

RugCon-RV2-T3F / X3F

Compact Size : 210 mm x 176 mm x 82 mm

Wide DC INPUT 6V~48V

Intel® 12th/13th generation Core i processor (H_45W), 5 network ports / 4 USB / 1 COM / 8 IDIO / Dual M.2 2280 SSD / 5G / WIFI and ignition / remote power control

Reach to i9-13900H/HK/HE



Features

- ✓ 5x LAN with 4x PoE+ support , RV2-X3F with M12 connectors
- ✓ 1x RS232/422/485
- ✓ 4 USB (1x USB3.0 , 2x USB2.0)
- ✓ 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

RugCon-RV2-T3F/X3F SPECIFICATION

Product Name	RugCon Series , RV2-T3F (RJ45 LAN) / RV2-X3F (M12)
Generation	Intel® 14th/ 13th/ 12th-Gen Core™ i9 / i7 /i5 (H_45W)
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 , 4x 2.5GbE , M12 X-coded connector for LAN Ports (RV2-X3F) Optional for 4 PoE power supply , 802.11 af/at mode
CAN	N/A
COM	1x RS232/422/485
USB	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 Optional for 1x M.2 Key M Type 2280 (PCIE x4 GEN4) especially for AI Card or NVME SSD
Mechanical	Dimension : 210(W) x 176(D) x82(H), Weight : 2.35 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
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 45W Intel® 14/13/12th generation Core™ processor. The latest Core™ i9 processor can reach up to 14-core /20 threads, providing ultra-high computing performance.

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.

2x M.2 2280 M key (SATA III SSD) , Raid 0/1

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

1x Full Size Mini-PCle(PCle ,USB2) with SIM slot
1x M.2 2242/3052 B key(USB3_2) with SIM slot
3x M.2 Key E Type 2230 (PCle, USB2)

5 ↑ RJ45 LAN Ports
5x 2.5GbE / 4x PoE+ support

6~48V DC INPUT

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

Remote Ignition Control
1x RS232/422/485

8x Isolated DIO
2x USB (1x USB3.0)

DVI
Mic In / Line Out
DP

RugCon RV2-X3F

M12 X-code Connectors for LAN Ports

ENBIK RugCon RV2-T3F

Rugged embedded system
Compact Small : 210(W) x 176(D) x 82 (H) mm

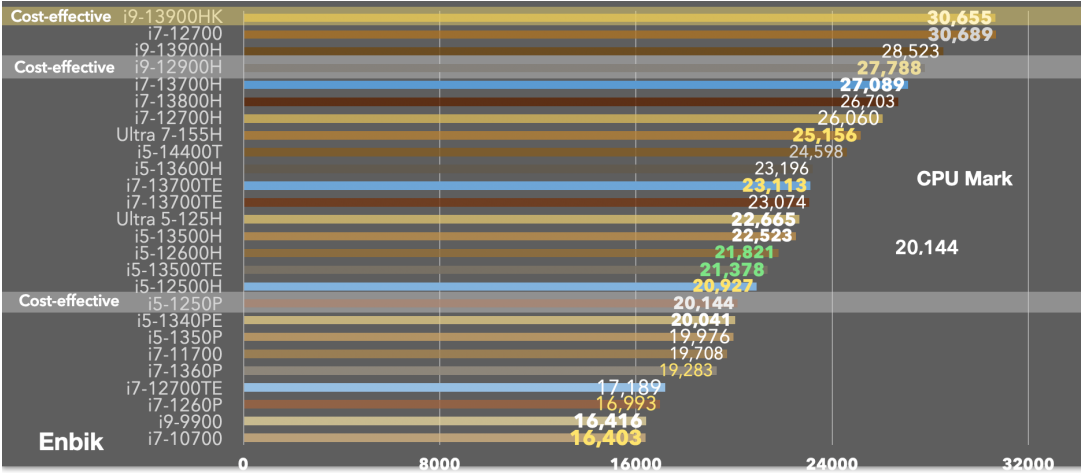
2x USB 2.0

Antenna holes

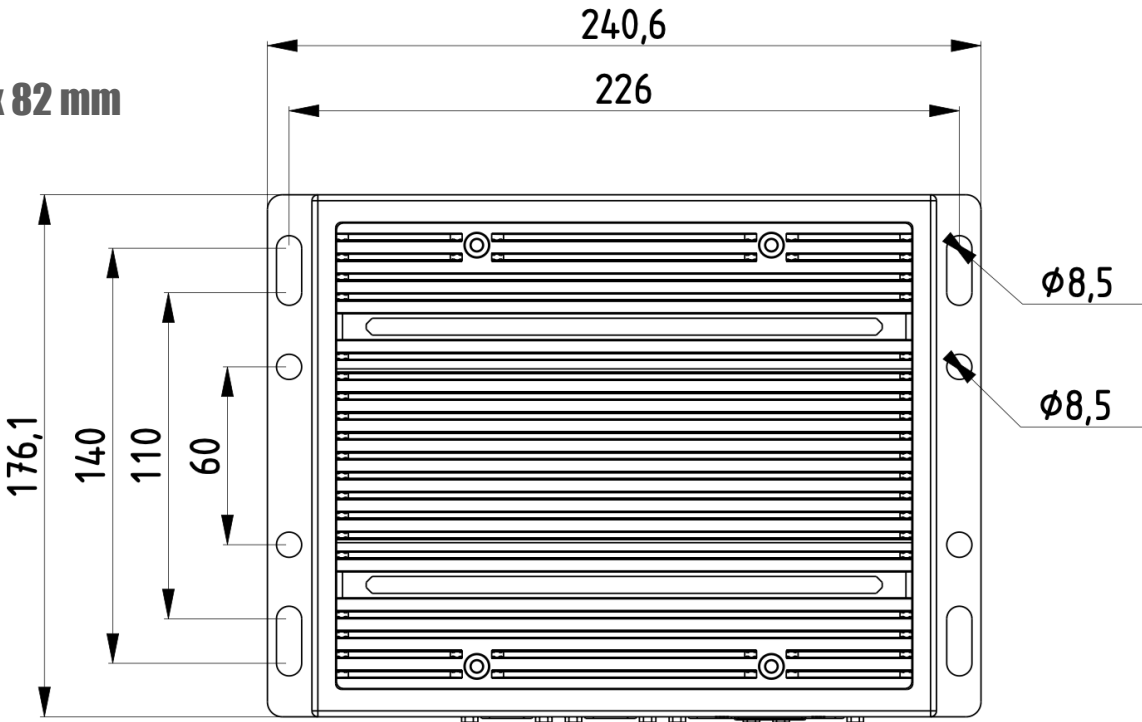
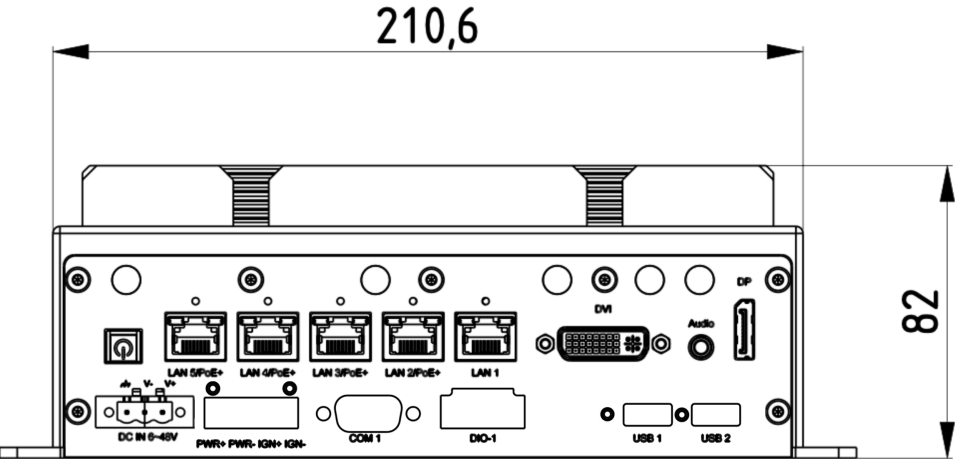
Optional AI acceleration card

26/ 40 TOPS
EMPOWERED BY HALO
Optional support 1x M.2 2280 Key M (PCIe x4), for AI acceleration card or NVME SSD etc.

Performance



Dimension : Compact Size : 210 mm x 176 mm x 82 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)

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)

Note : We also supply embedded CPU version , so if you need HE(45W) , please contact our sales channel .