AirLink® XR60: World's Smallest Rugged 5G Router

The ultra-compact and highly ruggedized AirLink® XR60 delivers high performance 5G and Wi-Fi 6 connectivity to space-limited and harsh environments — from tight industrial enclosures to fast-moving vehicles.

With advanced networking capabilities, private network support and edge computing capabilities, the XR60 future proofs your connectivity and accelerates your digital transformation.

Based on internal study of comparable IP64 rugged routers January 2024

Dual-Band GNSS	5G
IP64 Rated	2×2 MIMO Wi-Fi 6 (Optional)
AirLink OS with AirLink Complete	Single Serial / Single Ethernet (1 Gbps) or Dual Ethernet (1 Gbps + 5 Gbps)

For a limited time only, get 5 years of AirLink Complete with your new AirLink XR60 router:

✓ 5-year hardware warranty

✓ 5 years of technical support

✓ 5 years of remote device management through ALMS

AirLink® XR60 – Router Specifications

KEY FEATURES

Cellular Radios	5G
Wi-Fi	2×2 MIMO Wi-Fi 6 (Optional)
Ethernet	1 x Ethernet RJ45 (1 Gbps) – Single Serial/Single Ethernet variant 2 x Ethernet RJ45 (1×1 Gbps + 1×5 Gbps) – Dual Ethernet variant
Serial	Dual RS-232/485 (Serial/Ethernet variant)
GNSS	Dual-band 48 Channel GNSS
CAN	–
I/O	1 GPIO
USB	USB 3.2 Gen 1 Type-C® with power delivery and 5 Gbps LAN networking
Bluetooth	–
IP Rating	Sealed Aluminum Housing (IP64 Rated)
Services	AirLink Complete (1 year included)
Operating System	AirLink OS
Management System	AirLink Management Service (ALMS)

Region	**Global**

CELLULAR

Technology	5G
Peak Downlink (Theoretical)	2800 Mbps
Peak Uplink (Theoretical)	300 Mbps
Category	5G
Region	Global
Radio	EM9291
MIMO	4×4
RF Connectors	SMA
SIM	Dual SIM (Nano-4FF)

FREQUENCY BANDS

	1	2	3	4	5	7	8	12	13	14	17	18	19	20	25	26	28	29	30
5G	n1	n2	n3	–	n5	n7	n8	n12	n13	n14	–	n18	–	n20	n25	n26	n28	n29	n30
4G	B1	B2	B3	B4	B5	B7	B8	B12	B13	B14	B17	B18	B19	B20	B25	B26	B28	B29	B30
3G (HSPA+)	B1	B2	–	B4	B5	–	B8	–	–	–	–	–	B19	–	–	–	–	–	–

FREQUENCY BANDS

	32	34	38	39	40	41	42	43	46	48	66	70	71	75	76	77	78	79
5G	–	–	n38	–	n40	n41	–	–	–	n48	n66	n70	n71	n75	n76'	n77	n78	n79
4G	B32	B34	B38	B39	B40	B41	B42	B43	B46	B48	B66	–	B71	–	–	–	–	–
3G (HSPA+)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

*SA downlink only **Downlink only*

WIRELESS CERTIFICATION

Regulatory	FCC, IC/ISED, PTCRB, GCF, CE*, RED*, RCM
Carrier	AT&T, FirstNet® 4G Capable, T-Mobile, Verizon, CBRS, C-Band Planned: Rogers*, Telus*, Bell*, Telstra*
Public Safety	FirstNet® 4G Capable
Part Numbers	1105099 XR60 Dual Ethernet (1 Gbps + 5 Gbps) 1105159 XR60 Dual Ethernet (1 Gbps + 5 Gbps) with Wi-Fi 1105160 XR60 Single Serial, Single Ethernet (1 Gbps) 1105161 XR60 Single Serial, Single Ethernet (1 Gbps) with Wi-Fi

*Pending. See latest status **here**.

WI-FI

Wi-Fi Standard	Wi-Fi 6
Access Point	Dual (2.4 & 5GHz)
Client (Depot/WAN)	Yes
Client & AP	Yes
Peak Throughput (Theoretical)	1200 Mbps
MIMO	Single 2×2
Security	WPA2/3 Personal WPA2/3 Transitional WPA2 Enterprise
Clients	Up to 32 maximum
SSID	3
Output Power	21 dBm per chain
Frequency	2.4/5 GHz
RF Connectors	SMA (Reverse Polarity)

ENVIRONMENTAL

Operating Temperature	-40°C to +70°C / -40°F to +158°F -30°C to +65°C / -22°F to +149°F (Wi-Fi variant)
Storage Temperature	-40°C to +85°C / -40°F to +185°F
Humidity	95% RH @ 60°C
Military Specification	MIL-STD-810H (Shock, Vibration, Thermal Shock, Humidity)
IP Rating	IP64

INDUSTRY CERTIFICATIONS

Safety	IECEE Certification Bodies Scheme (CB Scheme)
Vehicle Usage	E-Mark* (UN ECE Regulation 10.05), ISO7637-2, SAE J1455 (Shock, Vibration, Electrical)
Environmental Directives	RoHS2, REACH, WEEE, Prop 65
Hazardous Environments	Class 1 Div 2* – Ambient temperatures of -30°C to +60°C IECEx* & ATEX*
Rail Usage	EN50155/EN45545 (Rolling Stock)

*Pending. See latest status **here**.

POWER

Input Voltage	7 to 36 VDC Redundant power input via USB-C (45W)
Power Consumption	Idle Power: 3.5W (290 mA @ 12VDC) – Serial/Ethernet variant Standby Mode Power: 55 mW (4.6 mA @ 12 VDC) Triggered on low voltage, I/O or periodic timer
Power Modes	7 to 36 VDC: Low voltage disconnect to prevent battery drain Built-in protection against voltage transients including 5VDC engine cranking and +200 VDC load dump Ignition Sense with time delay shutdown Configurable features and ports to optimize power consumption Can switch to redundant power input via USB-C (45W)

SECURITY

AAA	Wi-Fi 802.1x/Radius authentication
Firewall	Stateful firewall with port forwarding, DMZ
WLAN Encryption	WPA2/3 Personal WPA2/3 Transitional WPA2 Enterprise
Firmware Update	Secure Firmware Update

NETWORK AND ROUTING

Throughput	800 Mbps Firewall TCP throughput
Features	Semtech Cognitive Wireless IPv4 and IPv6 Routing Network Address Translation (NAT) Port Forwarding DHCP Server IP Passthrough LAN Segmentation IPv4 Passthrough and IPv6 Prefix Extension WAN/LAN Connection Policy Management Policy-Based Routing Configurable MTU size Static Routing WAN Ethernet
QoS	Application/Traffic Priority Queuing
WAN Monitors	Connection Failure Recovery

LAN (ETHERNET/USB)

	USB to Ethernet

VPN

Throughput	175 Mbps IPSec VPN TCP throughput
Features	Integrated with ACM VPN Server IPsec protocol with IKEv1/IKEv2 FIPS 140-2 Level 1 compliant
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)

ROUTER MANAGEMENT INTERFACES

	ALMS Local web user interface REST API (Beta) licensed via ALMS

EDGE COMPUTING

	Support for Edge Compute Docker Containerized Applications (Beta) licensed via ALMS
RAM[1,2]	1.2 GB
Storage (Flash)[1]	1.7 GB
CPU	Quad Core Arm A53 64 bit
	[1] Approximation available to containers (not device total) [2] Depends on other enabled features

AIRLINK COMPLETE (1 YEAR INCLUDED WITH ROUTER PURCHASE)

Support	24/7 technical support*
Hardware Warranty	1-year standard hardware warranty Extended hardware warranty up to 5 years with current subscription**
Device Management	AirLink Management Service (ALMS)*
Software Updates	Unrestricted critical firmware updates through at least December 31st, 2029

*With current AirLink Complete subscription
Full warranty terms are available at **www.sierrawireless.com/end-user-warranty

AIRLINK PREMIUM (OPTIONAL UPGRADE)
INCLUDES ALL AIRLINK COMPLETE FEATURES* AND ADDS:

Advanced Mobility Reporting	Coverage and fleet reporting*
Advance Replacement	Same-day shipping for in-warranty router replacements*

*With current AirLink Premium subscription

RELIABILITY

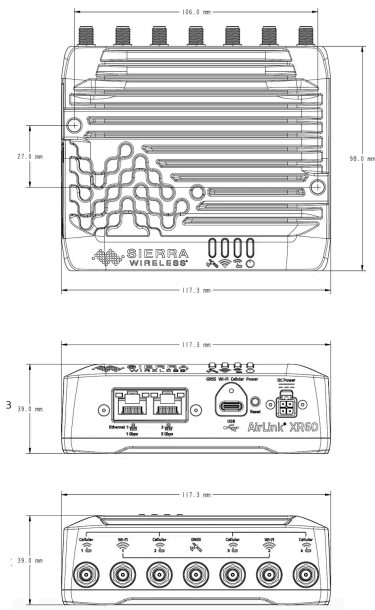|	
MTBF	1105099 XR60 Dual Ethernet: 264010 hours (30.13 years) 1105159 XR60 Dual Ethernet, Wi-Fi: 245227 hours (27.99 years) 1105160 XR60 Serial, Ethernet: 283666 hours (32.38 years) 1105161 XR60 Serial, Ethernet, Wi-Fi: 262094 hours (29.91 years) *Ground Benign, 25°C *MTBF calculations performed per Telcordia "Reliability Prediction Procedure for Electronic Equipment" document number SR-332, Method I, Issue 3

ACCESSORIES

In The Box	XR60, DC Power Cable, Quick Start Guide, AirLink Complete Leaflet
Other Accessories (sold separately)	6001503 AC Adapter 6001502 Spare DC Power Cable 6001529 DIN Rail Bracket 6001410 RJ45 to Single DB9 6001409 RJ45 to Dual DB9 For Antenna options visit: *here*

DIMENSIONS

Size	118 x 39 x 98 mm (108 mm including SMA connectors) 4.6 x 1.5 x 3.9 in (4.2 in including SMA connectors) Same bolt pattern as RV
Weight	522 g / 1.15 lb with Wi-Fi

For carrier specific band support please refer to the hardware user guide.

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