

PE100A

NXP® i.MX 8M ARM Cortex-A53 core, 4GB LPDDR4, 16G eMMC, HDMI, Dual LAN, 1*M.2 2230 E-key socket, 1*Mini-PCIe socket, 1*nano-SIM Card Slot, 3*USB 3.2 Gen 1

Features

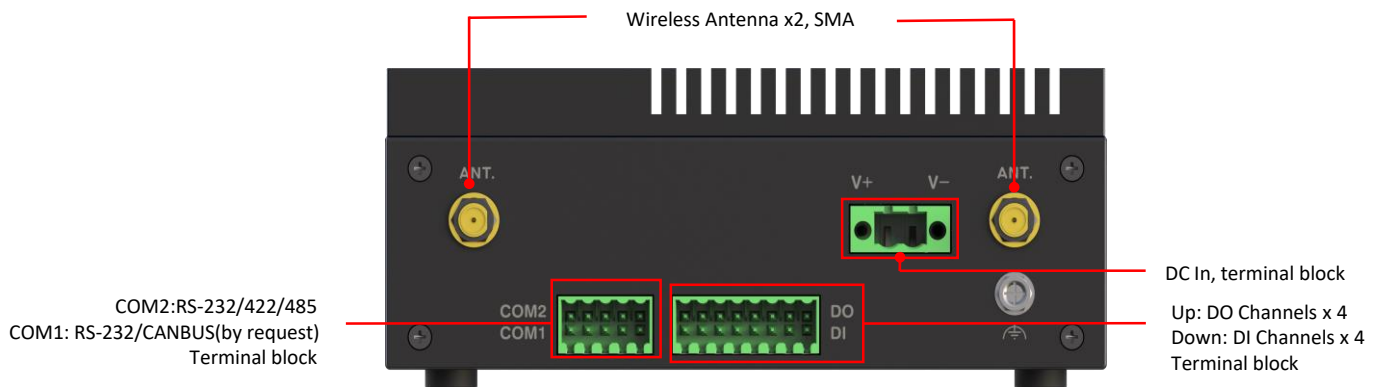
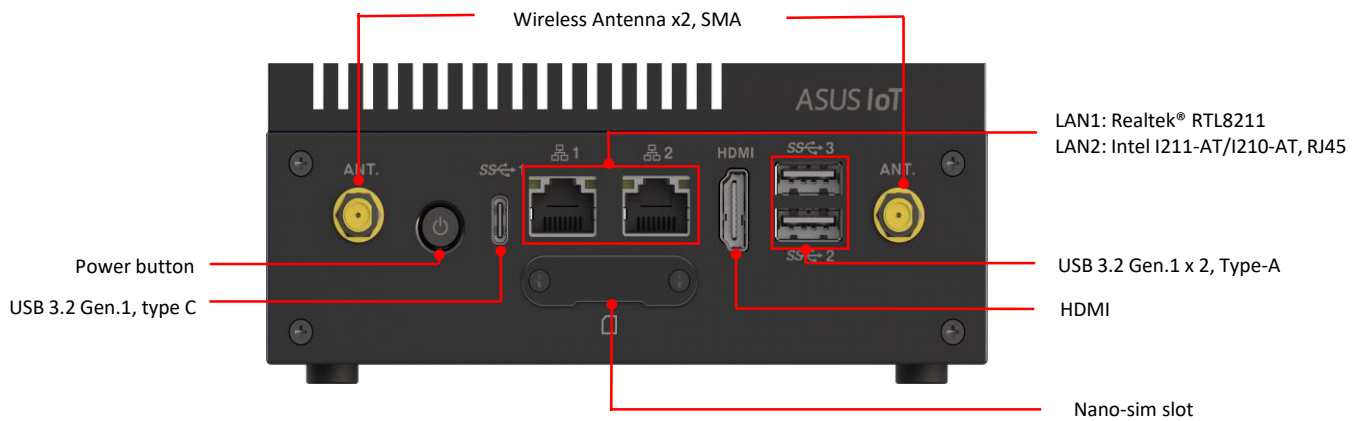
- Certified with RF Regulation: CE-RED (LTE module)
- 16GB on board eMMC, Mini PCIe slot for storage capacity
- Compact size gateway with low power consumption and scalable processor for diverse IoT applications
- Support Linux Yocto OS and Ubuntu server/ core
- Wide Operating Temperature Range: -20~60°C



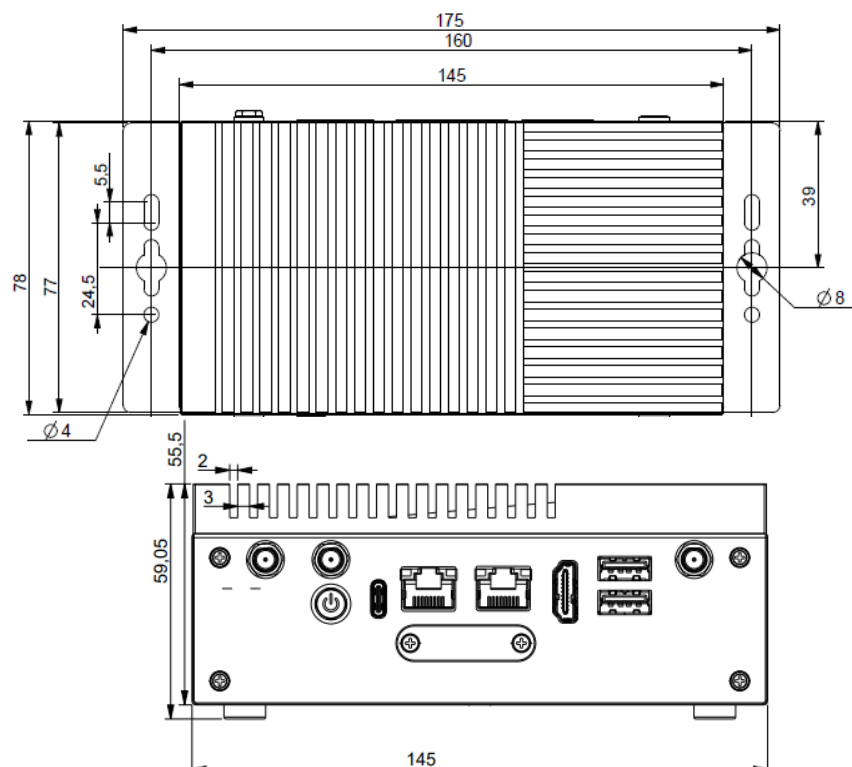
Specifications

System	CPU	NXP® i.MX 8M ARM Cortex-A53 Quad core , 1.3 GHz
	Memory	4 GB LPDDR4 onboard
	OS Storage	16 GB eMMC onboard
Wired Interfaces	Video	1 x HDMI 2.0, supports up to 3840 x 2160 @60Hz
	Ethernet	2 x 10/100/1000 Mbps, RJ45 1 x Realtek® RTL8211, supports WOL 1 x Intel I211-AT/I210-AT, supports WOL
	USB	2 x USB 3.2 Gen.1, Type-A 1 x USB 3.2 Gen.1, supports OTG, Type-C
	COM	1 x RS-232/CANBus (by request)(COM1) 1 x RS-232/422/485 (COM2), 2 x 5 terminal block
	DIO	4 x DI, 4 x GND, 2.5 KV optical isolation 4 x DO, 4 x GND, 10KV relay isolation, 2 x 8 terminal block
Wireless Interfaces	Wi-Fi	1 x M.2 2230 E-key socket, supports 802.11 a/b/g/n/ac + BT 4.2 module
	SIM	1 x nano-SIM slot
Expansion Slot	mPCIe	1 x mPCIe socket, supports SATA or USB signal for mSATA/LTE/Google®TPU module
	M.2 E key	1 x M.2 2230 E key socket, supports PCIe or USB signal for Wi-Fi/BT
AI	Edge TPU	Google® Coral Edge TPU (mPCIe socket)
Power	Power	12 to 24 V DC, 2-pin terminal block
Mechanical	Mounting	Wall mount/ Din Rail
	Dimensions	55.5(H) x 145(W) x 78(D) mm
	Weight	0.775 KG
Environment	Operating Temp.	-20~60°C with wide temperature parts, fanless
	Storage Temp.	-40~85°C
	Relative Humidity	10 to 95% (non-condensing)
	EMC	CE(ITE), FCC, VCCI, RCM,BSMI, CCC
	RF Regulation	LTE: CE-RED
	Safety	UL,CB, CCC, BSMI, CE
	Vibration	Operating: 0.21Grms, 5~500 Hz, 20min duration
	Shock	Operating: 50 G, half sine 11ms duration
Security	Green	GA (RoHS)
	TPM header	Cooperate with TPM 2.0 powered by Nuvoton NCPT 750 (Optional)
Others	Watch dog timer	Yes. Set up by software
	Operating System	Linux Yocto, Ubuntu server/ core

Appearance



Dimension (mm)



Ordering Information

CPU	DRAM	eMMC	TPM built-in	mPCIe socket	M.2 2230 E-key socket	Operating temperature ¹
NXP® i.MX 8M	4 GB	16 GB	optional	TPU or LTE (EC25-E) or mSATA SSD (optional)	Wi-Fi module (optional)	-20~60°C / 0~40°C

* The part number might vary for different regulations and package. Please consult the local sales representative for the exact 90PN.

1. Depends on Selective Key Part

Packing list

Description	Quantity
Adapter cable terminal block 2 pin to DC, 10cm (without switch)	1
Power adapter (optional)	1
PE100A wall mount bracket	2
2x5 terminal plugs	1
2x8 terminal plugs	1
Dust cover set (1 HDMI; 3 USB; 2 LAN; 4 SMA)	1

* The part number might vary due to part number revision.

Optional Accessories (purchased separately)

Part Number	Description
ADAPTER	
	Power adapter, input voltage 100 to 264VAC, output voltage 12VDC with 2A DC load, 0 to 40°C operating temperature
POWER CORD	
	Power cord with United States (US) plug, 180cm
	Power cord with Europe (EU) plug, 180cm
	Power cord with China (CN) plug, 180cm
	Power cord with Japan (JP) plug, 180cm
	Power cord with Australia (AU) plug, 180cm
	Power cord with United Kingdom (UK) plug, 180cm
	Power cord with Korea (KR) plug, 180cm
	Power cord with Swiss (CH) plug, 180cm
	Power cord with Taiwan (TW) plug, 180cm
GPS ANTENNA	
	Passive type GPS Dipole antenna, 1575.42MHz, 0.85dBi, SMA, antenna length 16.3cm
4G LTE ANTENNA	
	Omni-directional rubber duck GPRS/EDGE/UMTS/HSPA/LTE antenna, 704 to 960MHz & 1710 to 2690MHz, 3.5 dBi, RP-SMA, antenna length 10cm
WI-FI ANTENNA	
	Omni-directional rubber duck Wi-Fi antenna, 2.4/5GHz, 2dBi, RP-SMA, antenna length 8.6cm

* Please check with your importer or integrator for system level certification..