

Edge AI Computer

RV2-T1M / X1M
210 mm x 176 mm x 116 mm**Reach i7**
i7-1360P/PE/PRE**MXM GPU**

Reach to i7-1360P/PE



Features

- ✓ 3x LAN with 2x PoE+ support , RV2-X1M with M12 connectors
- ✓ 4x RS232/422/485, 2x RS232
- ✓ 6x USB (2x USB3.2 Gen2 , 1x USB3.0)
- ✓ 1x Mic In/Line Out
- ✓ 4 Channel isolated DI, 4 Channel isolated DO
- ✓ 2x Display (DP+DVI-D)
- ✓ 2x M.2 2280 SATAIII , support Raid 0/1
- ✓ 1x M.2 2242/3052 B key with SIM for 4G/5G/LTE
- ✓ 1x Full Size Mini-PCle with SIM for 4G/5G/LTE/WIFI
- ✓ 3x M.2 Key E Type 2230 for WIFI/BT/GPS
- ✓ Optional for 1x M.2 Key M Type 2280 (PCIE x4 GEN4) especially for AI Card or NVME SSD
- ✓ Wide voltage 6~48V DC input,
- ✓ 1x DC Output Voltage 12V
- ✓ Ignition /remote power control

SPECIFICATION

Product Name	RugCon Series , RV2-T1M (RJ45 LAN) / RV2-X1M (M12)
Generation	Intel® 13th/ 12th-Gen Core™ i7 /i5 /i3 (U_15W, P_28W)
Memory	Max. Capacity : 64GB DDR5 with 2x SO-DIMM
Display	2x Display : 1x Display Port (4096*2304@60Hz) , 1x DVI (1920*1200@60Hz)
LAN	1x 2.5 GbE with TSN support , 2x 2.5GbE , M12 X-coded connector for LAN Ports (RV2-X1M) Optional for 2 PoE power supply , 802.11 af/at mode
CAN	N/A
COM	1x Isolated RS232/422/485 (COM5) , 3x RS232/422/485 (COM 1/4/6), 2x RS232 (COM 2/3)
USB	2x USB 3.2 Gen2 / 1x USB3.0 / 3x USB 2.0,
Audio	1x 3.5mm jack for Mic-In and Line-out
DIO	4 Channel isolated DI, 4 Channel isolated DO
Storage	2x M.2 2280 M key (SATA III) , support Raid 0/1
Internal Expansion	1x M.2 2242/3052 B key with SIM slot supporting 4G/5G/LTE 1x Full Size Mini-PCle with SIM slot supporting 4G/5G/LTE 3x M.2 Key E Type 2230 for BT/GPS
MXM Expansion	Support TYPE A : 82 x 70 mm , TYPE B : 82 x 105 mm MXM GPU Module
Mechanical	Dimension : 210.6 (W) x 176 (D) x 116 (H), Weight : 2.9 Kg , Mounting : Wall Mount
Temperature	Operating :Standard : -25° C~70 °C , Extended Option : -40° C~85 °C Storage Temperature : -40°C to 85°C
Humidity	10% to 90% , non-condensing
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 1x 2-pin pluggable terminal block for 12V DC output
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



1. Intel® Core I 12th/13th
i7 / i5 / i3 / Core Ultra (U_15W, P_28W)

2. 3 RJ45 LAN
1x 2.5 GbE with TSN support, 2x 2.5 GbE
Optional 2 Power Over Ethernet Supply, 802.11 a/f/at mode

3. 2x M2. 2280 SSD
M.2 2280 M key, SATA III, Raid 0/1 protection

4. M.2 Expansion for 5G/4G/LTE/WIFI / GPS
1x M.2 2242/3052 B key with SIM slot supporting 4G/5G/LTE
1x Full Size Mini-PCIe with SIM slot supporting 4G/5G/LTE
3x M.2 Key E Type 2230 for BT/GPS

5. Power Module 180W or 300W
6~48V DC INPUT & 12V DC OUTPUT
Ignition & Remote Power Control
Surge Protection, Reverse-Voltage, Over-Voltage, Under-Voltage, Over-Current Protection

6. 2 Display
1x DVI (1920*1200@60Hz),
1x DP (4096*2304@60Hz)

7. 6 USB
2x USB 3.2 Gen2 / 1x USB3.0 /
3x USB 2.0,

8. 6 COM
4x RS232/422/485, 2x RS232

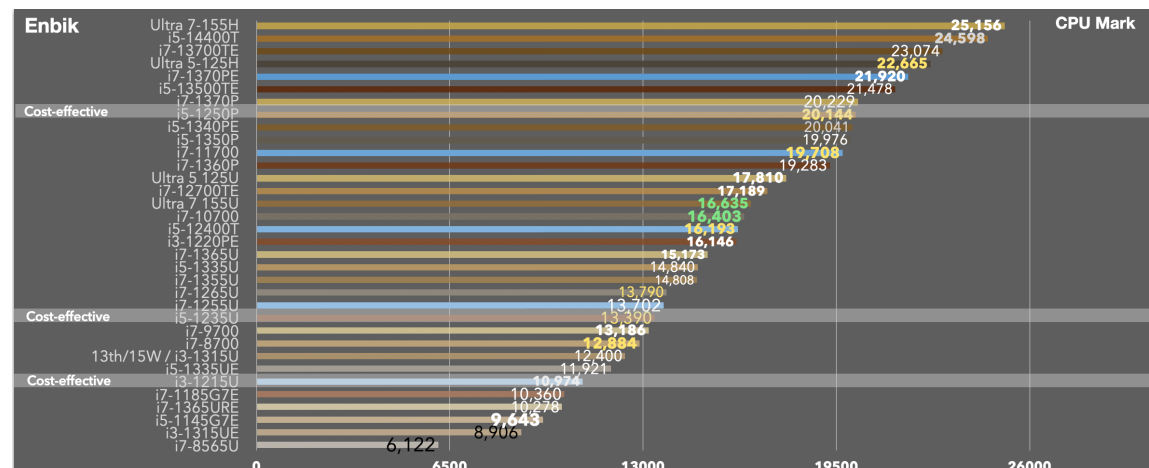
9. 4x DI & 4x DO (Isolation)

10. M12 X-code Connectors for LAN Ports
RugCon RV2-X1M

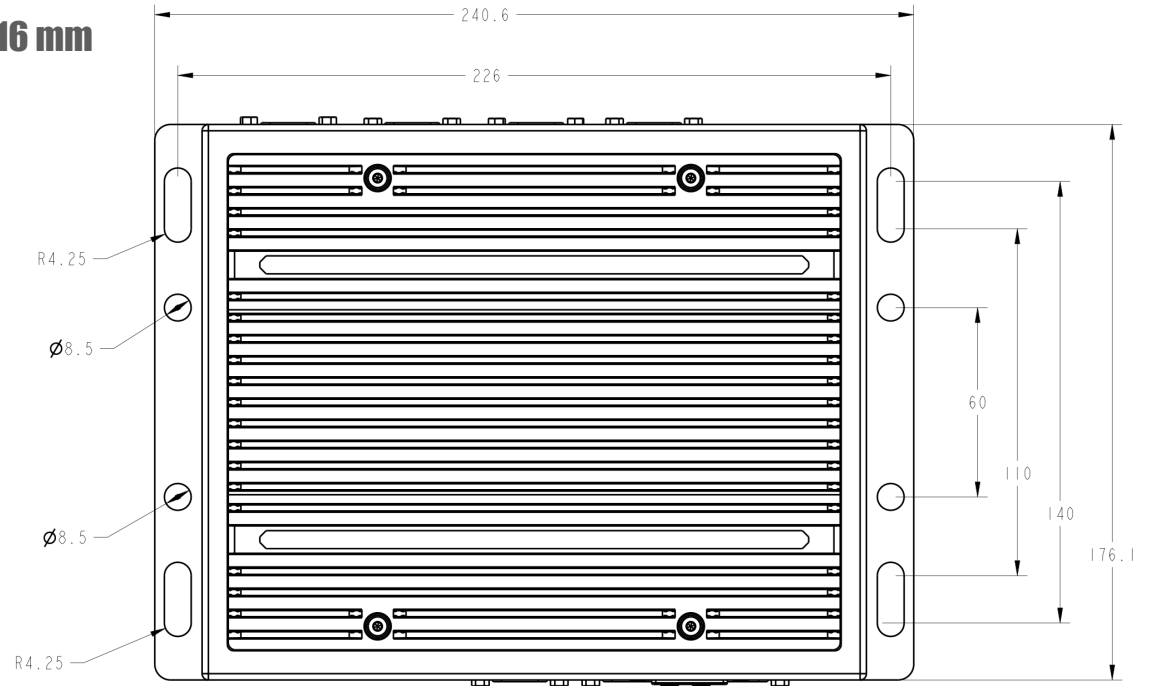
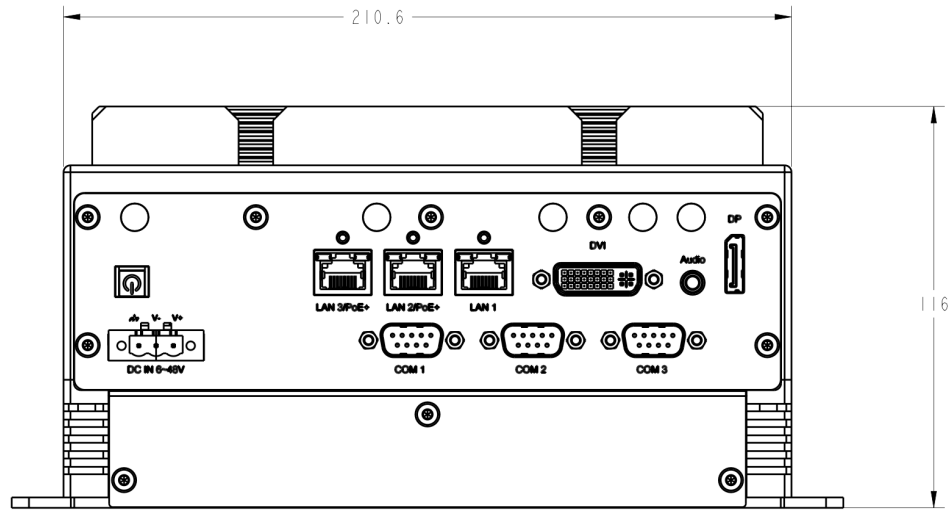
TYPEA / TYPEB

AI Edge AI Computing BOX
MXM GPU

Performance



Dimension : Compact Size : 210 mm x 176 mm x 116 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)

Note : We also supply embedded CPU version , so if you need PE(28W) or UE(15W) CPU , please contact our sales channel .

[illegible]