL CHAINS

RESTAURANTS

BRANCH OFFICES

KIOSKS

POP-UP STORES

NOC
NETWORK OPERATION CENTER
Uptime Service Level Agreement (SLA)

HQ
HEADQUARTERS
Inventory, operations, SOX

PP
PAYMENT PROCESSOR
Secure credit & debit card transactions

AirLink®
Management Service

• Primary and failover 4G connectivity for distributed enterprise
• Remotely troubleshoot and restore enterprise network equipment
• Securely manage transactions

• Configure, monitor and manage gateways remotely
• Set alerts for critical events and prevent downtime
• Track data usage
• Centrally manage software upgrades

FEATURES

- Full featured LTE gateway and terminal server for both primary and failover connectivity

- State of the art LTE coverage spanning 11 LTE frequency bands

- Proven and documented interoperability with major enterprise router vendors

- Cellular out of band management for remotely troubleshooting and restoring enterprise IT equipment

- Reliable Static Route eliminates redundant wireless data usage

- Advanced routing such as NEMO/DMNR included as standard

- Up to 5 VPN tunnels to support secure communications over cellular networks

- Secure configuration for PCI compliant systems

- Remote configuration, software updates, and data usage monitoring with AirLink Management Service

- Integrated by industry leading solution partners in the Solution Exchange

- Industry leading warranty, including free software maintenance and accelerated hardware replacement

ENTERPRISE GATEWAY AND TERMINAL SERVER

The AirLink ES450 enterprise gateway delivers mission-critical LTE connectivity either as a primary connection or as a failover solution to protect against landline failure. With documented interoperability guides for the industry's leading enterprise routers, the ES450 allows you to deploy your enterprise LTE connectivity solution quickly and seamlessly.

In addition to providing broadband connectivity, the ES450 also provides a terminal server for remote out-of-band management of network equipment. Using the AirLink ES450 to connect to the router console interface, IT administrators can remotely troubleshoot and repair network equipment. Personnel no longer need to be deployed to manually reset networking equipment, dramatically reducing the number of field visits.

SECURE WIRELESS BROADBAND COMMUNICATIONS

The ES450 is loaded with features to secure your critical enterprise data. With up to 5 concurrent VPN sessions, you can ensure secure communications to multiple back-end systems. Remote authentication management allows you to use enterprise RADIUS or TACACS+ systems to manage access to devices. Port filtering and trusted IP protect devices connected to your ES450 from unauthorized access. Finally, secure configuration options ensure compliance to PCI standards for payment systems.

FUTURE PROOF YOUR DEPLOYMENT

To protect your investment in mobile broadband technology, you want software upgrades and security enhancements to be readily and freely available and easy to deploy. You want the assurance that any issues will be quickly and thoroughly corrected. For this reason, AirLink offers unlimited access to software updates and enhancements free of charge. We also offer a standard 3 year manufacturer's warranty, and 24 hour turnaround on hardware replacements.

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BENEFITS

- Supports present and future high speed LTE networks
- Proven reliability, with over 1 million AirLink devices deployed
- Enterprise-grade security
- Remotely monitor and manage device connectivity
- Premium enterprise features, software updates, and hardware replacement included
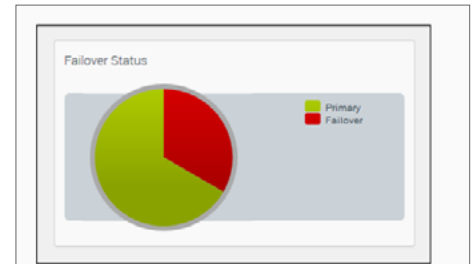
MANAGE, MONITOR AND MAINTAIN YOUR DEPLOYMENT

With a deployment of LTE enterprise gateways, you need to stay informed of important information like mobile data usage and failover status. In addition, you need to maintain device configurations, update device software, and remotely diagnose reported issues. AirLink Management Service (ALMS) has been ranked by ABI Research as "Best in Class" among competing device management services. This highly advanced application supports over-the-air device registration, configuration and software updates. Dashboards display up-to-date views of the entire deployment, and custom reports can be set-up to monitor critical events and prevent downtime.
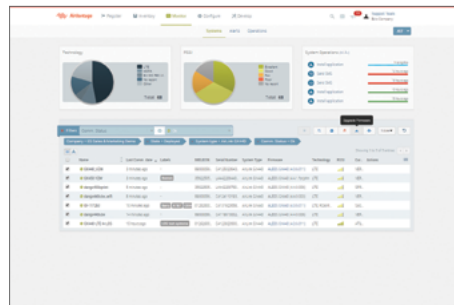
DASHBOARD

FAILOVER MONITOR

SOFTWARE UPGRADES/UPDATES

DATA USAGE ALERT

	Specification
CELLULAR WAN	**North American Model (Sierra Wireless MC7354)**
	• Carrier Approvals: Verizon, AT&T, Sprint, T-Mobile USA, Rogers, Bell, Telus
	• Supported Frequency Bands
	– LTE: 1900(B2), AWS(B4), 850(B5), 700(B13), 700(B17), 1900(B25)
	– WCDMA: 2100(B1), 1900(B2), AWS(B4), 850(B5), 900(B8)
	– EV-DO/CDMA: 800(BC0), 1900(BC1), 1700(BC10)
	– GSM/GPRS/EDGE: Quad-band
	• Industry Approvals: FCC, IC, PTCRB
	International Model (Sierra Wireless MC7304)
	• Supported Frequency Bands
	– LTE: 2100(B1), 1800(B3), 2600(B7), 900(B8), 800(B20)
	– WCDMA: 2100(B1), 1900(B2), 850(B5), 900(B8)
	– GSM/GPRS/EDGE: Quad-band
	• Industry Approvals: CE, RCM, GCF, R&TTE
HOST INTERFACES	10/100 Base-T RJ45 Ethernet port
	RS-232 Serial Console Port on DB-9 Connector
	USB 2.0 Micro-B Connector
	2 SMA antenna connectors (Primary, Secondary/Diversity)
INPUT/OUTPUT	Configurable I/O pin on power connector
	• Digital Input ON Voltage: 3.3 to 30 VDC
	• Digital Input OFF Voltage: 0 to 1.2 VDC
	• Digital Output > 200mA @ 30VDC
LAN (ETHERNET/USB)	DNS, DNS Proxy
	DHCP Server
	IP Passthrough
	VLAN
	Host Interface Watchdog
	PPPoE
SERIAL	TCP/UDP PAD Mode
	Modbus (ASCII, RTU, Variable)
	PPP
	Reverse Telnet
NETWORK AND ROUTING	Network Address Translation (NAT)
	Port Forwarding
	Host Port Routing
	NEMO/DMNR
	VRRP
	Reliable Static Route
	Dynamic DNS
VPN	IPsec, GRE, and SSL VPN Client
	Up to 5 concurrent tunnels
	Split Tunnel
	Dead Peer Detection (DPD)
	Multiple Subnets
	VPN Failover

	Specification
SECURITY	Remote Authentication (LDAP, RADIUS and TACACS+)
	DMZ
	Inbound and outbound port filtering
	Inbound and outbound Trusted IP
	MAC Address Filtering
	PCI DSS V3.0 compatible
EVENTS ENGINE	Custom event triggers and reports
	Configurable interface, no programming
	Event Types: Digital Input, Network Parameters, Data Usage, Timer, Power, Device Temperature
	Report Types: SNMP Trap
	Event Actions: Drive Relay Output
AIRLINK MANAGEMENT SERVICE	Secure cloud-based device management application
	Remote provisioning and airtime activation
	Device configuration and template management
	Configurable monitoring and alerting
	Fleet-wide firmware upgrade delivery
	Auto configuration
MANAGEMENT INTERFACES	Web-Based User Interface
	Device Configuration Templates
	Over-the-air software and radio module firmware updates
	AT Command Line Interface (Telnet/SSH/Serial)
	SMS Commands
	SNMP
APPLICATION FRAMEWORK	ALEOS Application Framework (AAF)
	LUA Scripting Language
	Eclipse-based IDE
	Integrated with AirVantage®
POWER	Analog Ignition Sense and Power Management
	Input Voltage: 9 to 36 VDC
	Low Power mode triggerable upon low voltage, timer delay (ignition sense), periodic timer
ENVIRONMENTAL	Operating Temperature: –20°C to +60°C / -4°F to +140°F
	Storage Temperature: –30°C to +70°C / -22°F to +158°F
	Military Spec MIL-STD-810G conformance to shock, vibration
INDUSTRY CERTIFICATIONS	Safety: IECEE Certification Bodies Scheme (CB Scheme), UL 60950
	Vehicle Usage: ISO7637-2
	Environmental: RoHS, REACH, WEEE
SUPPORT AND WARRANTY	3 year standard warranty
	Optional 2 year warranty extension
	1-day Accelerated Hardware Replacement available through participating resellers
	Unrestricted device software upgrades

About Sierra Wireless

Sierra Wireless is building the Internet of Things with intelligent wireless solutions that empower organizations to innovate in the connected world. We offer the industry's most comprehensive portfolio of 2G, 3G, and 4G embedded modules and gateways, seamlessly integrated with our secure cloud and connectivity services. OEMs and enterprises worldwide trust our innovative solutions to get their connected products and services to market faster.

For more information, visit www.sierrawireless.com.

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