















Performance Series Routers



	North America	Global
CELLULAR		
Peak D/L	5G - Up to 4.14 Gbps DL, 4G LTE Cat 20 - Up to 2 Gbps DL	
Peak U/L	5G - Up to 660 Mbps UL, 4G LTE Cat 20 - 210 Mbps UL	
5G Frequency Bands	Sub-6 Non-standalone (NSA): n1, n2, n3, n5, n28, n41, n66, n71, n77, n78, n79 Future Sub-6 Standalone (NSA & SA): n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40, n41, n48, n66, n71, n77, n78, n79	
4G LTE	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39,	
Frequency Bands	B40, B41, B42, B43 (future), B46, CBRS B48, B66, B71	
3G WCDMA/HSPA+		
Frequency Bands	B1, B2, B3, B4, B5, B6, B8, B9, B19	
LPWA		
Frequency Bands	B1, B2, B3, B4, B5, B8, B9, B10, B12, B13, B17, B18, B19, B20, B25, B26, B27, B28, B66	
APPROVALS		
Regulatory	FCC, IC, PTCRB, GCF, CE, RED, RCM	
Carrier	Verizon, AT&T, T-Mobile (pending)	
PART NUMBERS	XR80 Single 5G 1104793 XR80 Single 5G Wi-Fi 1104789 Optional 5G cartridge (future)	XR80 Single 5G 1104791 XR80 Single 5G Wi-Fi 1104787 Optional 5G cartridge (future)

Specification

HOST INTERFACES

Main body: 3x RJ-45 Ethernet ports (1x 5Gbps, 2x 1Gbps) With cartridge: 4x RJ-45 Ethernet ports (1x 5Gbps, 3x 1Gbps)

LPWA ALMS Out-of-Band Management

USB 3.2 Type-C port

Dual RS-232 serial port on RJ-45

Aux Port (GPIO/CAN)

Dual SIM Slots

11 FAKRA antenna connectors (Dual 4x4 Cellular, 5x4 Wi-Fi, GNSS, LPWA)

SECURITY

AAA: 802.1x /Radius authentication with Wi-Fi and Ethernet Firewall: Stateful firewall with port forwarding, DMZ, WLAN Encryption: WPA2/WPA3 Personal/Enterprise

FIPS 140-2

WI-FI (OPTIONAL)

4x4 MIMO Wi-Fi 6 AP/STA up to 2.4Gbps 1x1 MIMO Wi-Fi 6 STA Rx only

Support for 128 clients

WPA2/3Enterprise

Wi-Fi WAN and Wi-Fi Access Point (concurrently)

High output power 23 dBm (per chain)

Captive Portal (future)





Specification

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: 95% RH @ 60C IP64 rated ingress protection

MIL-STD-810G conformance to shock, vibration, thermal

shock, and humidity

POWER Input/Operating Voltage: 7 to 36 VDC

Power modes: Peak 54W (4.5A @12V); Standby 55mW

(4.5mA@12V)

Built-in protection against voltage transients including 5

VDC engine cranking

Ignition Sense with time delay shutdown

NETWORK AND ROUTING Sierra Cognitive Wireless

IPv4 and IPv6 Routing

Network Address Translation (NAT)

LAN Segmentation

IPv4 Passthrough and IPv6 Prefix Extension

WAN/LAN Connection Policy Management

Policy-Based Routing

QoS: Application/ Traffic Priority Queuing

WAN Monitors: Connection Failure Recovery

Configurable MTU size

Multiple LAN Support Customize transmission buffer size

Static Routing

WAN Ethernet

Integrated with ACM VPN Server

IPsec protocol with IKEv1/IKEv2

FIPS 140-2

Encryption: AES128/AES192/AES256

Hashing: SHA256/SHA384/SHA512

Key Exchange: DHGroup14/15/16/17/18/19/20/21

LAN to LAN and Host to LAN

Up to 10 concurrent tunnels per link

MOBIKE protocol

IP compression

Full/Split Tunnel

Dead Peer Detection (DPD)

Specification INDUSTRY CERTIFICATIONS

Safety: IECEE Certification Bodies Scheme (CB Scheme), UL

60950

Vehicle Usage: E-Mark (72/245/EEC, 2009/19/EC), ISO7637-

2, SAE J1455 (Shock & Vibration)

Environmental: RoHS2, REACH, WEEE

Rail Usage: EN50155 (Rolling Stock)

RELIABILITY MTBF: Dual 5G: 32.8 years (Telcordia SR-332 Issue3 Method1)

SUPPORT AND 3-year standard warranty; Optional 1/2-year warranty

Extension

ACCESSORIES

Unrestricted critical firmware updates

In the box: XR80, DC Power cable, LPWA Antenna, XR80 Quick Start Guide, ALMS Quick Start Guide

Mounting bracket (6001350) AC Adapter (6001372)

I/O Cable (6001004)

Antennas (See sierrawireless.com)

5G Expansion Cartridge (future)

EDGE COMPUTING Support for Edge Compute Containerized Applications (future)

Azure IoT Integration (future)

DIMENSIONS AirLink XR80 - Main Body

220mm x 170mm x 53mm (6.69in x 8.66in x 2.08in)

Weight:

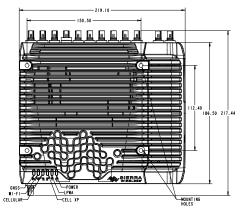
Non Wi-Fi 1.80 Kg (4.0 Lbs.)

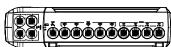
Wi-Fi 2.00 Kg (4.4 Lbs.)

AirLink XR80 - Main body with Single Expansion Cartridge

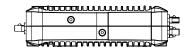
220mm x 220mm x 53mm (8.66in x 8.66in x 2.08in)

Weight: 2.64 Kg (5.8 Lbs.)











XR80 Services and Support



AirLink Complete

Maximize your AirLink XR80 hardware investment and ensure your applications operate at peak efficiency by subscribing to our best-inclass service and support including:

- AirLink Management Service (ALMS) network management
- Optional Advanced Mobility Reporting (AMR)
- 24/7/365 Tier 1 technical support from wireless experts via phone or online access
- Extended hardware warranty up to 5 years



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



AirLink Antennas

- Tested and certified to provide guaranteed performance with all AirLink routers and gateways
- Accelerate deployment with always-on, end-to-end connectivity



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About Sierra Wireless

Sierra Wireless (NASDAQ: SWIR) (TSX: SW) is the leading IoT solutions provider that combines devices, network and software to unlock value in the connected economy. Companies globally are adopting IoT to improve operational efficiency, create better customer experiences, improve their business models and create new revenue streams. Whether it's a solution to help a business securely connect edge devices to the cloud, or a software/API solution to help manage processes associated with billions of connected assets, or a platform to extract real-time data to make the best business decisions, Sierra Wireless will work with you to create the right industry-specific solution for your next IoT endeavor.

