



5G and Wi-Fi 6 Performance in an Ultra- Compact and Rugged Router for Fixed and Mobile Mission-Critical Applications

KEY FEATURES

- 4x4 5G + LTE Cat-20
- 2x2 Wi-Fi 6 (optional)
- Dual-Band GNSS
- Single Serial / Single Ethernet (1 Gbps) or Dual Ethernet (1 Gbps + 5 Gbps)
- IP64 and MIL-STD-810H Rated
- Powered by AirLink® OS and AirLink® Complete

XR60 Product Description

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.

A Fully Integrated Solution

The AirLink XR60 is fully integrated with AirLink Complete – a comprehensive service package that includes remote device and security management, expert technical support and extended hardware warranty. You can also opt for AirLink Premium – an advanced service package that includes all the benefits of AirLink Complete, enhanced with Advanced Mobility Reporting and Advance Replacement.

Ideal Applications

High-performance and reliable connectivity in fixed and mobile mission-critical applications:

- Critical Infrastructure
- Video Surveillance
- Smart Cities
- Manufacturing
- Public Safety Vehicles
- Fixed Wireless Access
- Fleet Vehicles

Benefits

- Designed for high performance with 5G, Wi-Fi 6, 5 Gbps Ethernet and USB-C technologies
- Ultra-compact design making it ideal for space-constrained industrial settings and vehicle applications
- Designed and thoroughly tested to thrive in the harshest conditions: shock and vibration resilience (MIL-STD-810H grade), extreme temperature and humidity operating range, intrinsic safety and power resilience
- Advanced networking capabilities with flexible software-defined routing functions
- Multi-band support for extensive public and private networking coverage
- Edge intelligence with industry-standard container support
- Redundant USB-C power supply input for increased reliability

XR60 Services and Support



AIRLINK COMPLETE

Maximize your AirLink XR60 hardware investment with AirLink Complete – a comprehensive service package designed to empower you with the tools and support necessary to secure, optimize and effortlessly scale your XR60 deployments.

AirLink Complete includes*:

- AirLink Management Service (ALMS) for remote device and security management
- Extended hardware warranty up to 5 years maximum
- Expert technical support
- For more information on AirLink Complete visit our [web page](#)

**With active subscription. 1-year subscription included with the XR60 purchase*



AIRLINK PREMIUM

Ideal for organizations managing mission-critical vehicle fleets, this service upgrade encompasses all the benefits of [AirLink Complete](#)*, enhanced with:

- **Advanced Mobility Reporting***: Offers comprehensive coverage and fleet reporting to monitor your network and vehicles.
- **Advance Replacement***: Provides same-day shipping for in-warranty router replacements, minimizing downtime, spare inventory and keeping your operations running smoothly.

**With active subscription.*



HYBRID CLOUD

This optional feature merges the benefits of cloud technology with on-premise security controls for the management of your AirLink XR and RX routers, offering ultimate security and control.

[Hybrid Cloud](#) is available to add to an active AirLink Complete or Premium subscription.



ANTENNAS

- Tested and certified to provide guaranteed performance with all AirLink routers
- Accelerate deployment with always-on, end-to-end connectivity
- For more information on antennas specific to the XR60 router visit our [web page](#)

AirLink XR60 – Router Specifications

| KEY FEATURES | |
|-------------------|---|
| Cellular Radios | 5G |
| Wi-Fi | 2x2 MIMO Wi-Fi 6 (Optional) |
| Ethernet | 1x Ethernet RJ45 (1 Gbps) – Single Serial/Single Ethernet variant 2x Ethernet RJ45 (1 Gbps + 5 Gbps) – Dual Ethernet variant |
| Serial | Dual RS-232/485 (Serial/Ethernet variant) |
| GNSS | Dual-band 40 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) |

| GLOBAL | |
|-----------------------------|---------------------|
| CELLULAR | |
| Variant | Global |
| Technology | 5G |
| Peak Downlink (Theoretical) | 2800 Mbps |
| Peak Uplink (Theoretical) | 900 Mbps |
| Category | 5G |
| Region | Global |
| Radio | EM9291 |
| MIMO | 4x4 |
| RF Connectors | SMA |
| SIM | Dual SIM (Nano-4FF) |



| FREQUENCY BANDS | | | |
|-----------------|------|--------|------------|
| | 5G | 4G LTE | 3G (HSPA+) |
| 1 | n1 | B1 | B1 |
| 2 | n2 | B2 | B2 |
| 3 | n3 | B3 | |
| 4 | | B4 | B4 |
| 5 | n5 | B5 | B5 |
| 7 | n7 | B7 | |
| 8 | n8 | B8 | B8 |
| 12 | n12 | B12 | |
| 13 | n13 | B13 | |
| 14 | n14 | B14 | |
| 17 | | B17 | |
| 18 | n18 | B18 | |
| 19 | | B19 | B19 |
| 20 | n20 | B20 | |
| 25 | n25 | B25 | |
| 26 | n26 | B26 | |
| 28 | n28 | B28 | |
| 29 | n29* | B29** | |
| 30 | n30 | B30** | |
| 32 | | B32** | |
| 34 | | B34 | |
| 38 | n38 | B38 | |
| 39 | | B39 | |
| 40 | n40 | B40 | |

| FREQUENCY BANDS | | | |
|-----------------|------|--------|------------|
| | 5G | 4G LTE | 3G (HSPA+) |
| 41 | n41 | B41 | |
| 42 | | B42 | |
| 43 | | B43 | |
| 46 | | B46** | |
| 48 | n48 | B48 | |
| 66 | n66 | B66 | |
| 70 | n70 | | |
| 71 | n71 | B71 | |
| 75 | n75* | | |
| 76 | n76* | | |
| 77 | n77 | | |
| 78 | n78 | | |
| 79 | n79 | | |

* SA downlink only

** Downlink only

WIRELESS CERTIFICATION

| | |
|---------------|--|
| Regulatory | FCC, IC/ISED, PTCRB, GCF, CE ¹ , RED ¹ , RCM |
| Carrier | AT&T, FirstNet® Trusted ² , T-Mobile, Verizon, Telus, Southern Linc, CBRS, C-Band Planned: Rogers, Bell, Telstra |
| Public Safety | FirstNet® Trusted ² |
| 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 TAA Part Numbers: 1105232 XR60 TAA Dual Ethernet (1 Gbps + 5 Gbps) 1105233 XR60 TAA Dual Ethernet (1 Gbps + 5 Gbps) with Wi-Fi 1105234 XR60 TAA Single Serial, Single Ethernet (1 Gbps) 1105235 XR60 TAA Single Serial, Single Ethernet (1 Gbps) with Wi-Fi |

WI-FI

| | |
|-------------------------------|---|
| Wi-Fi Standard | Wi-Fi 6 |
| Access Point | Dual (2.4 & 5 GHz) |
| Client (Depot/WAN) | Yes |
| Client & AP | Yes |
| Peak Throughput (Theoretical) | 1200 Mbps |
| MIMO | Single 2x2 |
| 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 +75°C / -40°F to +167°F -30°C to +70°C / -22°F to +158°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 ¹ (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 ¹ & ATEX ¹ |
| Rail Usage | EN50155/EN45545 (Rolling Stock) |

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 |

1: TAA Part Numbers do not have the CE/RED, IECEX/ATEX and E-Mark certifications

2: Requires device management via AirLink Management Service (ALMS)

| 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 | 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 (early adopters) licensed via ALMS |
| RAM ^{1,2} | 1.2 GB |
| Storage (Flash) ¹ | 750 MB |
| CPU | Quad Core Arm A53 64 bit |

1. Approximation available to containers (not device total)
2. Depends on other enabled features

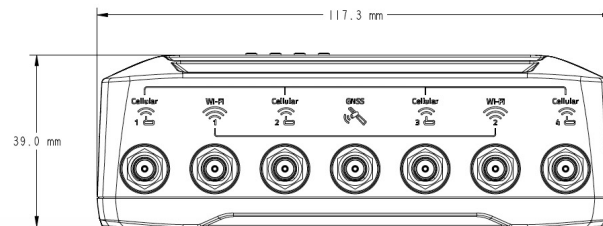
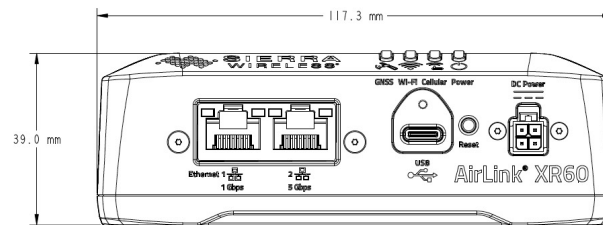
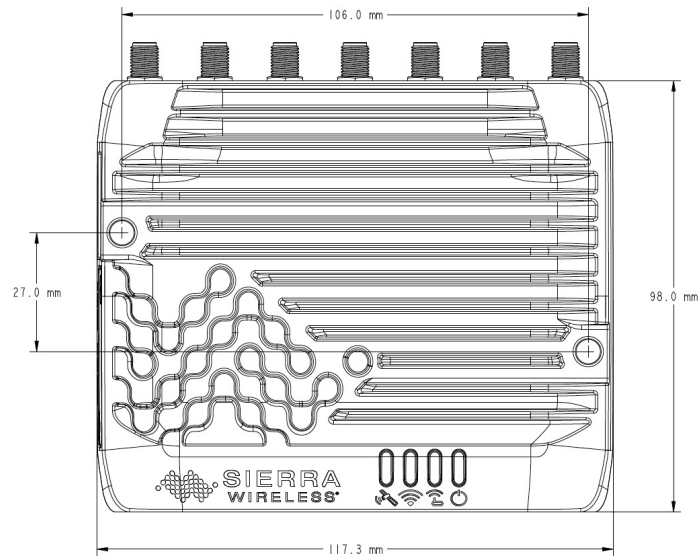
| AIRLINK COMPLETE (1 Year Included With Router Purchase) | |
|---|--|
| Support | 24/7 technical support* |
| Hardware Warranty | 1-year standard hardware warranty Extended hardware warranty up to 5 years with current subscription** |
| Device Management | AirLink Management Service (ALMS)* |
| Software Updates | Unrestricted critical firmware updates through at least December 31st, 2029 |
| 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*** |
| 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) <ul style="list-style-type: none"> 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: web page |
| DIMENSIONS | |
| AirLink XR60 | Size: 118mm x 39mm x 98mm (108 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 |

*With current AirLink Complete subscription

**Full warranty terms are available at www.sierrawireless.com/end-user-warranty

***With current AirLink Premium subscription

AirLink XR60 – Router Dimensions Diagram



About Semtech

Semtech Corporation (Nasdaq: SMTC) is a high-performance semiconductor, IoT systems and cloud connectivity service provider dedicated to delivering high-quality technology solutions that enable a smarter, more connected and sustainable planet. Our global teams are committed to empowering solution architects and application developers to develop breakthrough products for the infrastructure, industrial and consumer markets.

To learn more about Semtech technology, visit us at [Semtech.com](https://www.semtech.com) or follow us on [LinkedIn](#) or [X](#). "Semtech", "Sierra Wireless" and "AirLink" are registered trademarks of Semtech Corporation or its subsidiaries. Other product or service names mentioned herein may be the trademarks of their respective owners. © 2023 Sierra Wireless, Inc. © 2024 Semtech Corporation. All rights reserved. 2025.04.29