

Sierra Wireless AirLink® ES450

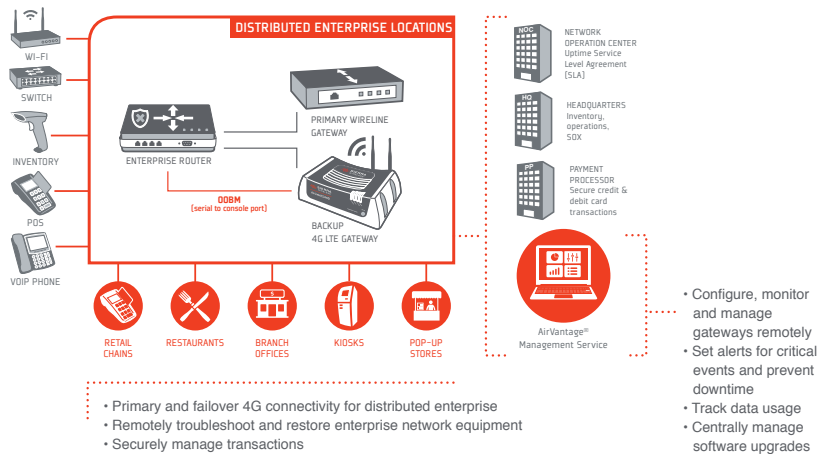
Reliable 4G enterprise connectivity

The AirLink® ES450 is a reliable, secure 4G 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 AirVantage® Management Service, you have a one-stop solution to provision devices, monitor cellular data usage, and remotely maintain software versions and configurations.



The ES450 Solution

Best-in-Class Business Continuity Strategy



AIRLINK ES450 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

AIRLINK ES450 FEATURES

- Full featured LTE gateway and terminal server for both primary and failover connectivity
- State of the art 4G 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 AirVantage Management Service
- Integrated by industry leading solution partners in M2M Solution Exchange
- Industry leading warranty, including free software maintenance and accelerated hardware replacement



AirLink®

Sierra Wireless

AirLink[®] ES450

ENTERPRISE GATEWAY AND TERMINAL SERVER

The AirLink ES450 enterprise gateway delivers mission-critical 4G 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

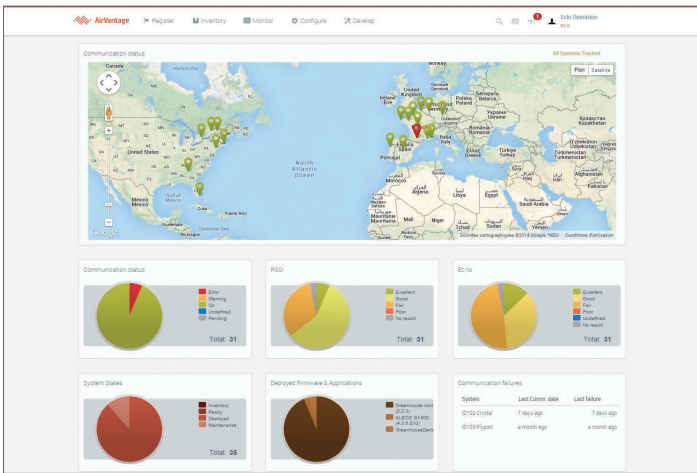
To protect your investment in mobile broadband technology, you want software upgrades and security enhancements to be readily and freely available and easy to deploy. You want the assurance that any issues will be quickly and thoroughly corrected. For this reason, AirLink offers unlimited access to software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

Sierra Wireless AirLink[®] ES450

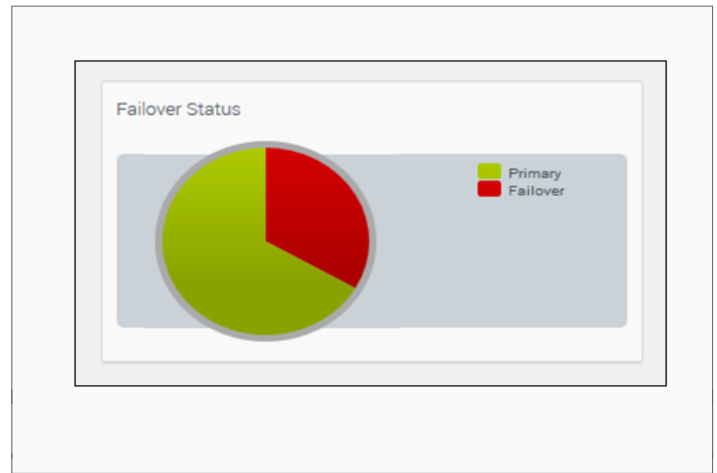
MANAGE, MONITOR AND MAINTAIN YOUR DEPLOYMENT

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. AirVantage Management Service (AVMS) is the industry's leading* device management solution. 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.

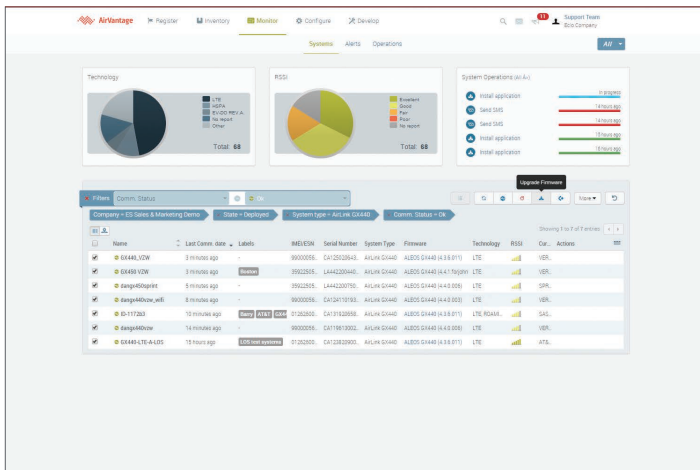
DASHBOARD



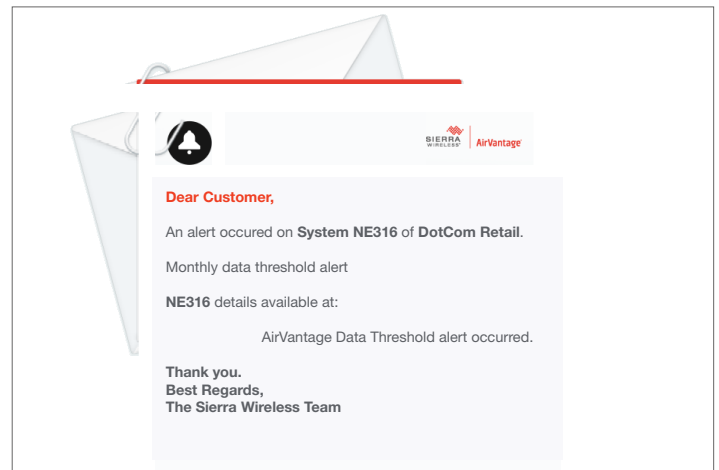
FAILOVER MONITOR



SOFTWARE UPGRADES/UPDATES



DATA USAGE ALERT



* ABI Research

AirLink[®] ES450

Technical Specifications



FEATURE	SPECIFICATION
Cellular WAN	North American Model (Sierra Wireless MC7354) - Carrier Approvals: Verizon, AT&T, Sprint, T-Mobile USA, Bell, Telus, Rogers - Supported Frequency Bands <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 Garmin FMI
Network and Routing	Network Address Translation (NAT) Port Forwarding Host Port Routing NEMO/DMNR VRRP Reliable Static Route Dynamic DNS

FEATURE	SPECIFICATION
VPN	IPsec, GRE, and SSL VPN Client Up to 5 concurrent tunnels Split Tunnel Dead Peer Detection (DPD) Multiple Subnets
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
AirVantage 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
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
Industry Certifications	Safety: IECCE Certification Bodies Scheme (CB Scheme), UL 60950 Vehicle Usage: ISO7637-2 Environmental: RoHS, REACH, WEEE
Support and Warranty	3 year standard warranty Optional additional 2 year warranty extension 1-day Accelerated Hardware Replacement available through participating resellers Unrestricted device software upgrades

About Sierra Wireless

Sierra Wireless is the global leader in machine-to-machine (M2M) devices and cloud services, delivering intelligent wireless solutions that simplify the connected world. Our solutions are **simple**, **scalable**, and **secure**, and enable customers to get their connected products and services to market faster.

For further company and product information, please visit www.sierrawireless.com.