AirLink® LX40 LTE Router

**Compact LTE Router for IoT Applications**

The AirLink® LX40 is a compact LTE and LTE-M / NB-IoT router for IoT/M2M applications, offering “out-of-the-box” connectivity that is simple to install, and easy to manage.

LX40 provides purpose-built, secure, managed LTE networking for applications such as Camera, Security, Point-of-Sale terminals and Smart Lockers. LX40 is also ideal for connecting industrial, remote data logging and sensing equipment in protected (indoor) locations, and enables processing of IoT data at the edge.

As part of the AirLink Essential series, the LX40 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.

LX40 is available with optional Wi-Fi with Dual Band 802.11ac to provide an access point or to connect to local Wi-Fi networks.

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

**BENEFITS**

- Out-of-Box LTE Connectivity: Add LTE connectivity to your existing equipment
- 150 Mbps LTE with optional Wi-Fi, plus LTE-M/NB-IoT version with extended coverage and reach for challenging locations
- Enables edge processing with secure embedded application framework (ALEOS Application Framework)
- Integrated 7–36VDC industrial grade power supply and –30°C to +65°C temperature range to provide superior reliability without need for additional power conditioning or adapters
- Power-over-Ethernet powered device (PD) for fixed low power applications
- ALMS Cloud or AMM On-Premises Management single pane device management across all devices

**IDEAL APPLICATIONS**

Primary cellular connectivity for:

- IoT/M2M
- Camera, Security
- Digital Signage
- Building Automation
- ATMs, Kiosks, Point of Sale, Lottery
- Smart Lockers
- Industrial Process Automation

**Application Example - Digital Signage**

![Application Example - Digital Signage](sierrawireless.com/LX40)
### LX40 LTE Router

<table>
<thead>
<tr>
<th></th>
<th>North America</th>
<th>North America</th>
<th>EMEA</th>
<th>Australia &amp; New Zealand</th>
<th>Global</th>
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</thead>
<tbody>
<tr>
<td><strong>LTE CATEGORY</strong></td>
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<td><strong>Peak D/L</strong></td>
<td>Cat 4</td>
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<td>Cat 4</td>
<td>Cat M1/ NB1</td>
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<td>Up to 150 Mbps</td>
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<td>Cat-M1: 300kbps Cat-N1B1: 270kbps</td>
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<td><strong>Peak U/L</strong></td>
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<td>Up to 50 Mbps</td>
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<td><strong>4G LTE</strong></td>
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<td><strong>Frequency Bands</strong></td>
<td>AWS(B4), 700(B13)</td>
<td>1900(B1), 1800(B3), 2600(B7), 900(B8), 800(B20), 700(B28)</td>
<td>2100(B1), 1800(B3), 850(B5), 700(B12), 700(B28)</td>
<td>2100(B1), 1900(B2), 1800(B3), AWS(B4), 850(B5), 900(B8), 700(B12), 700(B13), 700(B17), 850(B18), 850(B19), 800(B20), 850(B26), 700(B28)</td>
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<td><strong>3G WCDMA/HSPA+</strong></td>
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<td><strong>Frequency Bands</strong></td>
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<td>2100(B1), 900(B8)</td>
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<td>2100(B1), 850(B5), 900(B8)</td>
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<td>900, 1800</td>
<td>850, 900, 1800, 1900</td>
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<td><strong>1104177 (Wi-Fi)</strong></td>
<td>1104179 (Wi-Fi)</td>
<td>1104182 (Wi-Fi)</td>
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### Specification

**HOST INTERFACES**

- 1 Gigabit RJ-45 Ethernet Port
- 2.5 MA antenna connectors (cellular, diversity), 1 SMA for LTE-M version
- 1 RP SMA antenna connector (1x1 MIMO Wi-Fi)

**WI-FI (Optional)**

- Dual Band 2.4/5GHz Wi-Fi
- 802.11 br/g/n/ac (Wave2 Client Mode)
- Support for 10 clients, WPA2 Enterprise
- Output power 16dbm per channel
- Access Point or Client Mode (Wi-Fi as WAN)
- Single SSID Support
- Captive Portal

**INPUT/OUTPUT**

- Configurable I/O pin on power connector
  - Digital Inputs: ON Voltage: 2.7 to 36 VDC
  - Configurable Pull-ups for dry contact input
  - Digital Open Collector Output > sinking 500 mA
  - Analog Inputs: 0.5-36VDC (range selectable)

**LAN (ETHERNET/USB)**

- DHCP Server
- IP Passthrough
- VLAN
- Host Interface Watchdog
- PPPoE

**NETWORK AND ROUTING**

- Network Address Translation
- 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

### 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 (+60°C / +140°F when using PoE)
- Storage Temperature: -40°C to +85°C / -40°F to +185°F
- Humidity: 90% RH @ 60°C
- Military Spec MIL-STD-B10G conformance to shock, vibration, thermal shock, and humidity
- IP21 rated ingress protection
AirLink® LX40
LTE Router

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)
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
Power-over-Ethernet (PoE) powered device
Ignition Sense with time delay shutdown

DIMENSIONS
103 mm (111 mm including connectors) x 79 mm x 25 mm
4.1 in (4.4 in including connectors) x 3.1 in x 1.0 in

*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: E-Mark (UN ECE Regulation 10.04), 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

ACCESSORIES
In the box: DC Power Cable and Quick Start Guide
Other Accessories (sold separately):
2000579 AC Adapter, 12VDC
6001221 LX40 Mounting Bracket with DIN rail clip
6001110 Cellular Paddle Antenna
6001111 Wi-Fi 2.4/5Hz Paddle Antenna

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.