

EC800-QRB



Qualcomm® QRB5165
Fanless Robust Embedded System



KEY FEATURES



Qualcomm® QRB5165

Qualcomm® Robotics RB5 Platform: QRB5165



Dual Displays

Main HDMI + Second USB Type-C DP



On Board Memory

On board memory LPDDR5



5G Support

Support M.2 B key 3052 bounding with RM502G (Quectel)

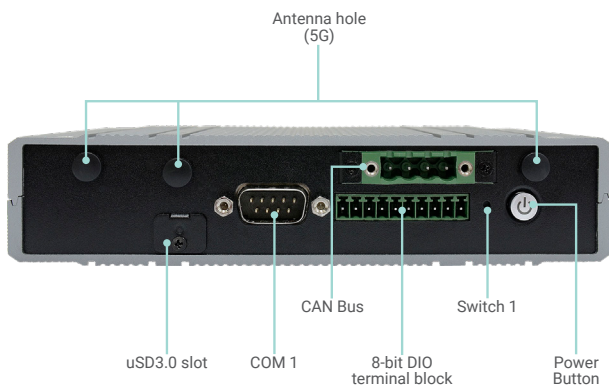


Rich I/O Expansion

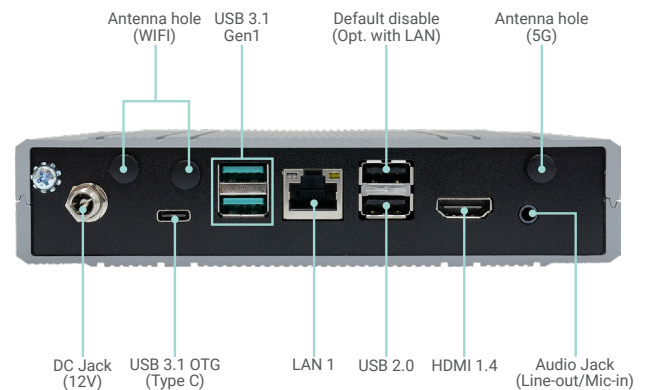
1 LAN, 4 USB, 1 COM, 1 DIO, 1 CAN



PANEL

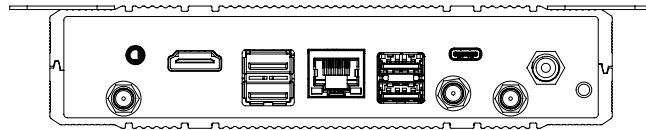


Front View

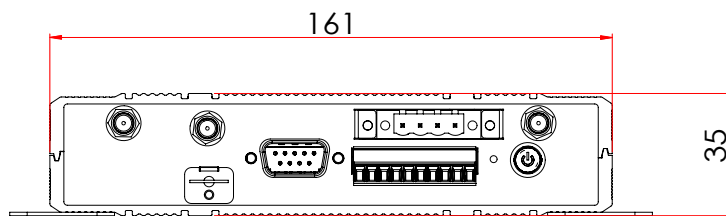
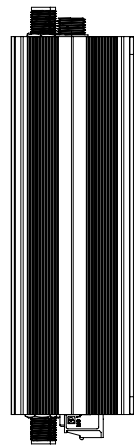
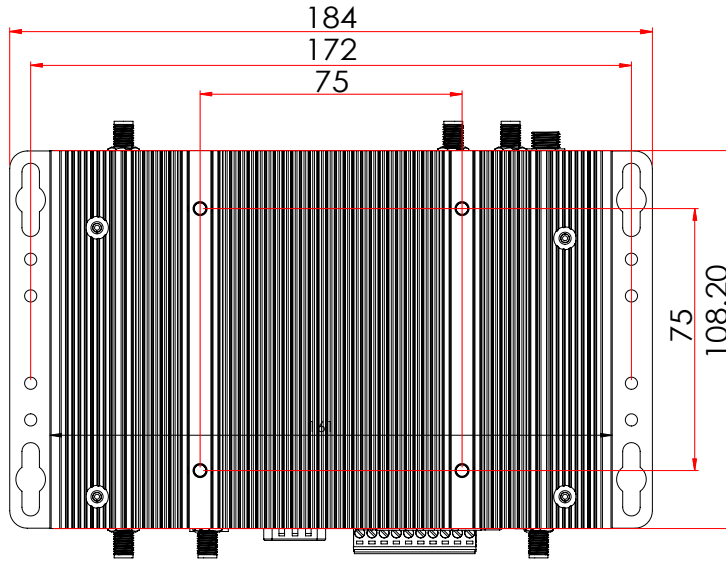
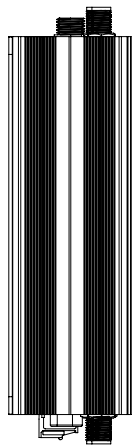


Rear View

DIMENSIONS



Rear View



Front View

SPECIFICATION

SYSTEM	Processor	Qualcomm® QRB5165, Kryo 585 CPU, up to 2.84 GHz
	Memory	POP LPDDR5, 8GB
GRAPHICS	Controller	Adreno 650 GPU
	Feature	OpenGL ES 3.2 Vulkan 1.1, DX12 FL12_1, OpenCL 2.0 full profile HW Decode: H.265 Main 10 , H.264 High,VP8, VP9 HW Encode: H.265 Main 10 , H.264 High,VP8
	Display	1 x HDMI Type A, w/audio. 1080P support on Linux. 1 x USB type C DP, 4K
	Dual Displays	Main HDMI + Second USB type C DP
STORAGE	UFS	Support UFS 3.1, default 128GB
EXPANSION	Interface	1 x M.2 B key 3052 (USB3.1, reserve PCIe x1) reference RM502G Quectel 1 x M.2 E key 2230 (PCIe x1) reference QCA6391 Wifi module 1 x Nano SIM slot
AUDIO	Audio Codec	Audio codec WCD9385
ETHERNET	Controller	AX88179A USB3 to GbE controller
LED	Indicators	1 x Power LED
FRONT I/O	Serial	1 x RS232/422/485 (DB9)
	DIO	1 x 8-bit DIO terminal block
	CAN	1 x CAN 2.0B
	Buttons	1 x Power button
	SD	1 x uSD3.0 slot
	Antenna Hole	3 x holes for 5G Antenna
REAR I/O	Ethernet	1 x GbE (RJ-45) (optional from rear USB2)
	USB	2 x USB 3.1 Gen1 (Type A) 1 x USB 2.0 (Type A) 1 x USB 3.1 OTG (Type C) with DP
	Display	1 x HDMI 1.4
	Audio	1 x Line out/Mic in audio jack (This function will be available on the next version)
	Antenna Hole	3 x holes for 5G/Wifi Antenna
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds
POWER	Type	12VDC
	Connector	DC Jack
OS SUPPORT	Linux	Ubuntu 20.04 (Linux Kernel 5.4.2)
ENVIRONMENT	Operating Temperature	-20 to 60°C
	Storage Temperature	-40 to 85°C
	Relative Humidity	10 to 90% RH
MECHANISM	Construction	Aluminum + Metal
	Dimensions (W x H x D)	161 x 35.1 x 108.2 mm
	Weight	0.5 KG
STANDARDS AND CERTIFICATIONS	Certifications	CE, FCC, RoHS, UKCA (ongoing)

PACKING LIST

1 EC800-QRB system unit
