

# Sierra Wireless AirLink<sup>®</sup> LS300 Gateway

## Small, rugged, and intelligent 3G gateway.

Want to remotely control, monitor, or track the location of field equipment? Need a reliable alternative to landlines when they go down or are not an option in remote or temporary locations?

### ONE GATEWAY, MULTIPLE POSSIBILITIES

The AirLink LS300 gateway is the smallest, most compact 3G gateway from Sierra Wireless. Designed to be the next generation, all-in-one successor to the market leading Raven series, the intelligent LS300 gateway comes standard with multiple interfaces (Ethernet, Serial, USB), GPS, and all features that AirLink customers have come to rely on for over 15 years:

- Best-in-class session persistence keep AirLink gateways connected to the cellular network 24/7
- Rugged, military spec design keep AirLink gateways operating in the harshest environments
- AirVantage™ Management Service provides remote device management to centrally configure, deploy, and monitor AirLink gateways over-the-air (OTA)
- Industry-leading warranties and world class support keep AirLink customers coming back

### QUICKLY CONFIGURE AND DEPLOY

The comprehensive set of configurable options makes the LS300 quick and easy to deploy in the field. With ALEOS™ embedded intelligence powering AirLink gateways, the LS300 can be deployed in most industrial, enterprise, and transportation applications out-of-the-box.

In addition to configuring connection settings, ALEOS enables users to setup custom security, networking, and routing parameters, GPS location tracking, and events reporting without any programming. With over a decade of experience in real-world deployments, ALEOS has been developed to ease integration and configuration for a wide range of deployment scenarios.

### ADD CUSTOM LOGIC WITHOUT ANY EMBEDDED EXPERTISE

ALEOS Application Framework makes it easy to add custom logic to the LS300 gateway for collecting information from connected equipment or optimizing data transfers. This scripting framework allows users to create applications without deep embedded expertise or C/C++ programming skills.



### USE CASE EXAMPLES

- **Industrial:** remotely monitor and control pipelines, meters, pumps, valves in any energy or utility application.
- **Enterprise:** instantly deploy reliable internet connectivity to remote point-of-sale locations, temporary installations, or retail operations.
- **Transportation:** track the location and speed of vehicles or heavy equipment and provide reliable internet to a mobile workforce.



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## Technical Specifications

### HSPA+ MODELS

*fallback to quad-band GSM/GPRS/EDGE*

- HSPA+ North America  
800/850/1900/2100 MHz
- HSPA+ EMEA  
900/2100 MHz

### EV-DO MODELS

*fallback to CDMA 1xRTT*

- Dual Band EV-DO Rev. A  
800/1900 MHz

### HOST INTERFACES

- 10/100 Base-T RJ45 Ethernet
- RS-232 Serial Port
- USB V2.0 Micro-B Connector
- 2 SMA Antenna Connectors  
(RF, GPS/Rx Diversity)
- Support for active antenna

### PROTOCOLS

- Network: TCP/IP, UDP/IP, DNS
- Routing: NAT, Host Port Routing, DHCP, PPPoE, VLAN, VRRP
- Application: SMS, Telnet/SSH, SMTP, SNMP, SNTIP
- Serial: TCP/UDP PAD Mode, Modbus (ASCII, RTU, Variable), PPP
- GPS: TAIP, NMEA, RAP

### INPUT/OUTPUT

- Configurable I/O on power connector
- Input ON Voltage 3.3 to 30 VDC
- Input OFF Voltage 0 to 1.2 VDC
- Output max. switching capability  
200mA @ 30VDC

### DIMENSIONS

- 3.0 in x 3.5 in x 1.0 in  
(76 mm x 90 mm x 25 mm)
- 6.7 oz (190G)

### POWER CONSUMPTION

*All figures in mA @ 12VDC*

- HSPA+: Min 219, Peak 624,  
Idle 104
- CDMA: Min 164, Peak 280,  
Idle 132
- Low Power Standby Mode: <35

### GPS TECHNOLOGY

*HSPA+ Models*

- Acquisition Time: <3 Sec Hot Start, <45  
Sec Cold Start
  - Accuracy: <10m
  - Tracking Sensitivity: -155 dBm
- EV-DO Models*
- 12 Channel, Continuous tracking
  - Acquisition Time: 9 sec Hot Start, 39  
Sec Cold Start
  - Accuracy: <3m (50%), <8m (90%)
  - Tracking Sensitivity: -160 dBm

### EVENTS REPORTING

- Event Types: Digital Input, GPS/AVL,  
Network Parameters, Data Usage,  
Timer, Power, Device Temperature
- Report/Action Types: SMS, Email,  
SNMP Trap, Relay Output, GPS Rap  
Report, Events Protocol Message to  
Server

### VPN/SECURITY

- IPsec, SSL, and GRE VPN Client
- Up to 5 VPN Tunnels
- IKE Encryption
- Port Forwarding and DMZ
- Port Filtering
- Trusted IP
- MAC Address Filtering

### DEVICE MANAGEMENT

- AirVantage Management Service  
next-generation device management  
application
- ACEManager device configuration utility

### ALEOS APPLICATION FRAMEWORK

- Lua language coding platform
- Remote application management
- Eclipse-based IDE
- Integrated real-time debugging

### ENVIRONMENTAL

- Operating Temperature:  
-30°C to +70°C / -22°F to +158°F
- Storage Temperature:  
-40°C to +85°C / -40°F to +185°F
- Humidity: 90% RH @ 60 °C
- Military Spec MIL-STD-810  
conformance to thermal, mechanical  
shock and humidity

### INDUSTRY CERTIFICATIONS

- PTCRB
- FCC, Industry Canada
- CE, E-Mark
- RoHS Compliant
- Class I, Div 2

### CARRIER APPROVALS

- AT&T
- Sprint
- Verizon Wireless

### WARRANTY

- 3-year