

# EPC-R3220

## TI Sitara™ AM3352 Cortex®-A8 ARM-Based IoT Gateway



### Features

- TI Sitara™ AM3352 Cortex®-A8 800MHz processor
- 1GB of DDR3-800 and 8 GB of eMMC NAND Flash onboard
- 2 Gigabit Ethernet ports
- 2 RS232/485, 1 USB OTG, 6 GPIO
- WiFi/BT/LTE solution ready
- Yocto Linux support
- -20 ~ 70 °C operating temperature/ 12~24V DC power supply
- Equipped with hardware watchdog timer for system protection



### Introduction

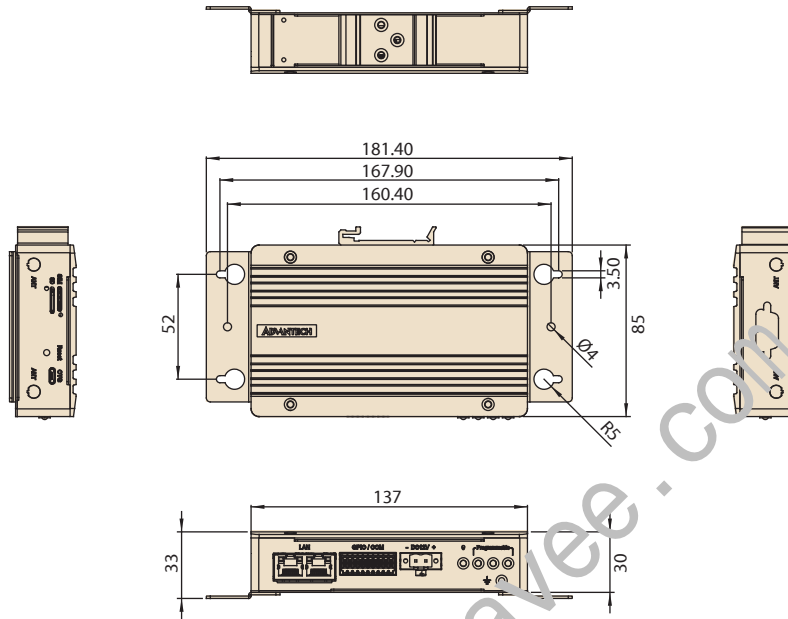
EPC-R3220 is a RISC-based box computer integrated with the TI Sitara AM3352 Cortex-A8 0.8GHz processor. It is designed for applications that require multiple connectivity points and low power consumption. The EPC-R3220 offers dual RS-232/485 serial ports with Modbus/OPC-UA protocol support for data collection, 6GPIOs for indication or device control, dual 10/100/1000 Ethernet ports, one wifi/BT onboard solution and one Mini-PCIE that can expand to an LTE solution. EPC-R3220 supports wide-ranging power input and temperature and supports both DIN-rail and wall mounting.

### Specifications

Form Factor		Box computer
Processor System	CPU	TI Sitara™ AM3352 Cortex®-A8 800MHz processor
	Capacity	1GB of onboard DDR3 at 800 MHz
	Flash	8 GB of eMMC NAND Flash for OS and 4 MB of SPI NOR Flash for ADV loader
Ethernet	Transceiver	RTL 8211
	Speed	2 x 10/100/1000 Mbps
WLAN	WiFi/BT	IEEE 802.11ac/a/b/g/n 2*2 WLAN+BT 4.2 On board (option)
WatchDog Timer		MSP430G2202 (timeout: 1 ~ 6553s, default 60s/power on/off 1s)
I/O	USB	1 x USB2.0 OTG
	Serial Port	2 x RS232/485 w/ 4wires
	GPIO	6
	I <sup>2</sup> C	1 by pin header
	SPI	1 by pin header
	Button	1 x Reset button
	Indicator	4 (1 x Power, 3 x User Programmable)
Expansion	Mini PCIe	1/USB signal only
	M.2	NA
	SD Socket	1 x Mirco SD slot
	SIM	1 x Nano SIM slot
	Antenna Hole	4
Power	Power Supply Voltage	12 ~ 24 V DC-in
	Power Type	2-pole lockable DC-in
	Power Consumption	4.7W (burning)
Environment	Operational Temperature	-20 ~ 70 °C
	Operating Humidity	5 ~ 95% relative humidity, non-condensing
Mechanical	Dimensions (W x D x H)	139 x 85 x 30 mm
Operating System		Linux Yocto2.4
Certifications		CE/FCC/CCC/BSMI/NCC/SRRC/UL/VCCI

## Dimensions

Unit: mm



## Ordering Information

Part Number	CPU	Memory	eMMC	SD	Serial	GPIO	USB OTG	LAN	Wi-Fi	TPM	Operating Temperature	Add-on
EPC-R3220IS-OLA1E	TI AM3352	1GB	8GB	1	1	1	1	2	-	-	-20 ~ 70 °C	DeviceOn
EPC-R3220IS-OLA1KE**	TI AM3352	1GB	8GB	1	1	1	1	2	1	1	-20 ~ 70 °C	DeviceOn
EPC-R3220IS-OMA1E	TI AM3352	1GB	8GB	1	1	1	1	2	-	-	-20 ~ 70 °C	CommBridge*
EPC-R3220IS-OMA1KE	TI AM3352	1GB	8GB	1	1	1	1	2	1	1	-20 ~ 70 °C	CommBridge*

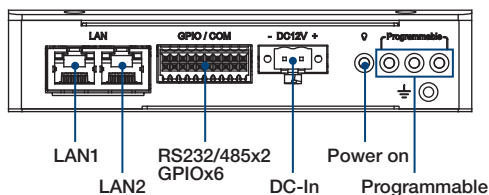
\*CommBridge only for China

\*\* Only for China & Taiwan

## Packing List

Part Number	Description
EPC-R3220	EPC-R3220 with 1GDDR/8GeMMC
1652008019-01	2x10P/2.54 Terminal Plug for COM/GPIO
1652005203	2P 90D(F) Plug-in block for power in

## External I/O



## Optional Accessories

Part Number	Description
96PSA-A36W12W7-5	ADP A/D 100-240V 36W 12V C6 LOCK DC JACK 62368
96PSA-A60W12W7-4	ADP A/D 100-240V 60W 12V LOCK DC PLUG WIDE TEMP
1700023307-01	DC jack/plug-in cable 1*2P-5.0 10 cm RSB-4220
170203183C	Power cord 3P Europe (WS-010+WS-083) 183 cm
170203180A	Power cord 3P UK 2.5A/3A 250 V 1.83 M
1700001524	Power cord 3P UL 10A 125 V 180 cm
1700019146	Power cord CCC 3P 10A 250V 183cm
ROM-ED20-00A1E	Debug adapter board
1700020562-01	Debug port cable
1700023619-01	USB OTG cable_typeA M to mirco USB
1950016423T101	DIN RAIL(BLACK WEAVE)
1960056982T003	MOUNTING BRACKET
1930001241	Screw M3x5L S/S D=4.8 H=1 (2+), for wall mount (x4) & DinRail (x3)
EMIO-220S-MPU01E	High Speed RS-422/RS-485 port module, 2-Ch, USB I/F, -40 ~ +85 °C
1750008800-01	Cable Ant.SMA/F-R-BH MFH4/113 BLK L100
1750008772-01	2Dipole Ant.D.B 2.4+5G WIFI 3/4.4dBi SMA/M-R BLK
968AD00479*	EC20CEFAG-MINIPCIE R2.1 LTE Cat 4 for China
1750008424-01	LTE Antenna Dipole L=148.5mm 4dBi A9703021
1750008461-01	Cable Ant. SMA/F-R-BH R/A MHF/113 WHT L83 WWAN1
1930006668-01	Screw for Mini-PCIE module

\* Please contact us to get suitable LTE solution for your region.