

**NEW** – Meet the AirLink® XR60, the World’s Smallest Rugged 5G Router – Now with 5-Year Warranty, **Learn more →**  
Support and Management. Limited-Time Offer!

# AirLink® MG90 5G

## High Performance Multi-Network 5G/ Wi-Fi 5 Router

The AirLink® MG90 is purpose built for transit, rail and first responders with dual-Cellular radios and dual Gigabit Wi-Fi delivering always-on connectivity with extensions to Land Mobile Radio (LMR) and satellite systems.

Single Serial	Dual 5G or Dual 4G
GNSS with Dead Reckoning	Dual 3x3 MIMO Wi-Fi 5
IP64 Rated	5x Ethernet (1 Gbps)
MGOS with AirLink Support	



## AirLink® MG90 – Router Specifications

KEY FEATURES	MG90 5G 4x4 Global MG90 DUAL 5G 2x2 Global	MG90 LTE-A Pro NAM MG90 DUAL LTE-A Pro NAM	MG90 LTE-A Pro Global MG90 DUAL LTE-A Pro Global
Cellular Radios	5G	LTE-A Pro	LTE-A Pro
Wi-Fi	Dual 3x3 Wi-Fi 5	Dual 3x3 Wi-Fi 5	Dual 3x3 Wi-Fi 5
Ethernet	5x Gigabit Ethernet Port (RJ45)	5x Gigabit Ethernet Port (RJ45)	5x Gigabit Ethernet Port (RJ45)
Serial	Single RS-232 serial port (DB9)	Single RS-232 serial port (DB9)	Single RS-232 serial port (DB9)
GNSS	48 Channel GNSS with Dead Reckoning	48 Channel GNSS with Dead Reckoning	48 Channel GNSS with Dead Reckoning
CAN	CAN bus/OBD-II (J1939/J1708) (optional cable)	CAN bus/OBD-II (J1939/J1708) (optional cable)	CAN bus/OBD-II (J1939/J1708) (optional cable)
I/O	5 GPIO	5 GPIO	5 GPIO
USB	Dual USB 3.0 type-A ports	Dual USB 3.0 type-A ports	Dual USB 3.0 type-A ports
Bluetooth	Bluetooth 2.1	Bluetooth 2.1	Bluetooth 2.1
IP Rating	Sealed Aluminum Housing (IP64 Rated)	Sealed Aluminum Housing (IP64 Rated)	Sealed Aluminum Housing (IP64 Rated)
Services	AirLink Support	AirLink Support	AirLink Support
Operating System	MG OS	MG OS	MG OS
Management System	AirLink® Mobility Manager	AirLink® Mobility Manager	AirLink® Mobility Manager

Region	Global	North America	Global
<b>CELLULAR</b>			
Technology	5G	LTE-A Pro	LTE-A Pro
Peak Downlink (Theoretical)	4.14 Gbps	600 Mbps	600 Mbps
Peak Uplink (Theoretical)	660 Mbps	150 Mbps	150 Mbps
Category	5G	Cat-12	Cat-12
Region	Global	North America	Global
Radio	EM9190	EM7511	EM7565
MIMO	4x4 or Dual 2x2	4x4 or Dual 2x2	4x4 or Dual 2x2
RF Connectors	SMA	SMA	SMA
SIM	Quad SIM (Mini-2FF)	Quad SIM (Mini-2FF)	Quad SIM (Mini-2FF)

## FREQUENCY BANDS

<b>5G Bands</b>	n1, n2, n3, n5, n28, n41 (4x4 only), n66, n71	–	–
<b>4G LTE Bands</b>	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, B46, B48, B66, B71	B1, B2, B3, B4, B5, B7, B8, B9, B12, B13, B14, B18, B19, B20, B26, B29, B30, B32, B41, B42, B43, B46, B48, B66	B1, B2, B3, B4, B5, B7, B8, B9, B12, B13, B18, B19, B20, B26, B28, B29, B30, B32, B41, B42, B43, B46, B48, B66
<b>3G HSPA+ Bands</b>	B1, B2, B4, B5, B6, B8, B9, B19	B1, B2, B4, B5, B6, B8, B9, B19	B1, B2, B4, B5, B6, B8, B9, B19
<b>2G GPRS Bands</b>	–	–	–
<b>LPWA</b>	–	–	–

## WIRELESS CERTIFICATION

<b>Regulatory</b>	FCC, IC, PTCRB, GCF, CE, RED, RCM	FCC, IC, PTCRB, GCF	CE, RED, RCM
<b>Carrier</b>	AT&T, T-Mobile, Verizon (4G only), US Cellular, CBRS	AT&T, FirstNet, Verizon, T- Mobile, US Cellular, Telus, Rogers	–
<b>Public Safety</b>	FirstNet® 4G, ESN	FirstNet®	–
<b>Part Numbers</b>	1104708 Single 4x4 1104709 Dual 2x2	1103981 Single 1103982 Dual	1103980 Single 1103983 Dual

## WI-FI

<b>Wi-Fi Standard</b>	Wi-Fi 5 802.11ac
<b>Access Point</b>	Dual
<b>Client (Depot/WAN)</b>	Yes
<b>Client &amp; AP</b>	Yes
<b>Peak Throughput (Theoretical)</b>	1300 Mbps
<b>MIMO</b>	Dual 3x3
<b>Security</b>	WPA2 Enterprise
<b>Clients</b>	128
<b>SSID</b>	4 per radio
<b>Output Power</b>	21 dBm per chain
<b>Frequency</b>	2.4/5 GHz
<b>RF Connectors</b>	SMA (Reverse Polarity)

**ENVIRONMENTAL**

<b>Operating Temperature</b>	-30°C to +70°C / -22°F to +158°F
<b>Storage Temperature</b>	-40°C to +85°C / -40°F to +185°F
<b>Humidity</b>	95% RH @ 60°C
<b>Military Specification</b>	MIL-STD-810G (Shock, Vibration, Thermal Shock, Humidity)
<b>IP Rating</b>	IP64

**INDUSTRY CERTIFICATIONS**

<b>Safety</b>	IECEE Certification Bodies Scheme (CB Scheme), UL 60950
<b>Vehicle Usage</b>	E-Mark (72/245/EEC, 2009/19/EC), ISO7637- 2, SAE J1455 (Shock & Vibration, Electrical)
<b>Environmental Directives</b>	RoHS2, REACH, WEEE
<b>Hazardous Environments</b>	–
<b>Rail Usage</b>	EN50155/EN45545 (Rolling Stock)

**POWER**

<b>Input Voltage</b>	7 to 36 VDC
<b>Power Consumption</b>	Peak 30W (2.5A @12V); Standby 135mW (11mA@12V)
<b>Power Modes</b>	Built-in protection against voltage transients including 5 VDC engine cranking and +200 VDC load dump Ignition Sense with time delay shutdown

**SECURITY**

<b>AAA</b>	802.1x /Radius authentication with Wi-Fi and Ethernet
<b>Firewall</b>	Stateful firewall with port forwarding
<b>WLAN Encryption</b>	WPA2/WPA3 Personal/Enterprise FIPS 140-2
<b>Firmware Update</b>	Secure Firmware Update

**NETWORK AND ROUTING**

	Cognitive Wireless IPv4 Routing Network Address Translation (NAT) Port Forwarding DHCP Server LAN Segmentation WAN/LAN Connection Policy Management Policy-Based Routing Configurable MTU size Static Routing WAN Ethernet
<b>QoS</b>	Application/Traffic Priority Queuing Load Balancing Over Multiple WAN Links
<b>WAN Monitors</b>	Connection Failure Recovery

## VPN LAN (ETHERNET/USB)

	Integrated with ACM VPN Server USB to Serial IPsec protocol with IKEv1/IKEv2 FIPS 140-2 Level 1 compliant
<b>Encryption</b>	3DES/AES128/AES256
<b>Hashing</b>	MD5/SHA1/SHA256/SHA512
<b>Key Exchange</b>	DHGroup2/5/14/15/16/17
	Support 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

	AM/AMM Local web user interface
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## EDGE COMPUTING

<b>RAM<sup>1,2</sup></b>	–
<b>Storage (Flash)<sup>1</sup></b>	–
<b>CPU</b>	–

<sup>1</sup> Approximation available to containers (not device total)

<sup>2</sup> Depends on other enabled features

## AIRLINK SERVICES

<b>Services</b>	AirLink Support
<b>Support</b>	24/7
<b>Warranty</b>	3 year standard warranty with up to 5 years extended warranty with current AirLink Support subscription
<b>Device Management</b>	AirLink® Manager (AM) or AirLink® Mobility Manager (AMM)
<b>Software Updates</b>	Unrestricted critical firmware updates

## RELIABILITY

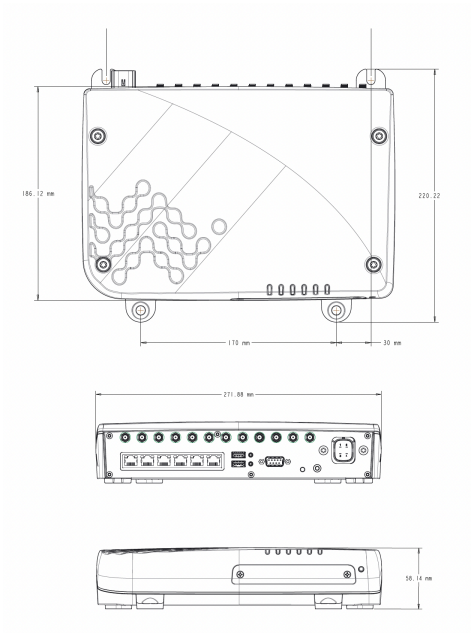
<b>MTBF</b>	23.22 years Telcordia SR-332 Issue 3 Method 1
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## ACCESSORIES

<b>In The Box</b>	MG90, DC Power Cable, Quick Start Guide and SMA Wrench
<b>Other Accessories (sold separately)</b>	6001024 Mounting Bracket 6001023 AC Adapter 6001095 I/O Cable For Antenna options visit: <b><i>here</i></b>

DIMENSIONS

Size	272mm x 220mm x 60mm
Weight	2.40 Kg



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