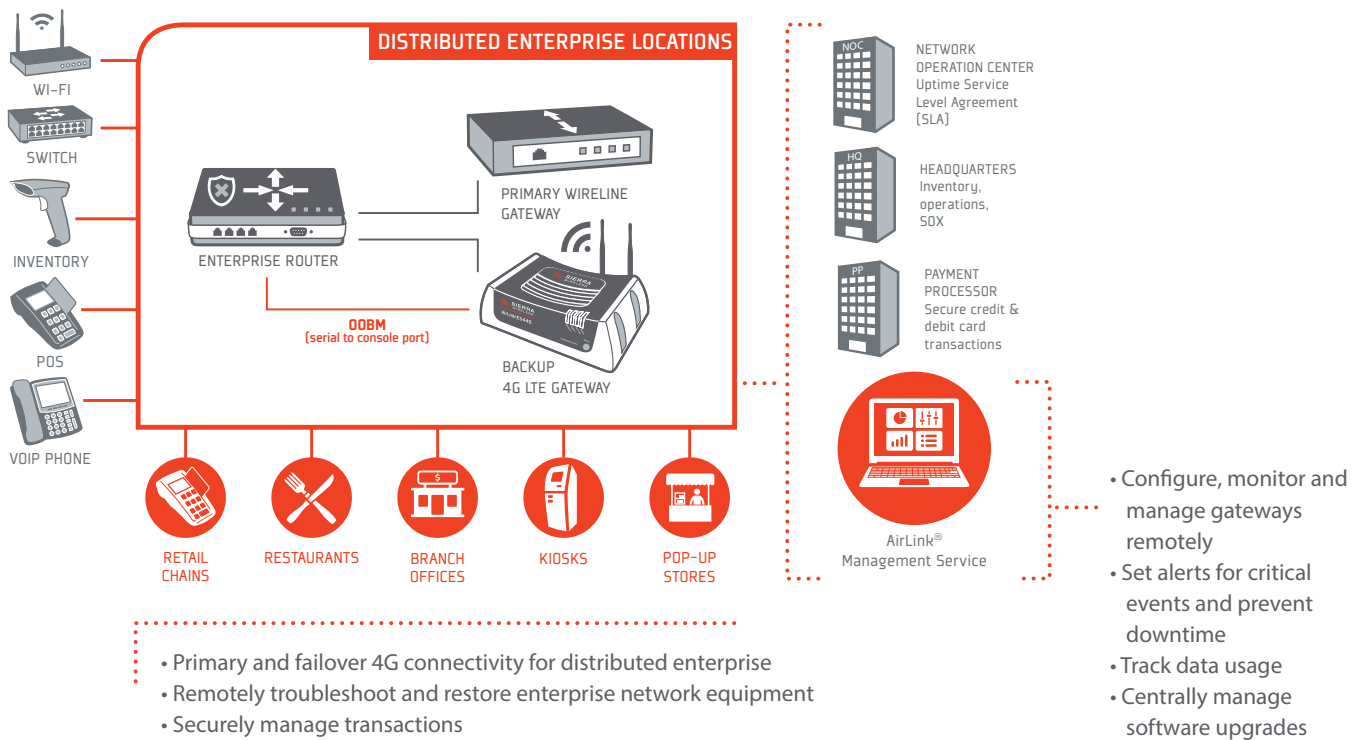




Sierra Wireless AirLink® ES450 Enterprise Gateway

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.



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.

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

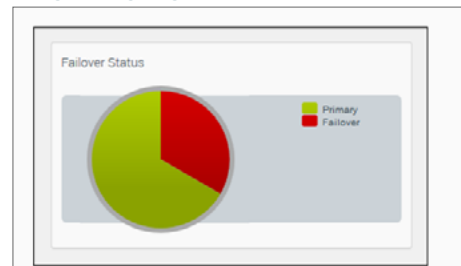
MANAGE, MONITOR AND MAINTAIN YOUR DEPLOYMENT

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

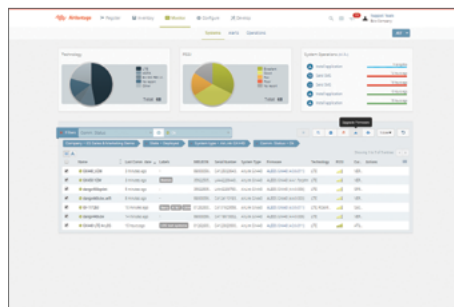


FAILOVER MONITOR



...sites. A new widget Failover Status is available in the Dashboard to this purpose of AirLink devices. As soon as the primary ISP on a site falls, the backup will b

SOFTWARE UPGRADES/UPDATES



DATA USAGE ALERT

The screenshot shows an email alert template. The text is as follows:
Dear Customer,
 An alert occurred on **System NE316** of **DotCom Retail**.
 Monthly data threshold alert
NE316 details available at:
 AirVantage Data Threshold alert occurred.
Thank you.
Best Regards,
 The Sierra Wireless Team

	Specification
CELLULAR WAN	<p>North American Model (Sierra Wireless MC7354)</p> <ul style="list-style-type: none"> Carrier Approvals: Verizon, AT&T, Sprint, T-Mobile USA, US Cellular, Rogers, Bell, Telus 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 SIM Interface (2FF) <p>International Model (Sierra Wireless MC7304)</p> <ul style="list-style-type: none"> 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 Automatic SIM based network operator switching SIM Interface (2FF)
HOST INTERFACES	<p>10/100 Base-T RJ45 Ethernet port</p> <p>RS-232 Serial Console Port on DB-9 Connector</p> <p>USB 2.0 Client (Micro-B Connector)</p> <p>2 SMA antenna connectors (Primary, Secondary/Diversity)</p>
INPUT/OUTPUT	<p>Configurable I/O pin on power connector</p> <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)	<p>DNS, DNS Proxy</p> <p>DHCP Server</p> <p>IP Passthrough</p> <p>VLAN</p> <p>Host Interface Watchdog</p> <p>PPPoE</p>
SERIAL	Reverse Telnet
NETWORK AND ROUTING	<p>Network Address Translation (NAT)</p> <p>Port Forwarding</p> <p>Host Port Routing</p> <p>NEMO/DMNR</p> <p>VRRP</p> <p>Reliable Static Route</p> <p>Dynamic DNS</p>
VPN	<p>IPsec, GRE, and SSL VPN Client</p> <p>Up to 5 concurrent tunnels</p> <p>Split Tunnel</p> <p>Dead Peer Detection (DPD)</p> <p>Multiple Subnets</p> <p>VPN Failover</p>
DIMENSIONS	<p>142 x 98 x 41 mm (5.6 x 3.9 x 1.6 in)</p> <p>397g (14oz.)</p>

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

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.