AirLink® LX60 Dual Ethernet LTE Router

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

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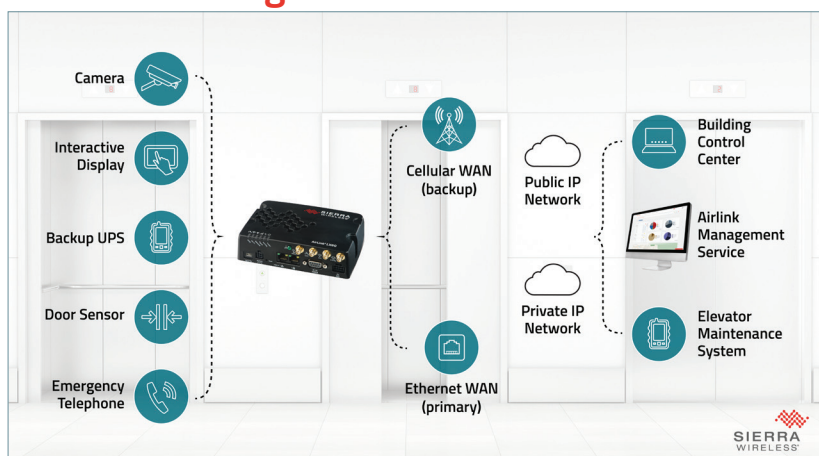
LX60 provides purpose-built, secure, reliable, managed Cellular LTE networking in Building Automation, Digital Signage, Taxis, ATMs, Kiosks and Point-of-Sale terminals.

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
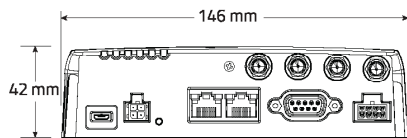

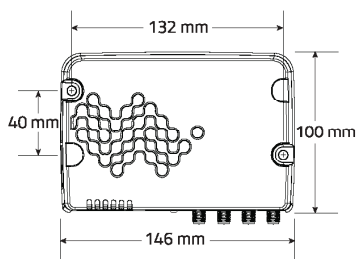*Application Example - Building Automation*

sierrawireless.com/LX60

	LX60				
	North America Verizon	**North America AT&T/Generic**	**EMEA**	**Australia & New Zealand**	**Global**
	LTE				**LTE-M/NB-IoT**
LTE CATEGORY **Peak D/L**	Cat 4 Up to 150 Mbps	Cat 4 Up to 150 Mbps	Cat 4 Up to 150 Mbps	Cat 4 Up to 150 Mbps	Cat M1/NB1 Cat-M1: 300kbps Cat-NB1: 27kbps
Peak U/L	Up to 50 Mbps	Up to 50 Mbps	Up to 50 Mbps	Up to 50 Mbps	Cat-M1: 375kbps Cat-NB1: 65kbps
4G LTE **Frequency Bands**	AWS(B4), 700(B13)	1900(B2), AWS(B4), 850(B5), 700(B12)	2100(B1), 1800(B3), 2600(B7), 900(B8), 800(B20), 700(B28)	2100(B1), 1800(B3), 850(B5), 2600(B7) 900(B8), 700(B28)	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)
3G WCDMA/HSPA+ **Frequency Bands**		1900(B2), AWS(B4), 850(B5)	2100(B1), 900(B8)	2100(B1), 850(B5), 900(B8)	
2G GSM/GPRS **Frequency Bands**			900, 1800		850, 900, 1800, 1900
APPROVALS **Regulatory**	FCC	FCC, IC, PTCRB	GCF, CE	GCF, RCM	PTCRB, FCC, GCF, IC
Carrier	Verizon	AT&T T-Mobile USA		Planned: Telstra	Planned: Verizon, AT&T T-Mobile USA
VARIANTS **Optional**	Wi-Fi+GNSS	Wi-Fi+GNSS	Wi-Fi+GNSS	Wi-Fi+GNSS	

HOST INTERFACES	**Specification**
	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
	802.11 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 PAD 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	**Specification**
	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, TAIP, 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: -40°C to +85°C / -40°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

SIERRA WIRELESS®

	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.

	Specification
INDUSTRY CERTIFICATIONS	Safety: IECEE Certification Bodies Scheme (CB Scheme), UL 60950
	Vehicle Usage: ISO7637-2, SAE J1455 (Shock, Vibration, Electrical) Environmental: RoHS2, REACH, WEEE
	Environmental: RoHS2, REACH, WEEE
SUPPORT AND WARRANTY	3-year standard warranty; Optional 2-year warranty extension
	Unrestricted device software upgrades
	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

DIMENSIONS

132 mm
40 mm
100 mm
146 mm

146 mm
42 mm

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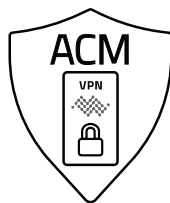
- VPN appliance built from the ground up for Airlink routers & gateways
- Simplify deployment and management of your VPN solution, extending the enterprise to the network edge for fixed and mobile endpoints
- Carrier agnostic — ACM doesn't require fixed and/or public IP
- Compatible with FIPS 140-2,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

SIERRA WIRELESS®