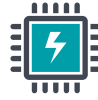


EC90A-GH

AMD Ryzen™ Embedded R1000 Series
Ultra Small Size Embedded System



KEY FEATURES



High Performance CPU

Smallest AMD Ryzen™ R1000 system



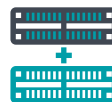
Ultra Small Size

Dimension: 112.29 x 80 x 56.20mm (W x H x D)



Fanless Design

DFI optimized thermal design



Expansion Options

Options of 2 serials ports or LTE or WiFi

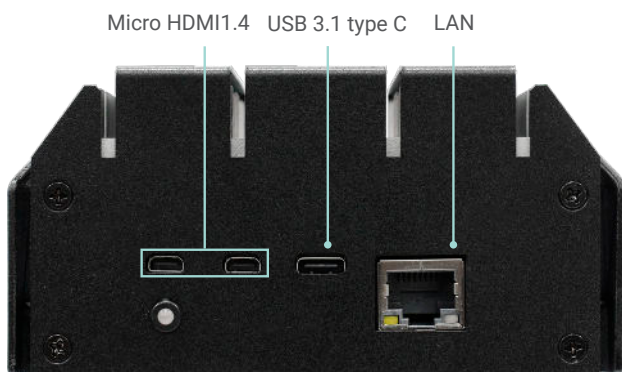


Easy Integration

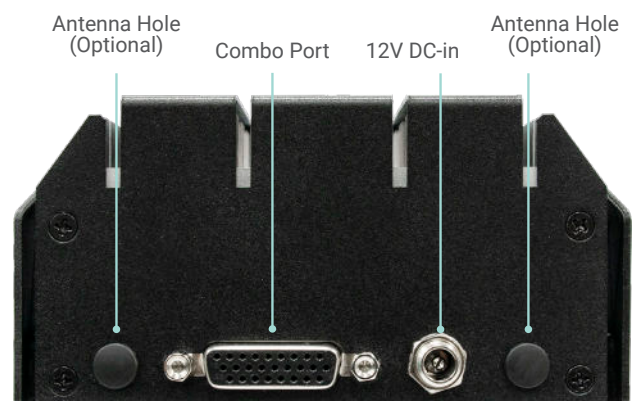
User friendly of installing SIM card



PANEL

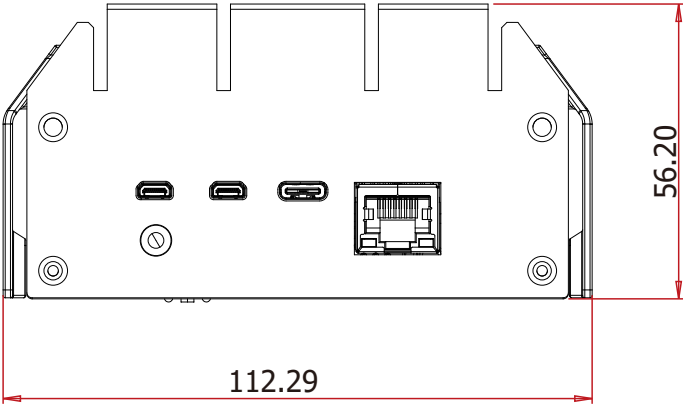


Front View

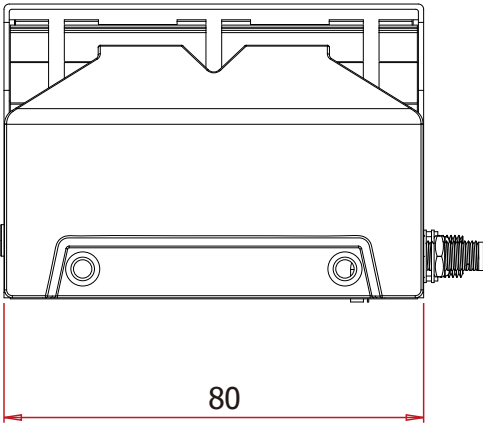


Rear View

DIMENSIONS

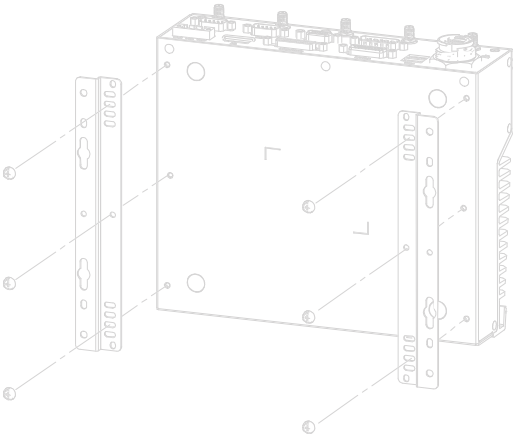


Front View

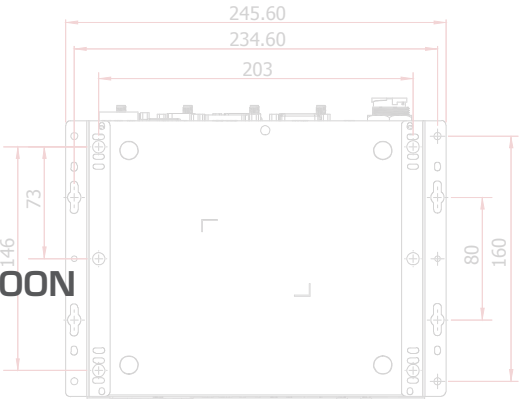


Right View

WALL MOUNTING



COMING SOON



SPECIFICATION

SYSTEM	Processor	AMD Ryzen™ Embedded R1606G, Dual Core, 1MB Cache, 3 CU, 2.6GHz (3.5GHz), 12W AMD Ryzen™ Embedded R1505G, Dual Core, 1MB Cache, 3 CU, 2.4GHz (3.3GHz), 12W AMD Ryzen™ Embedded R1305G, Dual Core, 3 CU, 1.5GHz (2.8GHz), 8-10W AMD Ryzen™ Embedded R1102G, Dual Core, 3 CU, 1.2GHz (2.6GHz), 6W
	Memory	DDR4 Memory Down up to 4GB/8GB Single Channel DDR4 2400MHz
	BIOS	AMI SPI 64bit
GRAPHICS	Controller	AMD Vega GPU with up to 3 computing units.
	Feature	H.265 decode/encode support, VP9 decode.
	Display	2 x Micro HDMI1.4 HDMI 1.4: resolution up to 4096 x 2160 @ 24Hz
STORAGE	Internal	eMMC up to 16/32/64/128GB
EXPANSION	Interface	1 x Full-size Mini PCIe (PCIe Gen2/USB 2.0, opt: USB 3.1 Gen2/USB 2.0)
ETHERNET	Controller	1 x I211AT PCIe or 1 x Intel I210IT (optional)
LED	Indicators	Power status
FRONT I/O	Ethernet	1 x GbE
	USB	1 x USB 3.1 Gen2 type C
	Display	2 x Micro HDMI1.4
REAR I/O	Combo Port	(option 1) 1 x 8-bit DIO + 1 x SMBus (option 2) 2 x RS-232
	Antenna	2 x Antenna (LTE or WiFi, via module) (optional) not available if selecting 2 x RS-232
WATCHDOG TIMER	Output & Interval	System reset, programmable via software from 1 to 255 seconds
SECURITY	TPM	fTPM 2.0
POWER	Type	12V DC-in
	Connector	DC Jack with lock
OS SUPPORT	Microsoft	Windows 10 IoT Enterprise 64-bit
	Linux	Ubuntu-certified IoT hardware
ENVIRONMENT	Operating Temperature	-20~45°C
	Storage Temperature	-40~85°C
	Relative Humidity	5 to 90% RH (non-condensing)
MECHANICAL	Construction	Metal + Aluminium
	Mounting	Wall mount /VESA mount
	Dimensions (W x H x D)	112.29 x 80 x 56.20mm
	Weight	700g
STANDARDS AND CERTIFICATIONS	Shock	Non-Operational Half-sine waveform: 5G
	Vibration	Non-Operational Vibration 1.5 G
	Certifications	CE, FCC, UKCA

ORDERING INFORMATION

Model Name	Part Number	Description
EC90A-GH	750-EC90A1-000G	EC90A-GH: GHF51-BN-46R16, R1606G, DDR4 4GB, eMMC 32GB, 1 LAN, 2 Micro HDMI, 1 USB 3.1 Gen 1 type C, 8bit DIO& SMBUS, 12VDC, F/G SYSTEM RoHS
EC90A-GH	750-EC90A1-100G	EC90A-GH: GHF51-EN-46R16, R1606G, DDR4 4GB, eMMC 64GB, 1 LAN, 2 Micro HDMI, 1 USB 3.1 Gen 1 type C, 8bit DIO& SMBUS, 12VDC, F/G SYSTEM RoHS
EC90A-GH	750-EC90A1-200G	EC90A-GH: GHF51-BN-46R16, R1606G, DDR4 4GB, eMMC 32GB, 1 LAN, 2 Micro HDMI, 1 USB 3.1 Gen 1 type C, 2 COM /RS232, 12VDC, F/G SYSTEM RoHS
EC90A-GH	750-EC90A1-300G	EC90A-GH: GHF51-EN-46R16, R1606G, DDR4 4GB, eMMC 64GB, LTE module, 1 LAN, 2 Micro HDMI, 1 USB 3.1 Gen 1 type C, 8bit DIO& SMBUS, 2 SMA, 12VDC, F/G SYSTEM RoHS
EC90A-GH	750-EC90A1-400G	EC90A-GH:GHF51-BN-46R15,R1505G,DDR4 4GB, eMMC 64GB, 1 LAN, 2 Micro HDMI, 1 USB 3.1 Gen 1 type C, 2 COM /RS232, 12VDC, F/G SYSTEM RoHS
EC90A-GH	750-EC90A1-500G	EC90A-GH:GHF51-BN-46R11,R1102G,DDR4 4GB, eMMC 64GB, 1 LAN, 2 Micro HDMI, 1 USB 3.1 Gen 1 type C, 2 COM /RS232, 12VDC, F/G SYSTEM RoHS
EC90A-GH	750-EC90A1-600G	EC90A-GH:GHF51-BN-46R13,R1305G,DDR4 4GB, eMMC 64GB, 1 LAN, 2 Micro HDMI, 1 USB 3.1 Gen 1 type C, 2 COM /RS232, 12VDC, F/G SYSTEM RoHS

OPTIONAL ITEMS

Optional Items	Part Number	Description
Power Adapter	671-106012-000G	Power adapter 12V, 60W
WiFi+BT kit	761-AP1235-000G	WiFi+BT Module, W/Antenna, SMA Cable/200mm, 802.11 abgn/ac