SIERRA WIRELESS®

5G
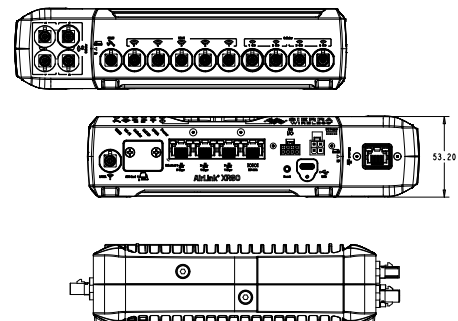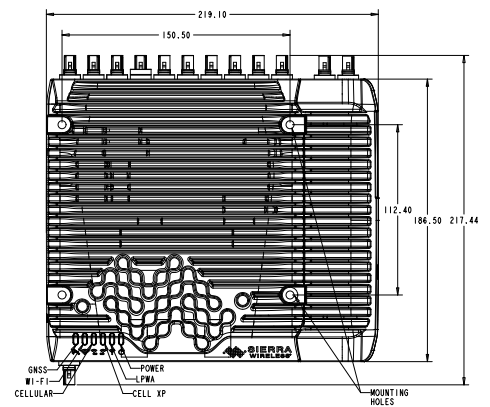
	North America	Global
CELLULAR		
Peak D/L	5G - Up to 4.14 Gbps DL, 4G LTE Cat 20 - Up to 2 Gbps DL	
Peak U/L	5G - Up to 660 Mbps UL, 4G LTE Cat 20 - 210 Mbps UL	
5G **Frequency Bands**	Sub-6 Non-standalone (NSA): n1, n2, n3, n5, n28, n41, n66, n71, n77, n78, n79 Future Sub-6 Standalone (NSA & SA): n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40, n41, n48, n66, n71, n77, n78, n79	
4G LTE **Frequency Bands**	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, 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
VPN	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 WARRANTY	3-year standard warranty; Optional 1/2-year warranty Extension
	Unrestricted critical firmware updates
ACCESSORIES	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 MANAGEMENT SERVICE (ALMS)

OUT-OF-BAND MANAGEMENT *(AirLink XR80 router only)*

AIRLINK COMPLETE

EXTENDED WARRANTY

TECHNICAL SUPPORT

AirLink Complete

Maximize your AirLink XR80 hardware investment and ensure your applications operate at peak efficiency by subscribing to our best-in-class 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

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.

For more information, visit www.sierrawireless.com.

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