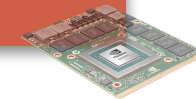


Edge AI Computer

RVP-P1M/PX1M
203 mm x 125 mm x 79 mm**MXM GPU | TYPE A**

Fit Anywhere and Everywhere

Wide Temperature -40 °C ~ 60 °C

SPECIFICATION



Features

- ✓ Supports NVIDIA® Ampere/Ada Lovelace TYPE A MXM GPU Module, up to 65W TGP
- ✓ Intel® 13th/12th-Gen Core™ i7/i5/i3 (15W, 28W)
- ✓ 2x LAN Ports (RJ45 or M12 Connectors)
- ✓ 3x Displays (2x HDMI, 1x DP)
- ✓ 1x RS232/422/485, 1x RS232
- ✓ 8x USB (Support 6x USB3)
- ✓ 1x Mic In/Line Out
- ✓ 2x M.2 2242 M key (SATA III SSD) , support Raid 0/1
- ✓ 1x M.2 2242/3052 B key with SIM slot, support 4G/5G
- ✓ 1x Full Size Mini-PCIe with SIM slot, support 4G/5G
- ✓ 1x M.2 Key E Type 2230 for WIFI/BT/GPS
- ✓ 6~48V Wide DC In Voltage Input,
- ✓ Ignition Power switch Control
- ✓ Remote Power on/off Control

Product Name	RugCon-RVP-P1M / RVP-PX1M (M12 LAN)
Generation	Intel® 13th/ 12th-Gen Core™ i7/i5/i3 (U_15W, P_28W)
Memory	Max. Capacity : 64GB DDR5 with 2x SO-DIMM
Display	3x Display 1x Display Port, 4096*2304@60Hz 2x HDMI , 4096*2160@30Hz
LAN	1x 2.5 GbE , 1x GbE , M12 A-coded connector for LAN Ports (RVP- PX1M)
CAN	N//A
COM	1x RS232/422/485, 1x RS232
USB	8x USB (6x USB3.2 GEN1x1 5Gbps, 2x USB 2.0)
Audio	1x 3.5mm jack for Mic-In and Line-out
DIO	N//A
Storage	2x M.2 2242 M key (SATA III SSD) , Support Raid 0/1 , (1x M.2 2242 share with M.2 3052)
Internal Expansion	1x M.2 2242/3052 M-B key with SIM slot, support 4G/5G 1x Full Size Mini-PCIe with SIM slot, support 4G/5G 1x M.2 Key E Type 2230 for WIFI/BT/GPS
MXM Expansion	Support TYPE A : 82 x 70 mm MXM GPU Module
Mechanical	Dimension : 203(W) x 125(D) x 79(H) mm , Weight : 1.95 Kg , Mounting : Wall Mount
Temperature	Operating Temperature : -40° C ~ 70 °C (According to CPU) , TGP 65W (45 °C) , TGP 35W (60 °C) Storage Temperature : -40°C to 85°C
Humidity	Operating : 0~95%(non-condensing) Storage : 10~90%
Power	1x 3-pin pluggable terminal block for 6~48V DC Input 200V/1ms Surge Protection, Reverse-Voltage, Over-Voltage, Under-Voltage, Over-Current Protection 1x Power Button 1x 4-pin pluggable terminal block for Ignition/Remote
Vibration / Shock	Vibration test according to MIL-STD-810H, Method 514.8, Category 4 Shock test according to MIL-STD-810H, Method 516.8, Procedure I
EMC	CE/FCC Class A , according to EN 55032 & EN 55035 , E-Mark / EN50155 / EN45545-2 by request

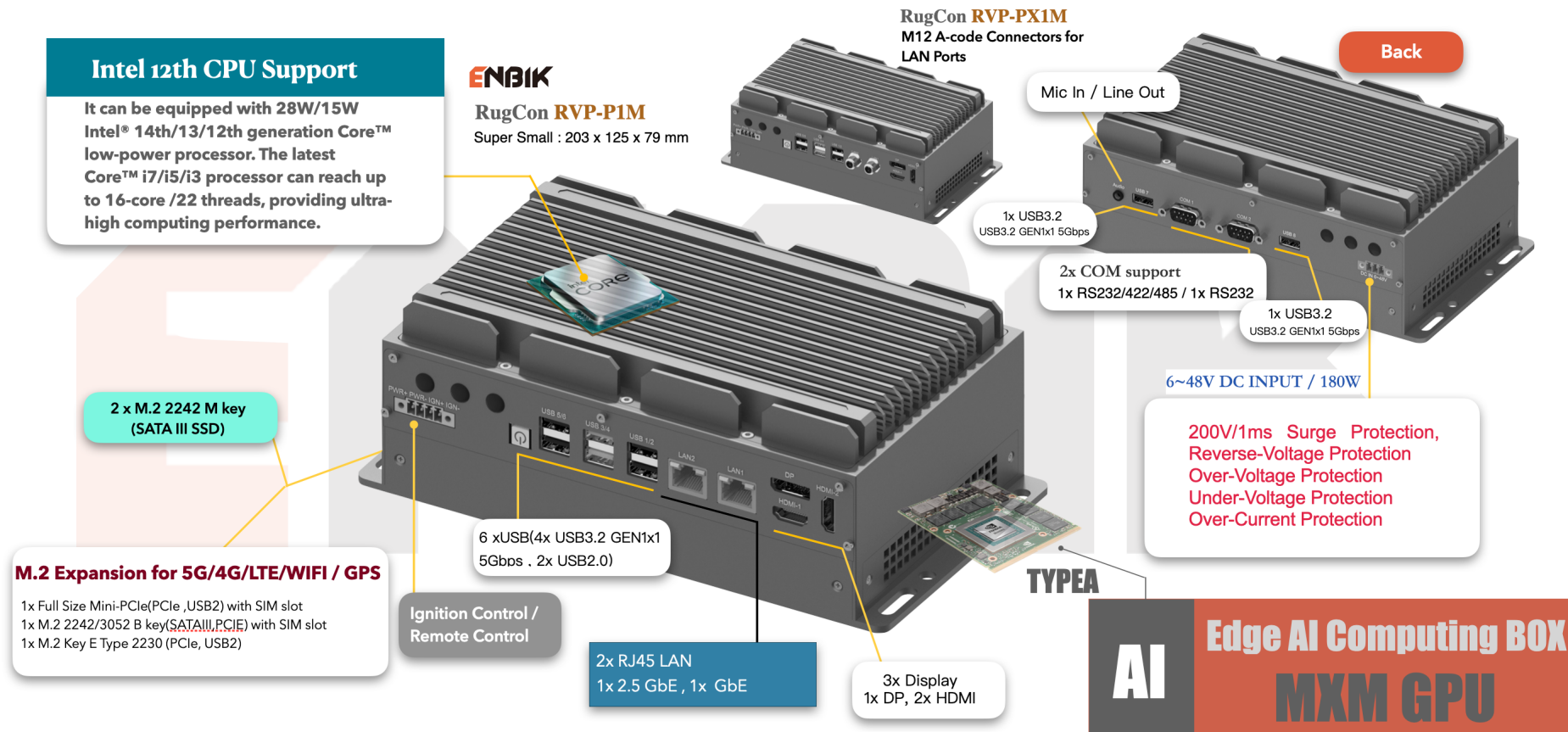
Product Introduction

ENBIK RugCon-**RVP-P1M/PX1M** is a Mini-Small **wide temperature** edge AI computer equipping MXM GPU with only 203 x 125 x 79 mm size ideal for space-constrained setups. **RVP-P1M/PX1M** combines low power consumption Intel® 13th/ 12th generation Core™ 15W/28W processor with high-performance AI computing ability which can effectively solve the problem of edge artificial intelligence deployment with limited power supply. **RVP-P1M/PX1M** offers a wide range of I/O ports including 2x LAN(2.5GbE/GbE), 1x RS232/422/485, 1x RS232, 8x USB, 3x displays and Multiple M.2 internal expansion slots for 5G/4G/WIFI/GPS. **RVP-P1M/PX1M** also has 2x M.2 2242 SATA III slots, which can install two SSD at the same time.

What is exciting is that the **RVP-P1M/PX1M**, can actually be compatible with industry-standard MXM GPUs and **fully match NVIDIA RTX4070/RTX4060/RTX4050/RTX2000/A2000** or other MXM GPU Module up to **321 TOPS**, for NVIDIA GPU which undoubtedly makes software developers more excited. The rich NVIDIA software ecosystem makes edge artificial intelligence deployment faster and easier to implement, effectively solves the installation and low-latency reasoning problems of various artificial intelligence models at the edge, and quickly makes various decisions and judgments at the edge. Modular GPU scalability ensures seamless upgrades to meet evolving application demands, the ENBIK's **RVP-P1M/PX1M** is definitely the best choice for edge deployment of demanding artificial intelligence tasks, limited space and limited power in various edge applications.

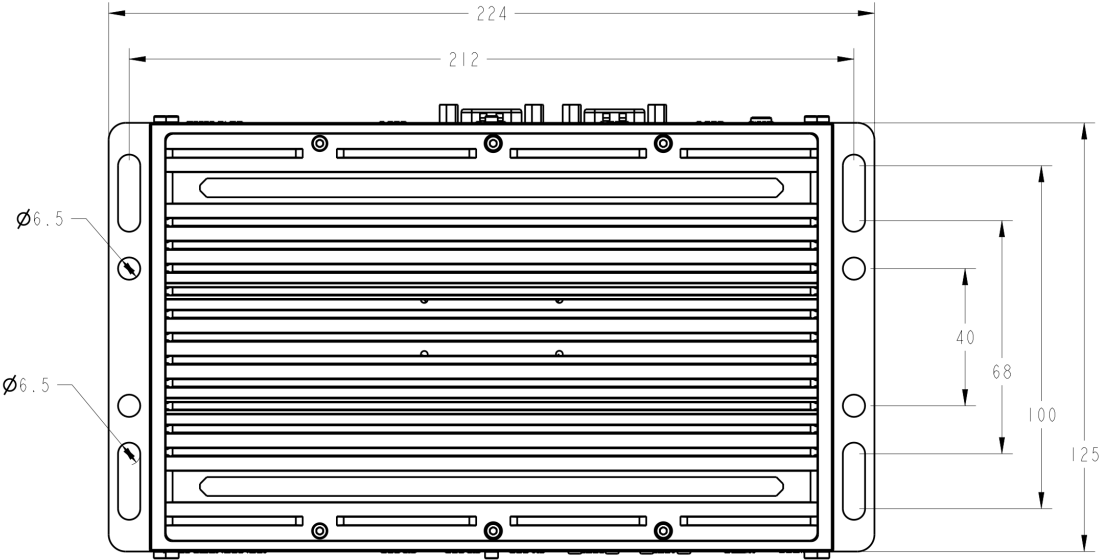
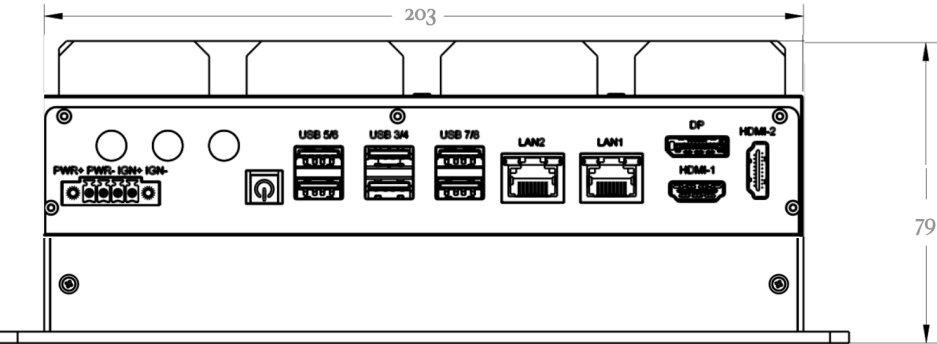
Product Application

ENBIK RugCon-**RVP-P1M/PX1M** is suitable for edge computing, AIoT, machine vision, AGV/AMR, In-Vehicle systems, rail transit, robot control and automation control, as well as various harsh and extreme edge environments with limited installation space and limited power supply.



Dimension :

Compact Slim : 203 mm x 125 mm x 79 mm



CPU Support :

Intel 12th CPU Support List

12th Gen Intel® Core™ mobile processors (formerly Alder Lake-P)	
CPU Module	Description
i7-1260P	Intel® Core™ i7-1260P processor with 4 P-cores and 8 E-cores up to 4.7GHz 18MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 96 EUs Intel® code name Alder Lake-P (P-Series,28W)
i5-1250P	Intel® Core™ i5-1250P processor with 4 P-cores and 8 E-cores up to 4.4GHz 12MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 80 EUs Intel® code name Alder Lake-P (P-Series,28W)
i5-1235U	Intel® Core™ i5-1235U processor with 2 P-cores and 8 E-cores up to 4.4GHz 12MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 80 EUs Intel® code name Alder Lake-P (U-Series,15W)
i3-1215U	Intel® Core™ i3-1215U processor with 2 P-cores and 4 E-cores up to 4.4GHz 10MB Intel® Smart Cache Intel® UHD Graphics 64EU Intel® code name Alder Lake-P (U-Series,15W)

Intel 13th CPU Support List

13th Gen Intel® Core™ mobile processors (formerly Raptor Lake-P)	
CPU Module	Description
i7-1360P	Intel® Core™ i7-1360P processor with 4 P-cores and 8 E-cores up to 5.0GHz 18MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 96 EUs Intel® code name Raptor Lake-P (P-Series,28W)
i5-1350P	Intel® Core™ i5-1350P processor with 4 P-cores and 8 E-cores up to 4.7GHz 12MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 80 EUs Intel® code name Raptor Lake-P (P-Series,28W)
i5-1335U	Intel® Core™ i5-1335U processor with 2 P-cores and 8 E-cores up to 4.6GHz 12MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 80 EUs Intel® code name Raptor Lake-P (U-Series,15W)
i3-1315U	Intel® Core™ i3-1315U processor with 2 P-cores and 4 E-cores up to 4.5GHz 10MB Intel® Smart Cache Intel® UHD Graphics 64EU Intel® code name Raptor Lake-P (U-Series,15W)

Note1 : Embedded or other Processors also be supported , please contact our sales channel .

Select the power of artificial intelligence

GeForce RTX Series				QUADRO EMBEDDED	
AI Chip	RTX4070-8G	RTX4060-8G	RTX4050-6G	RTX2000-8G	A2000-8G
Generation	Ada Generation	Ada Generation	Ada Generation	Ada Generation	Ampere
Chip Clock	735MHz (Boost 1230MHz)	1140MHz (Boost 1470MHz)	1140MHz (Boost 1605MHz)	1635MHz(Boost 2115MHz)	1087MHz(Boost 1552MHz)
Memory	8GB GDDR6 128bit	8GB GDDR6 128bit	6GB GDDR6 96bit	GDDR6 8GB 128bit	GDDR6 8 GB 128bit
Memory Clock	2000 MHz	2000 MHz	2000 MHz	1250 MHz	1375 MHz
Memory Bandwidth	256.0 GB/s	256.0 GB/s	192.0 GB/s	256.0 GB/s	176.0 GB/s
Single Precision	15.71 TFLOPS	12.22 TFLOPS	8.218 TFLOPS	14.176 TFLOPS	8.958 TFLOPS
TOPS	321	232	194	232	-
CUDA	4608	3072	2560	3072	2560
Tensor Core	144	96	80	96	80
RT core	36	24	20	24	20
TGP	65W	60W	35W	56.5W	60W
Dimension	TYPE A : 82 x 70 mm	TYPE A : 82 x 70 mm	TYPE A : 82 x 70 mm	TYPE A : 82 x 70 mm	TYPE A : 82 x 70 mm

Note 2 : Embedded or other MXM GPU Module also be supported , please contact our sales channel .