AirLink® LX60 Dual Ethernet LTE Router

Dual Ethernet LTE Router, for Primary or Backup Connectivity

The AirLink® LX60 is designed for Commercial and Enterprise LTE network connectivity. Dual Gigabit Ethernet and serial ports make it ideal to connect machines and provide primary or backup network connectivity.

LX60 provides purpose-built, secure, reliable, managed Cellular LTE networking in Building Automation, Digital Signage, Taxis, ATMs, Kiosks and Point-of-Sale terminals.

As part of the AirLink Essential series, the LX60 is designed to meet the environmental and performance requirements of these applications, while delivering superior reliability and uninterrupted operation in fixed, indoor and protected outdoor environments.

LX60 is available with optional Wi-Fi + GNSS and rated for shock, vibration and vehicle power supplies. It offers Dual Band 802.11ac Wi-Fi and dedicated 48 Channel GNSS, meeting the demands of Commercial fleets and Taxis requiring connectivity.

The LX60 comes in LTE Cat 4 regional variants, and a Global LPWA (Low-Power Wide Area) variant offering LTE-M/NB-IoT for applications where low data rates, enhanced cellular coverage and global deployment is required.

Purpose-Built, Secure, Reliable, Managed Cellular LTE Networking

BENEFITS

• Out-of-Box LTE Connectivity: Add LTE connectivity to your existing equipment
• Enables edge processing with optional secure linux-based embedded application framework (ALEOS Application Framework)
• Dual Ethernet, RS232 & RS485 and multiple I/O to connect to a wide variety of field equipment
• LTE and LTE-M/NB-IoT variants for global deployments, and extended coverage and depth (in-building and below ground) to reach challenging locations
• Integrated 7–36VDC industrial grade power supply and –30C to +65C temperature range to provide superior reliability without need for additional power conditioning or adapters
• ALMS Cloud or AMM On-Premises Management single-pane device management across all devices

IDEAL APPLICATIONS

Primary or backup connectivity for:
• IoT/M2M
• WAN Failover Applications
• Building Automation
• Digital Signage
• Taxis, Light Transport Vehicles
• ATMs, Kiosks, Point of Sale, Lottery
### AirLink® LX60
Dual Ethernet LTE Router

#### LX60

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### Specification

#### HOST INTERFACES
- 2 Gigabit RJ-45 Ethernet ports
- RS-232 serial port (DB-9)
- USB 2.0 Micro-B Connector
- 3 SMA antenna connectors (cellular, diversity, GNSS)
- 1 RP SMA antenna connector (1x1 MIMO Wi-Fi)
- Active GNSS antenna support
- Aux Port (RS-485/GPIO)

#### WI-FI (Optional)
- Dual Band 2.4/5GHz Wi-Fi
- B02.11 b/g/n/ac (Wave2 Client Mode)
- Support for 10 clients, WPA2 Enterprise
- Output power 16dBm
- Access Point or Client Mode (Wi-Fi as WAN)
- Single SSID Support
- Captive Portal

#### INPUT/OUTPUT
- Configurable I/O (5 pins total)
  - 5 Digital Inputs: ON Voltage: 2.7 to 36 VDC
  - 1 Digital Open Collector Output > sinking 300 mA
  - 3 Analog Inputs: 0.5-5/0.5-10 VDC (range selectable)
  - Configurable Pull-ups for dry contact input

#### LAN (ETHERNET/USB)
- DHCP Server
- IP Passthrough
- VLAN
- Host Interface Watchdog
- PPPoE

#### SERIAL
- TCP/UDP P2D Mode
- Modbus [ASCII, RTU, Variable]
- ppp
- DNP3 Interoperability

#### NETWORK AND ROUTING
- Network Address Translation (NAT)
- Port Forwarding
- NEMO/DMNR
- VRRP
- Reliable Static Route
- Ethernet WAN
- Verizon PNTM
- IPv6 Gateway
- Policy Routing
- Dynamic DNS

#### SECURITY
- Remote Authentication (LDAP, RADIUS, TACACS+) DMZ
- Inbound and Outbound Port filtering
- Inbound and Outbound Trusted IP
- MAC Address Filtering
- PCI compatible
- Secure Firmware Update

#### SATELLITE NAVIGATION
- GNSS (Optional)
- Dedicated GNSS Receiver supporting GPS, GLONASS, BeiDou, Galileo
- Tracking Sensitivity: -162 dBm
- Accuracy: < 1.5m (50%), < 3.15m (95%)
- Acquisition Time: 1s Hot Start
- Reports: NMEA 0183 V3.0, TAR, RAP, XORA
- Multiple Redundant Servers
- Reliable Store and Forward

#### NETWORK MANAGEMENT
- Secure mobile network & asset management application available in the cloud or licensed platform in the enterprise data center
- Fleet wide firmware upgrade delivery
- Router configuration and template management
- Router staging over the air and local Ethernet connection
- Over-the-air software and radio module firmware updates
- Device Configuration Templates
- Configurable monitoring and alerting
- Remote provisioning and airtime activation (where applicable)

#### EVENTS ENGINE
- Custom event triggers and reports
- Configurable interface, no programming
- Event Types: Digital Input, Network Parameters, Data Usage, Timer, Power, Device Temperature and Voltage Report Types: RAP, SMS, Email, SNMP Trap, TCP (Binary, XML, CSV)
- Event Actions: Drive Relay Output

#### ENVIRONMENTAL
- Operating Temperature: -30°C to +65°C / -22°F to +149°F
- Storage Temperature: -60°C to +85°C / -76°F to +185°F
- Humidity: 90% RH @ 60°C
- Military Spec MIL-STD-810G conformance to shock, vibration, thermal shock, and humidity
- IP20 rated ingress protection
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Specification

VPN
IPsec, GRE, and OpenVPN Client
Up to 5 concurrent tunnels
Split Tunnel
Dead Peer Detection (DPD)

ROUTER MANAGEMENT
Local web user interface
AT Command Line Interface (Telnet/SSH/Serial)
SNMP
SMS Commands

APPLICATION
ALEOS Application Framework (AAF)
LUA Scripting Language

POWER
Input Voltage: 7 to 36 VDC
Low voltage disconnect to prevent battery drain
Built-in protection against voltage transients including 5 VDC engine cranking
Ignition Sense with time delay shutdown

DIMENSIONS
146 mm x 42 mm x 100 mm (106 mm including connectors)
5.74 in x 1.65 in x 3.93 in (4.17 in including connectors)
250g (weight)

*For carrier specific band support please refer to the hardware user guide.

INDUSTRY CERTIFICATIONS
Safety: IECEE Certification Bodies Scheme (CB Scheme), UL 60950
Vehicle Usage: ISO7637-2, SAE J1455 (Shock, Vibration, Electrical) Environmental: RoHS2, REACH, WEEE

SUPPORT AND WARRANTY
Includes 1st Year AirLink Complete:
• AirLink Management Service (ALMS)
• Direct 24/7 Technical Support
• 3-year standard warranty; optional 2-year warranty extension
1-day Accelerated Hardware Replacement Available through participating resellers

PART NUMBERS
LTE Verizon: 1103826 / 1103827 Wi-Fi+GNSS
LTE NA Generic: 1103828 / 1103829 Wi-Fi+GNSS
EMEA, AUS/NZ, LTE-M/NB-IoT SKUs: Coming in Q2/Q3 2018
Other Accessories (sold separately):
2000579  AC Adapter, 12VDC
6001110  Cellular Paddle Antenna
6001111  Wi-Fi 2.4/5Hz Paddle Antenna
In the box: DC Power Cable and Quick Start Guide

AirLink Networking Solution - Related Products

AIRLINK NETWORK MANAGEMENT SOLUTIONS

AIRLINK MANAGEMENT SERVICE (ALMS)
• Secure, Cloud-based network and asset management
• Remotely deploy, configure, monitor and manage AirLink devices
• Carrier-grade, high availability, secure, global infrastructure

AIRLINK MANAGER / MOBILITY MANAGER (AM/AMM)
• Deployable in the enterprise data center (on-premises) or in the cloud
• Advanced, end-to-end network and asset management for both fixed and mobile networks.
• Remote, real-time configuration, control and troubleshooting of AirLink devices

AIRLINK VPN APPLIANCE

AIRLINK CONNECTION MANAGER
• VPN appliance built from the ground up for Airlink routers & gateways
• Simplify deployment and management of your VPN solution, extending the enterprise to the network edge for fixed and mobile endpoints
• Carrier agnostic – ACM doesn’t require fixed and/or public IP
• Compatible with FIPS 140-2, and always-on VPN capability

About Sierra Wireless
Sierra Wireless (NASDAQ: SWIR) (TSX: SW) is an IoT pioneer, empowering businesses and industries to transform and thrive in the connected economy. Customers Start with Sierra because we offer a device-to-cloud solution, comprised of embedded and networking solutions seamlessly integrated with our IoT services. OEMs and enterprises worldwide rely on our expertise in delivering fully integrated solutions to reduce complexity, turn data into intelligence and get their connected products and services to market faster. Sierra Wireless has more than 1,400 employees globally and operates R&D centers in North America, Europe and Asia. For more information, visit www.sierrawireless.com.

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