

# Sierra Wireless AirLink® GX400/440

## Rugged mobile 3G/4G gateway

The AirLink® GX400/440 mobile gateways deliver high performance, mission-critical cellular communication and GPS location. Its rugged military spec design (MIL-STD 810) and water-resistant aluminum casing (IP-64 rating) enables it to withstand the extreme temperature changes, humidity, shock, and vibration found in mobile applications.

Supporting LTE (GX440) and 3G (GX400) networks, the GX400/440 is ideal for in-vehicle field deployments such as connecting police cars, fire trucks, ambulances, public transit, taxis, or any other fleet application.

MODEL	HARDWARE INTERFACES
GX440/400 base	1 Ethernet, 1 RS-232 serial, 1 digital I/O, 1 USB, 2 cellular & 1 GPS antenna connectors
Wi-Fi option	Adds 802.11 b/g/n Wi-Fi hotspot with simultaneous client mode for cellular offloading
I/O option	Adds 4 digital I/O, 4 analog input, and a second RS-232 Serial port
Ethernet option	Adds 2 more Ethernet ports for a total of 3

### WI-FI MODEL

Create a Wi-Fi hotspot for communicating with 8 other WLAN equipped devices, including laptops, card readers, fingerprint scanners, and point-of-sale terminals. The Wi-Fi Model will simultaneously switch from communicating over cellular to Wi-Fi when inside the range of a designated access point (ie. depot or service bay) while maintaining connection to the WLAN devices.

### I/O MODEL

Use the digital I/O and analog input to monitor sensors and control digital relays and switches while using the second serial port to collect data from a programmable logic controller, data logger, or to remotely control serial equipment. The I/O Model enables a wide variety of monitoring applications such as doors, sirens, locks, temperature, humidity, or fluid/gas pressure.

### ETHERNET MODEL

Create a three port wireless Ethernet switch to connect any Ethernet enabled device such as a laptop, car reader, IP camera, or dispatch terminal. The Ethernet model provides both gateway and switch capabilities eliminating the need for additional hardware.



Wi-Fi Model



I/O Model



Ethernet Model



Base Model

### AIRLINK GX SERIES BENEFITS

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

# AirLink<sup>®</sup> GX400/440

## Technical Specifications

### 4G LTE GX440 MODELS

- 700MHz Band 13 LTE  
Sierra Wireless MC7750 Radio Module  
*fallback to 800/1900 MHz EV-DO*
- 700MHz Band 17 AWS LTE  
Sierra Wireless MC7700 Radio Module  
*fallback to 850/1900/2100 MHz HSPA+*

#### Peak LTE data rates

- Download: 100Mbps
- Upload: 60Mbps

### 3G GX400 MODELS

- Rev. A 800/1900 MHz EV-DO  
Sierra Wireless MC5728 Radio Module  
*fallback to CDMA 1xRTT*
  - o Peak download data rate: 3.1Mbps
  - o Peak upload data rate: 1.8Mbps
- 850/900/1900/2100 MHz HSPA+  
Sierra Wireless MC8705 Radio Module  
*fallback to GSM/GPRS/EDGE*
  - o Peak download data rate: 21.1Mbps
  - o Peak upload data rate: 5.76Mbps

### CARRIER APPROVALS

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

### HOST INTERFACES

- 10/100 Base-T RJ45 Ethernet (Ethernet model x3)
- RS-232 serial port (I/O model x2)
- USB V2.0 Micro-B connector
- 3 SMA antenna connectors (Primary, Secondary/Diversity, GPS)
- 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
- Digital Output > 200mA @ 30VDC

#### I/O Model only

- 5 configurable digital I/O
- 4 configurable analog input (Input Voltage 0 to 30 VDC)

### WI-FI MDOEL

- IEEE 802.11b/g/n
  - o Adjustable output power (Max:15dBm)
  - o Hotspot access point for up to 8 clients (simultaneous hotspot/client with WEP, WPA2 security)
- SMA-RP antenna connector

### GPS TECHNOLOGY

- LTE Gateway GX440 Models
  - o Acquisition Time: 2 Sec Hot Start
  - o Accuracy: <2m (50%), <5m (90%)
  - o Tracking Sensitivity: -161 dBm
- 3G GX400 Models
  - o Acquisition Time: 9 sec Hot Start
  - o Accuracy: <3m (50%), <8m (90%)
  - o Tracking Sensitivity: -152 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, SNTIP
- 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 management application
- ACEManager™ device configuration utility

### DIMENSIONS

- 5.6 in x 3.8 in x 1.6 in (142 mm x 98 mm x 40 mm)
- 14 oz (397G)

### POWER

- Analog Ignition Sense & Power Management
- Input Voltage: 9 to 36 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
- IP 64 rated

### INDUSTRY CERTIFICATIONS

PTCRB, R&TTE, FCC, Industry Canada, CE, E-Mark, RoHS Compliant, Class 1 Div 2 certified.

### 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](http://www.sierrawireless.com).