Sierra Wireless AirLink® GX Series

Rugged and mobile 3G/4G gateway

The AirLink® GX Series of mobile gateways delivers 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.

The GX Series is ideal for in-vehicle field deployments such as connecting police cars, fire trucks, ambulances, public transit, taxis, or any other fleet

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 I/O, 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 and analog I/O 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 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 AirVantage® M2M Cloud for building innovative applications and services
- 5-year warrranty

SIERRA WIRELESS™ | AirLink®

AirLink® GX Series
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
- Open collector output > 200mA @ 30VDC

I/O Model only
- 5 configurable digital I/O
- 4 configurable analog I/O
  (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
- 4G LTE 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, SNTP
- 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
- AirVantage Management Service cloud-based device 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.

SIERRA WIRELESS™ | AirLink®