

RugCon-RV1-T3 / X3

Compact Small : 177 mm x 127 mm x 78 mm

Wide DC INPUT 6V~48V

Intel® 12th/13th generation Core i processor (U_15W), 4 network ports / 6 USB / 5 COM / **2 CAN** / 8 IDIO / 5G / WIFI and ignition / remote power control

Reach to i7-1365U/UE



Features

- ✓ 4x LAN with PoE+ support , RV1-X3 with M12 connectors
- ✓ 2x Isolated CANBus
- ✓ 3x 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)
- ✓ 1x M.2 2242 SATAIII
- ✓ 1x M.2 2242/3052 B key with SIM for 4G/5G/LTE
- ✓ 1x Full Size Mini-PCIe with SIM for 4G/5G/LTE/WIFI
- ✓ 1x 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/1A
- ✓ Ignition /remote power control

RugCon-RV1-T3/X3 SPECIFICATION

Product Name	RugCon Series , RV1-T3 / RV1-X3 (M12)
Generation	Intel® 14th/ 13th/ 12th-Gen Core™ i7 /i5 /i3 (U_15W)
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 , 3x GbE , M12 X-coded connector for LAN Ports (RV1-X3) Optional for 4 PoE power supply , 802.11 af/at mode
CAN	2x CAN 2.0 (Isolation)
COM	3x RS232/422/485, 2x RS232
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	1x M.2 2242 M key (SATA III SSD)
Internal Expansion	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 1x M.2 Key E Type 2230 for BT/GPS Optional for 1x M.2 Key M Type 2280 (PCIE x4 GEN4) especially for AI Card or NVME SSD
Mechanical	Dimension : 176.6(W) x 129(D) x 77(H) mm, Weight : 1.7 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

CPU Information

It can be equipped with 15W Intel® 14/13/12th generation Core™ low-power processor. Up to 12 cores /14 threads, providing ultra-high computing performance.



RugCon RV1-T3

Compact Small : 177 x 129 x 77 mm

RugCon RV1-X3

M12 X-code
Connectors for
LAN Ports

Interface screw lock

Network ports, USB ports, COM ports, display interfaces, etc. all support screw locks to ensure a stable connection in shock and vibration environments.

4x RJ45 LAN or M12
4x PoE+ support

1x 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(USB3_2) with SIM slot
1x M.2 Key E Type 2230 (PCIe, USB2)

Isolated CAN BUS

3 COM
1x RS232/422/484 / 2x RS232

DVI
Mic In / Line Out
DP

Optional support 1x M.2 2280 Key M (PCIe x4), for AI acceleration card or NVME SSD etc.

1x12V/2A
Output Voltage

Remote
Ignition Control

4x USB (2x
USB3.2 Gen2)

RS232/422/484

8x Isolated DIO

RS232/422/484

2个USB口 (1x USB3.0)

Isolated CAN bus

6~48V DC INPUT

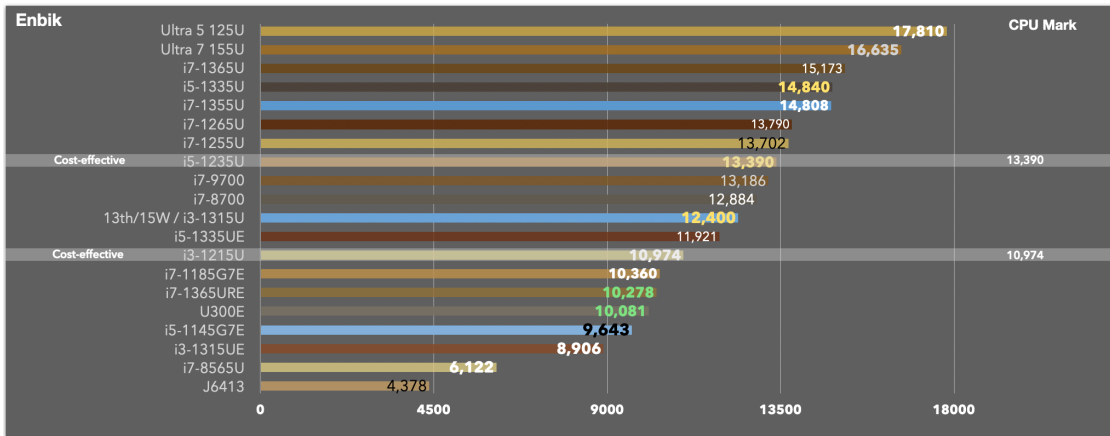
200V/1ms Surge Protection,
Reverse-Voltage Protection
Over-Voltage Protection
Under-Voltage Protection
Over-Current Protection

Optional AI Accelerating Card



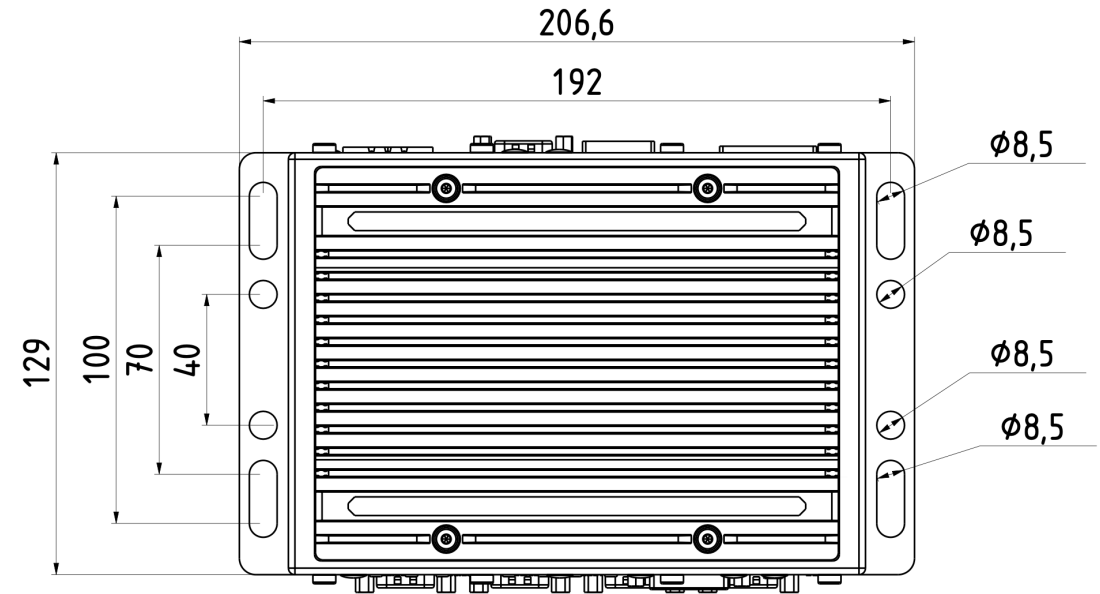
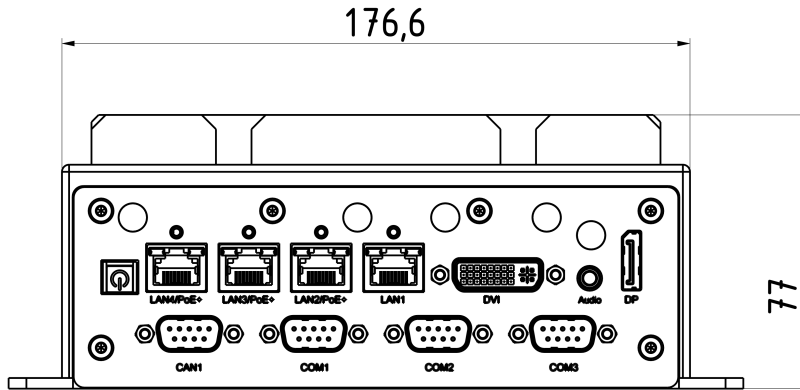
26/ 40 TOPS

Performance



Dimension :

Compact Small : 177 mm x 127 mm x 78 mm



CPU Support :

Intel 12th CPU Support List

12th Gen Intel® Core™ mobile processors (formerly Alder Lake-P) , Commercial	
CPU Module	Description
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)

12th Gen Intel® Core™ mobile processors (formerly Alder Lake-P) , Industrial	
CPU Module	Description
i5-1245UE	Intel® Core™ i5-1245UE 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)
i3-1215UE	Intel® Core™ i3-1215UE 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) , Commercial	
CPU Module	Description
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)

13th Gen Intel® Core™ mobile processors (formerly Raptor Lake-P) , Industrial	
CPU Module	Description
i5-1335UE	Intel® Core™ i5-1335UE processor with 2 P-cores and 8 E-cores up to 4.5GHz 12MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 80 EUs Intel® code name Raptor Lake-P (U-Series,15W)
i3-1315UE	Intel® Core™ i3-1315UE 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)