Sierra Wireless AirLink® LS300

Compact industrial 3G gateway

The AirLink® LS300 industrial gateway has a small footprint for easy installation and a rugged, military spec design (MIL-STD 810) that enables it to withstand extreme temperature changes, humidity, shock, and vibration. Certified for hazardous environments (Class I, Div 2), the LS300 is ideal for industrial deployments.

Designed to be the next generation, all-in-one successor to the market leading Raven gateways, the LS300 comes standard with Ethernet, USB and serial interfaces, as well as digital I/O and GPS, enabling you to:

- Remotely monitor and control your infrastructure and surveillance equipment on pipelines, meters, pumps and valves in any energy, utility or industrial application.
- Instantly connect your equipment at remote point-of-sale locations, temporary installations, or retail operations.
- Track the location of heavy equipment and assets in the field, while providing reliable internet connectivity to your mobile workforce.

QUICKLY CONFIGURE AND DEPLOY

The comprehensive set of configurable options makes it quick and easy to deploy in the field. With ALEOS™ embedded intelligence powering all AirLink gateways, the LS300 can be deployed in most industrial, enterprise, and mobility 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 a proven 20-year track record of over a million deployed devices, 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 and integrated development environment make it easy to process data inside the LS300. Collect and analyze information from connected equipment and optimize data transfers using a simple, Lua-based scripting language. Now you can program an AirLink gateway without deep embedded expertise.

AIRLINK LS300 BENEFITS

- Intelligence that makes it quick to deploy and simple to manage
- Reliable connectivity that ensures it stays connected to the network
- Rugged design that lasts for years in the harshest environments
- Application framework that makes it easy to program
- Integration with AirLink® Management Service (ALMS) for building innovative applications and services
- 3-year warranty

SIERRA WIRELESS® | AirLink®

AirLink® LS300 Technical Specifications

3G HSPA+ MODELS

fallback to GSM/GPRS/EDGE

- 800/850/1900/2100 MHz HSPA+ Sierra Wireless SL8090 Radio Module
- 900/2100 MHz HSPA+ Sierra Wireless SL8092 Radio Module

Peak HSPA data rates

- Download: 14.4Mbps
- Upload: 5.76Mbps

3G EV-DO MODELS

fallback to CDMA 1xRTT

- Rev. A 800/1900 MHz Sierra Wireless SL5011 Radio Module

Peak CDMA data rates

- Download: 3.1 Mbps
- Upload: 1.8Mbps

CARRIER APPROVALS

Approved for deployment by Verizon, AT&T, Sprint, Rogers, Bell, and Telus

HOST INTERFACES

- 10/100 Base-T RJ45 Ethernet
- RS-232 serial port
- USB V2.0 Micro-B connector
- 2 SMA antenna connectors (Primary, GPS/Diversity)
- Active antenna support

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
- Analog Input Voltage 0 to 30 VDC
- Open collector output > 200mA @ 30VDC

GPS TECHNOLOGY

HSPA+ Models

- Acquisition Time: <3 Sec Hot Start, <45 Sec Cold Start
- Accuracy: <10m
- Tracking Sensitivity: -155 dBm

EV-DO Models

- Acquisition Time: 9 sec Hot Start, 39 Sec Cold Start
- Accuracy: <3m (50%), <8m (90%)
- Tracking Sensitivity: -160 dBm

PROTOCOLS

- Network: TCP/IP, UDP/IP, DNS
- Routing: NAT, Host Port Routing, DHCP, PPPoE, VLAN, VRRP, Reliable Static Route
- Application: SMS, Telnet/SSH, Reverse Telnet, SMTP, SNMP, SNTP
- Serial: TCP/UDP PAD Mode, Modbus (ASCII, RTU, Variable), PPP
- GPS: NMEA 0183 V3.0, TAIP, RAP

EVENTS REPORTING

- Event Types: Digital Input, GPS/AVL, Network Parameters, Data Usage, Timer, Power, Device Temperature
- Report 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

- AirLink Management Service cloud-based device management application
- ACEManager™ device configuration utility

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+: Idle 224, Typ 245, Max 430
- CDMA: Idle 220, Typ 257, Max 427
- Low Power Standby Mode: <68

- Analog Ignition Sense & Power Management
- Input Voltage: 7 to 28 VDC

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, R&TTE, FCC, Industry Canada, CE, RoHS Compliant, Class 1 Div 2.

About Sierra Wireless

Sierra Wireless is building the Internet of Things with intelligent wireless solutions that enable 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. Sierra Wireless has more than 900 employees globally and operates R&D centers in North America, Europe and Asia.

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

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