

RugCon : RVP-Plus

RVP-P1F / PX1F

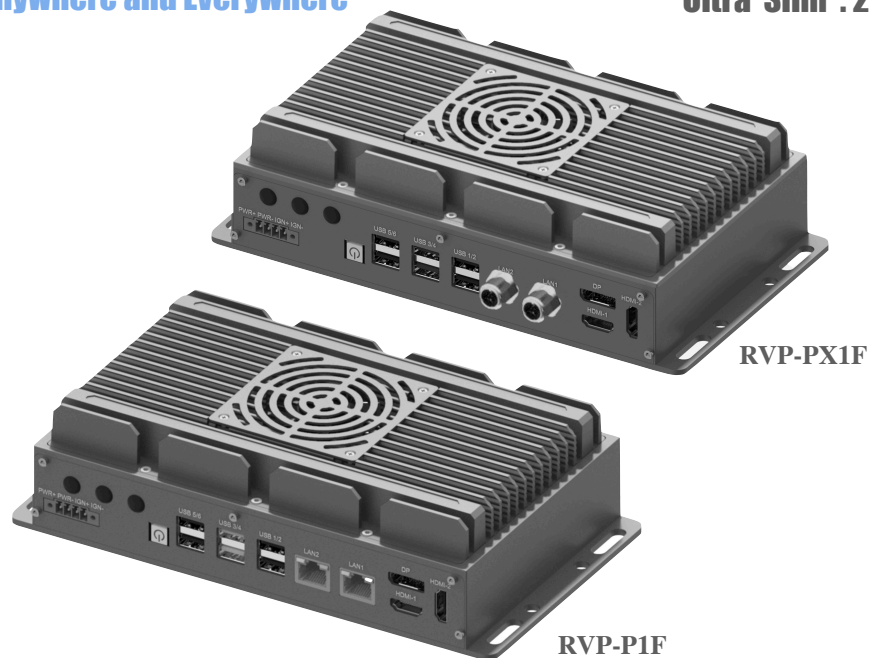
Ultra-Slim Wide Temperature Rugged Edge Computer

Wide DC INPUT 6V~48V

Equipped with the latest Intel® 12th/13th generation Core i processor (U_15W,P_28W,H_45W), 2 network ports / 8 USB / 3 Display / 2 COM / Dual M.2 SSD / 5G / WIFI and vehicle ignition power control / remote power control

Fit Anywhere and Everywhere**Ultra Slim : 203 mm x 125 mm x 54 mm**

SPECIFICATION



Features

- ✓ Intel® 13th/ 12th-Gen Core™ i9/i7/i5/i3 (15W/28W/45W)
- ✓ 2x LAN Ports (RJ45 or M12 Connectors)
- ✓ 3x Displays (2x HDMI, 1x DP)
- ✓ 1x RS232/422/485, 1x RS232
- ✓ 8x USB (Support 6x USB3.2 GEN1)
- ✓ 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-PCle 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-P1F / RVP-PX1F (M12 LAN)
Generation	Intel® 13th/ 12th-Gen Core™ i9/i7/i5 (U_15W, P_28W, H_45W)
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- PX1F)
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-PCle with SIM slot, support 4G/5G 1x M.2 Key E Type 2230 for WIFI/BT/GPS
Mechanical	Dimension : 203(W) x 125(D) x 54(H) mm , Weight : 1.3 Kg , Mounting : Wall Mount
Temperature	Operating :Standard : -40°C to 70°C (According to TDP) 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-P1F/PX1F is a **mini-slim rugged wide temperature edge computer** that can be equipped with **desktop-level high-performance processors**. It is only 203 x 125 x 54 mm, which is very suitable for space-limited installation and deployment, and perfectly combines Intel® 13/12th generation Core™ i9/i7/i5/i3 (15W/28W/45W) high-performance processor and precise I/O design. **RVP-P1F/PX1F** provides a wide range of I/O ports, including 2 LANs, 1 RS232/422/485, 1 RS232, **8 USBs**, **2 HDMI**, **1 DP** and multiple M.2 internal expansion slots for 5G/4G/WIFI/GPS. **RVP-P1F/PX1F** also has 2 M.2 2242 SATA III, which can install two solid-state drives at the same time.

ENBIK RVP-P1F/PX1F supports MXM expansion interface, which can flexibly integrate **ENBIK's MXM GPU AI computing box** to improve edge AI deep learning and reasoning capabilities. While driving high-performance computing with low-power consumption configuration, it helps to reduce power consumption. With high computing power, high stability and high reliability, it helps customers achieve deployment-intensive artificial intelligence reasoning applications and maintain high cost-effectiveness.

Product Application

ENBIK RugCon-RVP-P1F/PX1F is suitable for edge computing, IoT, machine vision, AGV/AMR, In-Vehicle systems, rail transit, robot control, drone and automation control, as well as various harsh and extreme edge environments with limited installation space and limited power supply.

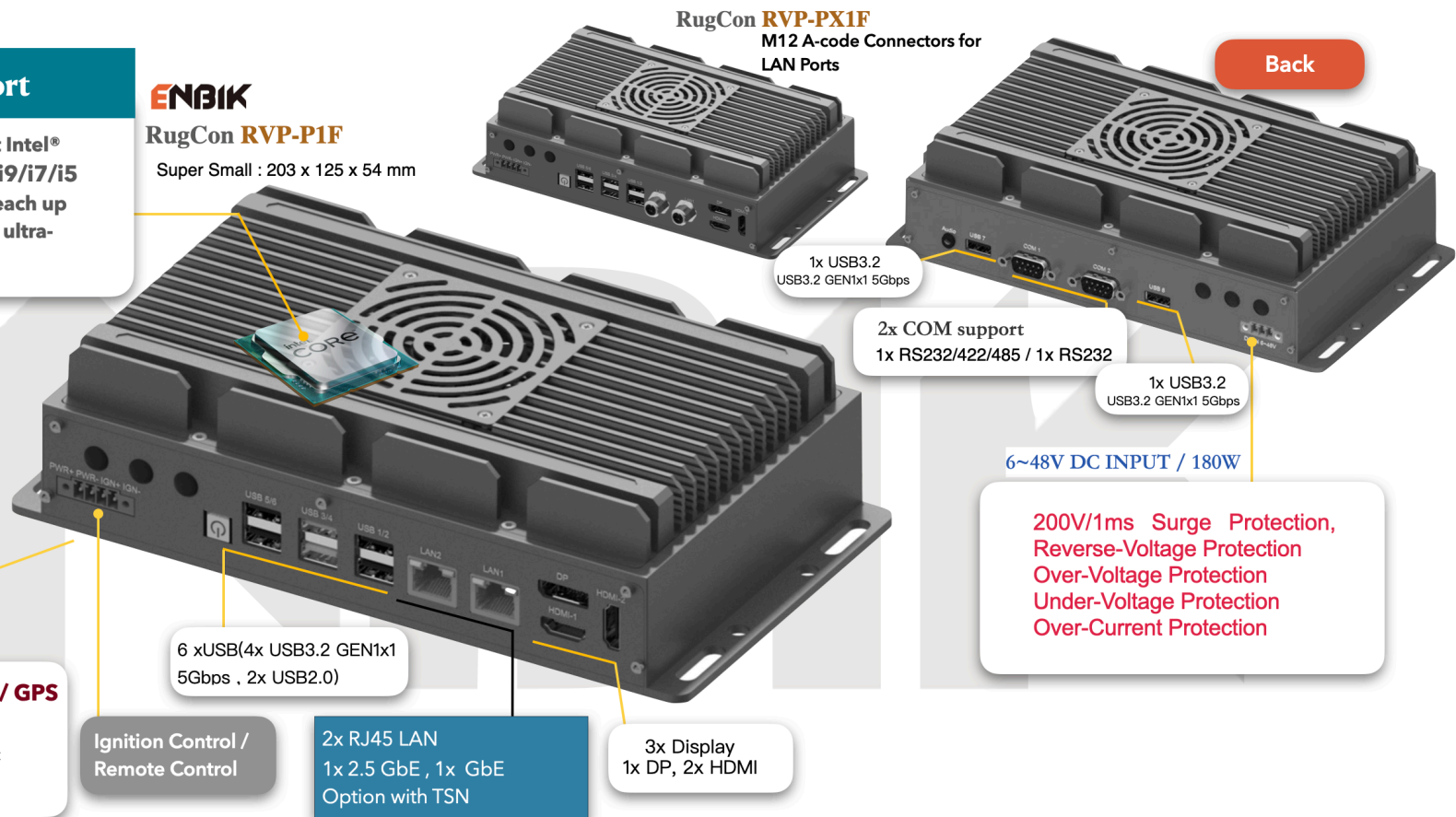
Intel 12th CPU Support

It can be equipped with the latest Intel® 14th/13/12th generation Core™ i9/i7/i5 (15W/28W/45W) processor can reach up to 16-core /22 threads, providing ultra-high computing performance.



RugCon RVP-P1F

Super Small : 203 x 125 x 54 mm



2 x M.2 2242 M key (SATA III SSD)

M.2 Expansion for 5G/4G/LTE/WIFI / GPS

1x Full Size Mini-PCIe(PCIe, USB2) with SIM slot
1x M.2 2242/3052 B key (SATA III, PCIe) with SIM slot
1x M.2 Key E Type 2230 (PCIe, USB2)

Ignition Control / Remote Control

2x RJ45 LAN
1x 2.5 GbE, 1x GbE
Option with TSN

3x Display
1x DP, 2x HDMI

1x USB3.2
USB3.2 GEN1x1 5Gbps

2x COM support
1x RS232/422/485 / 1x RS232

1x USB3.2
USB3.2 GEN1x1 5Gbps

6~48V DC INPUT / 180W

200V/1ms Surge Protection,
Reverse-Voltage Protection
Over-Voltage Protection
Under-Voltage Protection
Over-Current Protection

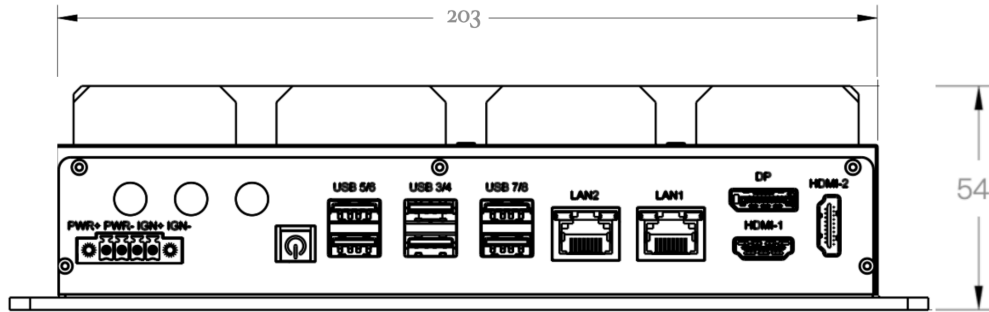
Back

RugCon RVP-PX1F

M12 A-code Connectors for LAN Ports

Dimension :

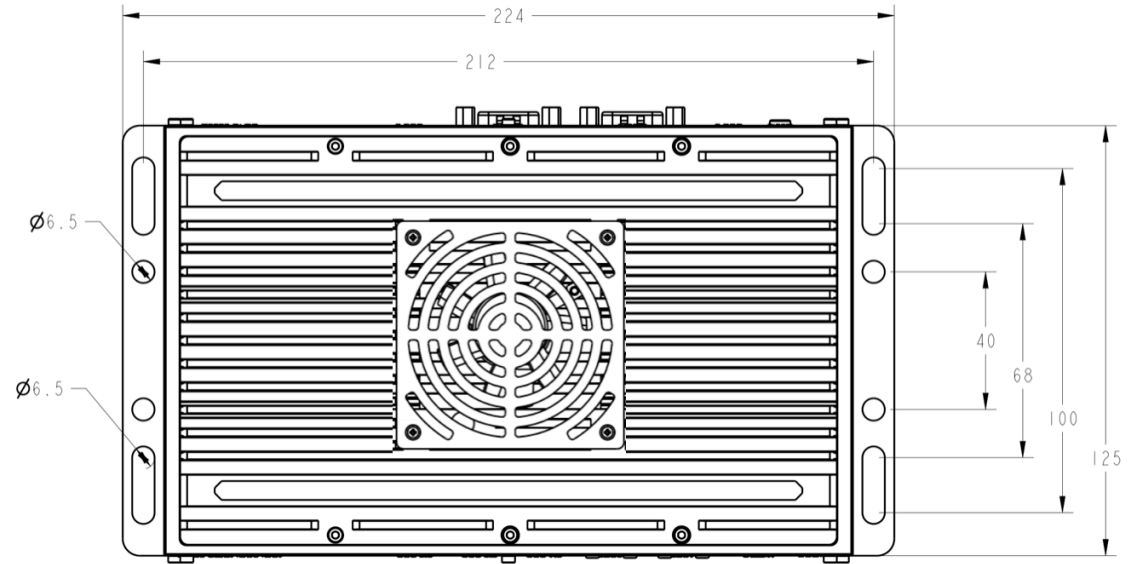
Compact Slim : 203 mm x 125 mm x 54 mm



CPU Support :

Intel 12th CPU Support List

12th Gen Intel® Core™ mobile processors (formerly Alder Lake-P)	
CPU Module	Description
i9-12900H	Intel® Core™ i9-12900H processor with 6 P-cores and 8 E-cores up to 5.0GHz 24MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 96 EUs Intel® code name Alder Lake-P (H-Series,45W)
i7-12700H	Intel® Core™ i7-12700H processor with 6 P-cores and 8 E-cores up to 4.7GHz 24MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 96 EUs Intel® code name Alder Lake-P (H-Series,45W)
i5-12600H	Intel® Core™ i5-12600H processor with 4 P-cores and 8 E-cores up to 4.5GHz 18MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 80 EUs Intel® code name Alder Lake-P (H-Series,45W)
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
i9-13900HK	Intel® Core™ i9-13900HK processor with 6 P-cores and 8 E-cores up to 5.4GHz 24MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 96 EUs Intel® code name Raptor Lake-P (H-Series,45W)
i7-13800H	Intel® Core™ i7-13800H processor with 6 P-cores and 8 E-cores up to 5.2GHz 24MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 96 EUs Intel® code name Raptor Lake-P (H-Series,45W)
i5-13600H	Intel® Core™ i5-13600H processor with 4 P-cores and 8 E-cores up to 4.8GHz 18MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 80 EUs Intel® code name Raptor Lake-P (H-Series,45W)
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)

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