AirLink® LX40 LTE Router

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 −30C to +65C 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

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.

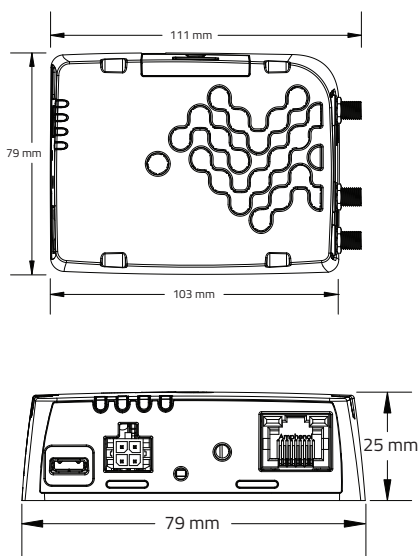## Purpose-Built, Secure, Reliable, Managed Cellular LTE Networking

Application Example - Digital Signage

sierrawireless.com/LX40

	LX40				
	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
PART NUMBERS	1104176 1104177 (Wi-Fi)	1104178 1104179 (Wi-Fi)	1104181 1104182 (Wi-Fi)	1104183 1104184 (Wi-Fi)	1104180

	Specification
HOST INTERFACES	1 Gigabit RJ-45 Ethernet Port
	USB 2.0 Micro-B Connector
	2 SMA 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 b/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 — Ethernet WAN
	Port Forwarding — Verizon PNTM
	NEMO/DMNR — IPv6 Gateway
	VRRP — Policy Routing
	Reliable Static Route — Dynamic DNS

	Specification
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-810G conformance to shock, vibration, thermal shock, and humidity
	IP21 rated ingress protection

SIERRA WIRELESS®

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.

Specification	
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
	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
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
	See website for more antenna options.

DIMENSIONS

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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