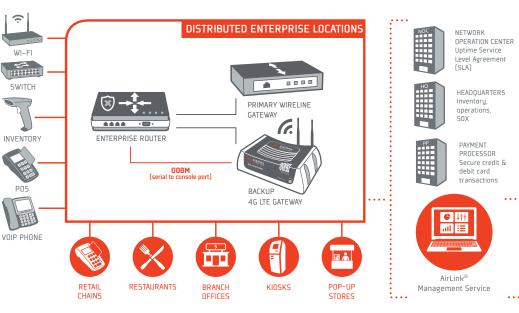




# Sierra Wireless AirLink® ES450 Enterprise Gateway

## 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.



- 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



- 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.





- 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

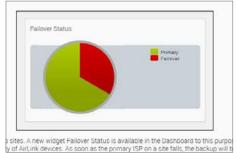
## MANAGE, MONITOR AND MAINTAIN YOUR DEPLOYMENT

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



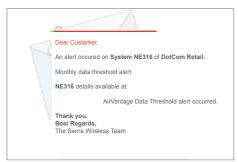
## FAILOVER MONITOR



## SOFTWARE UPGRADES/UPDATES



## **DATA USAGE ALERT**





	Specification		Specification
CELLULAR WAN	North American Model (Sierra Wireless MC7354)	SECURITY	Remote Authentication (LDAP, RADIUS and TACACS+)
	Carrier Approvals: Verizon, AT&T, Sprint, T-Mobile USA,     Section 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		DMZ
	US Cellular, Rogers, Bell, Telus  Supported Frequency Bands		Inbound and outbound port filtering
	- LTE: 1900(B2), AWS(B4), 850(B5), 700(B13), 700(B17),		Inbound and outbound Trusted IP
	1900(B25) - WCDMA: 2100(B1), 1900(B2), AWS(B4), 850(B5),		MAC Address Filtering
	900(B8)		PCI DSS V3.0 compatible
	<ul><li>EV-DO/CDMA: 800(BC0), 1900(BC1), 1700(BC10)</li><li>GSM/GPRS/EDGE: Quad-band</li></ul>	EVENTS ENGINE	Custom event triggers and reports
	<ul> <li>Industry Approvals: FCC, IC, PTCRB</li> </ul>		Configurable interface, no programming
	<ul> <li>SIM Interface (2FF)</li> <li>International Model (Sierra Wireless MC7304)</li> </ul>		Event Types: Digital Input, Network Parameters, Data Usage,
	Supported Frequency Bands     TE: 2100(B2), 2000(B2), 2000(B2		Timer, Power, Device Temperature  Report Types: SNMP Trap
	<ul> <li>LTE: 2100(B1), 1800(B3), 2600(B7), 900(B8), 800(B20)</li> <li>WCDMA: 2100(B1), 1900(B2), 850(B5), 900(B8)</li> </ul>		Event Actions: Drive Relay Output
	- GSM/GPRS/EDGE: Quad-band	AIRLINK MANAGEMENT	Secure cloud-based device management application
	<ul> <li>Industry Approvals: CE, RCM, GCF, R&amp;TTE</li> <li>Automatic SIM based network operator switching</li> </ul>	SERVICE	Remote provisioning and airtime activation
LIOCT INTEDEACES	SIM Interface (2FF)		Gateway configuration and template management
HOST INTERFACES	10/100 Base-T RJ45 Ethernet port		Configurable monitoring and alerting
	RS-232 Serial Console Port on DB-9 Connector		Over the air software and radio module firmware updates
	USB 2.0 Client (Micro-B Connector)		Auto configuration
INPUT/OUTPUT	2 SMA antenna connectors (Primary, Secondary/Diversity)	MANAGEMENT INTERFACES	Web-Based User Interface
INPUT/OUTPUT	Configurable I/O pin on power connector  Digital Input ON Voltage: 3.3 to 30 VDC	INTERNACES	Device Configuration Templates
	<ul> <li>Digital Input OFF Voltage: 0 to 1.2 VDC</li> <li>Digital Output &gt; 200mA @ 30VDC</li> </ul>		Over-the-air software and radio module firmware updates
LAN (ETHERNET/USB)	DNS, DNS Proxy		AT Command Line Interface (Telnet/SSH/Serial)
2,114 (21112111112111035)	DHCP Server		SMS Commands
	IP Passthrough		SNMP
	VLAN	APPLICATION FRAMEWORK	ALEOS Application Framework (AAF)
	Host Interface Watchdog		LUA Scripting Language  Eclipse-based IDE
	PPPoE		Integrated with AirVantage®
SERIAL	Reverse Telnet	POWER	Analog Ignition Sense and Power Management
SERVICE	Neverse remet	POWLK	Input Voltage: 9 to 36 VDC
NETWORK AND ROUTING	Network Address Translation (NAT)		Low Power mode triggerable upon low voltage, timer delay
	Port Forwarding		(ignition sense), periodic timer
	Host Port Routing	ENVIRONMENTAL	Operating Temperature: -20°C to +60°C / -4°F to +140°F
	NEMO/DMNR		Storage Temperature: -30°C to +70°C / -22°F to +158°F
	VRRP		Military Spec MIL-STD-810G conformance to shock, vibration
	Reliable Static Route	INDUSTRY CERTIFICATIONS	Safety: IECEE Certification Bodies Scheme (CB Scheme), UL 60950
	Dynamic DNS		Vehicle Usage: ISO7637-2
VPN	IPsec, GRE, and SSL VPN Client		Environmental: RoHS, REACH, WEEE
	Up to 5 concurrent tunnels	SUPPORT AND WARRANTY	3 year standard warranty
	Split Tunnel	VVARRANTI	Optional 2 year warranty extension
	Dead Peer Detection (DPD)		1-day Accelerated Hardware Replacement available through participating resellers
	Multiple Subnets		Unrestricted device software upgrades
	VPN Failover		
DIMENSIONS	142 x 98 x 41 mm (5.6 x 3.9 x 1.6 in)		
	397g (14oz.)		

## **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.

