

Edge AI Computer

RV1-T3M / X3M
176.6 mm x 129 mm x 111 mm**Reach i7**
i7-1365U/UE**MXM GPU**

Reach to i7-1365U/UE

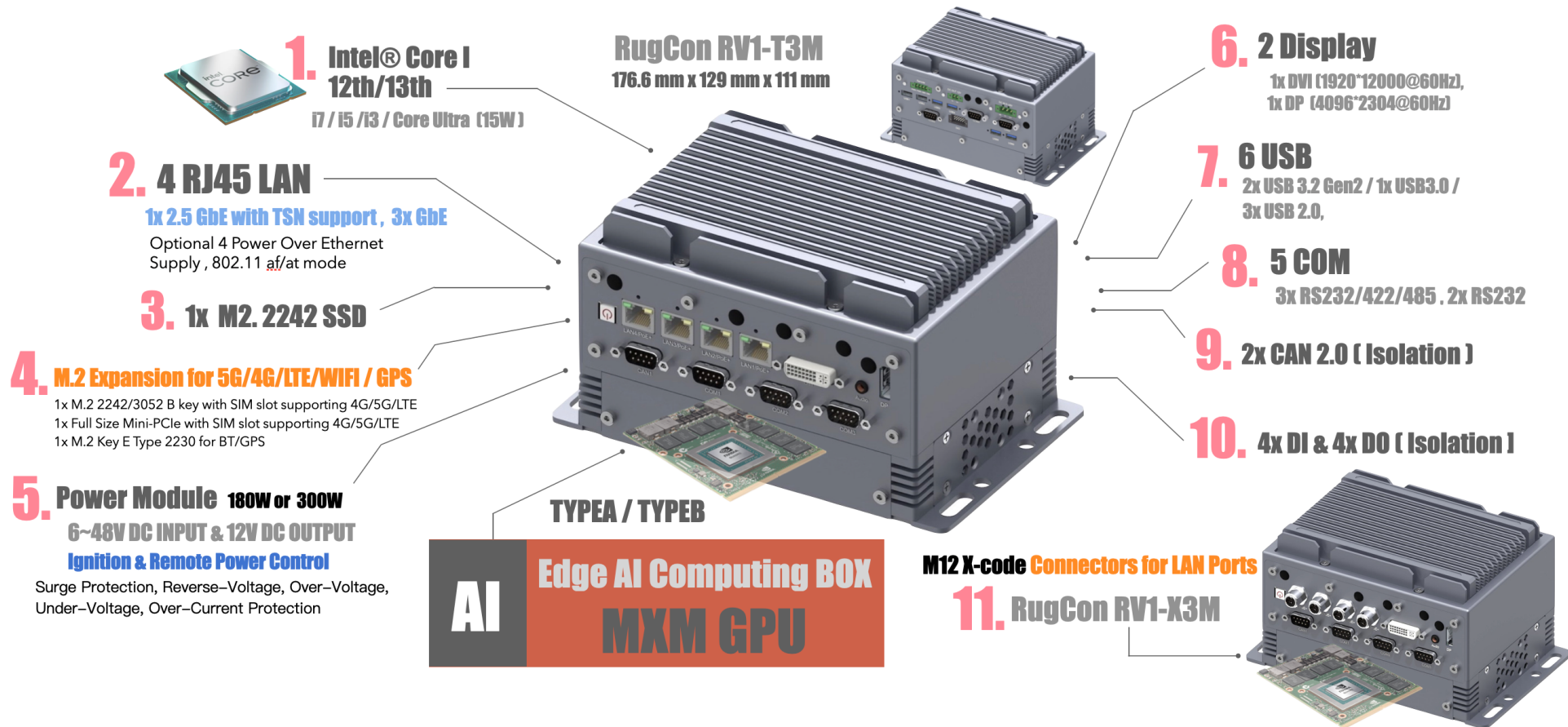


Features

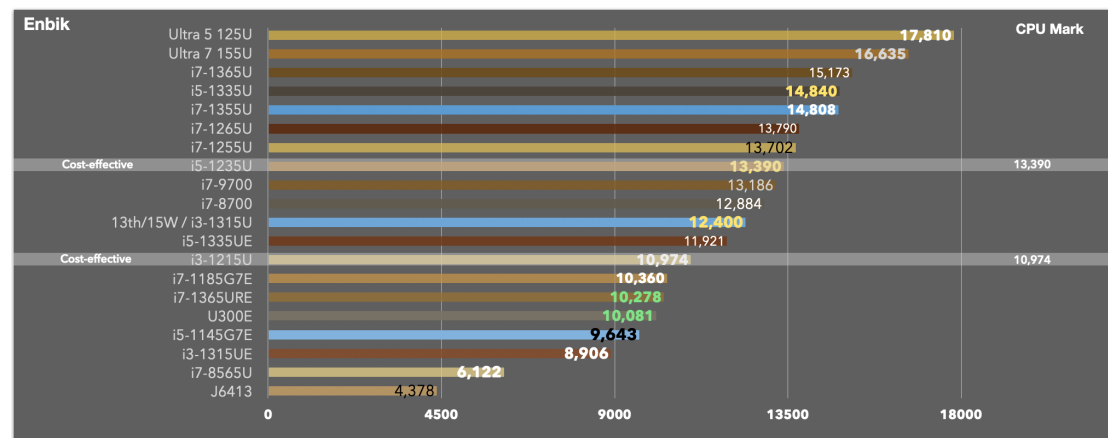
- ✓ 4x LAN with PoE+ support , RV1-X3M with M12 connectors
- ✓ 2x Isolated CANBus
- ✓ 3x RS232/422/485, 2x RS232
- ✓ 6x USB(2x USB3.2 Gen2 , 1x USB3.0)
- ✓ 1x Mic In/Line Out
- ✓ 4 Channel isolated DI, 4 Channel isolated DO
- ✓ 2x Display (DP+DVI-D)
- ✓ 1x M.2 2242 SATAIII
- ✓ 1x M.2 2242/3052 B key with SIM for 4G/5G/LTE
- ✓ 1x Full Size Mini-PCle 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

SPECIFICATION

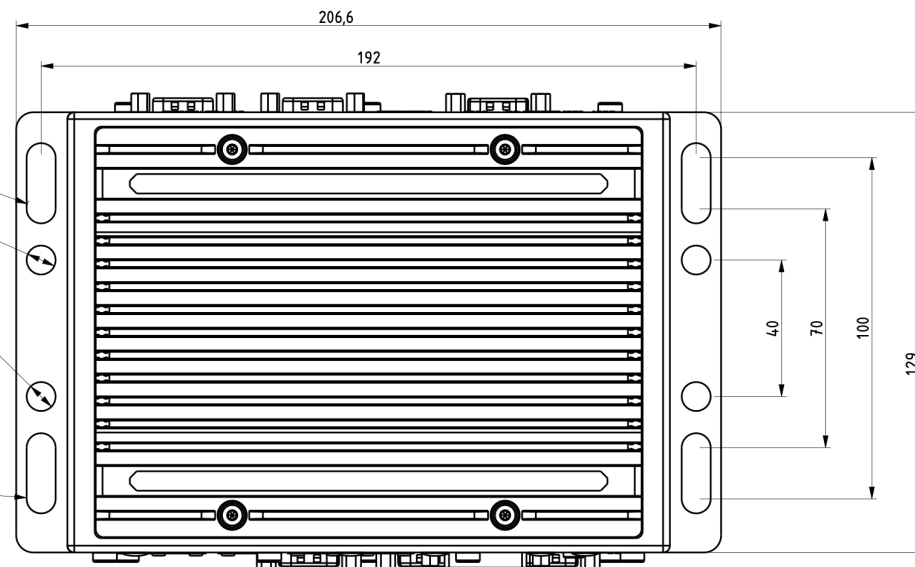
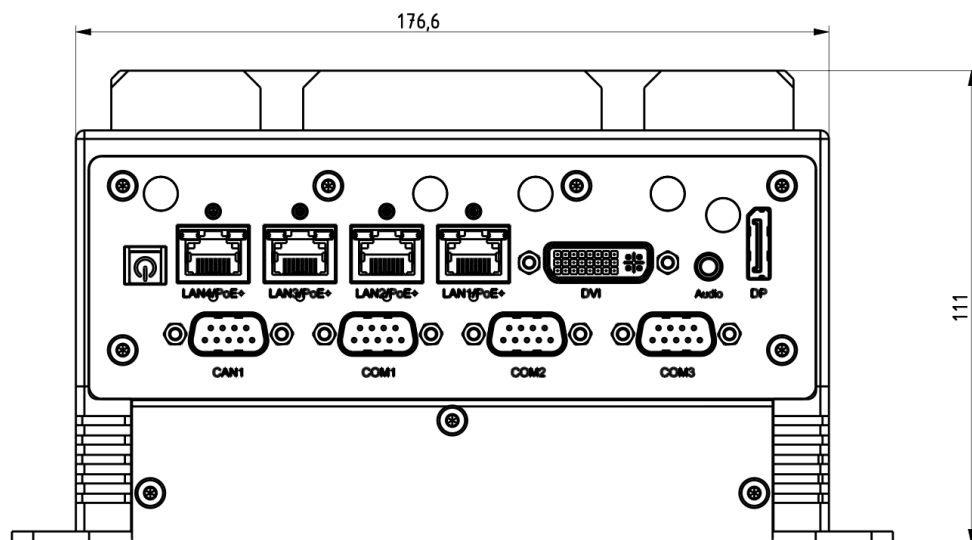
Product Name	RugCon Series , RV1-T3M / RV1-X3M (M12)
Generation	Intel® 13th/ 12th-Gen Core™ i7 /i5 /i3 (U_15W)
Memory	Max. Capacity : 64GB DDR5 with 2x SO-DIMM
Display	2x Display : 1x Display Port (4096*2304@60Hz) , 1x DVI (1920*1200@60Hz)
LAN	1x 2.5 GbE with TSN support , 3x GbE , M12 X-coded connector for LAN Ports (RV1-X3M) 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-PCle with SIM slot supporting 4G/5G/LTE 1x M.2 Key E Type 2230 for BT/GPS
MXM Expansion	Support TYPE A : 82 x 70 mm MXM GPU Module
Mechanical	Dimension : 176.6 (W) x 129 (D) x111 (H) mm, Weight : 2 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)



Performance



Dimension : Compact Small : 176.6 mm x 129 mm x 111 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

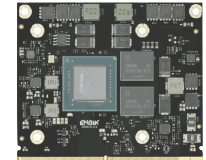
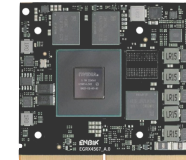
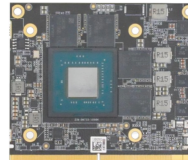
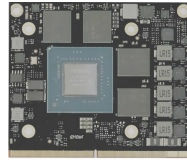
13th Gen Intel® Core™ mobile processors (formerly Raptor Lake-P) , Commercial

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)

Select the artificial intelligence capability to be installed



Product Name	EGMA2008P50	EGMR2008P56	EGRX4506P35	EGMX554P35
AI Chip	A2000	RTX2000	RTX4050	MX550
Generation	Ampere	Ada Generation	Ada Generation	Turing
Chip Clock	1087MHz(Boost 1552MHz)	1635MHz(Boost 2115MHz)	1140MHz (Boost 1605MHz)	1260MHz (Boost 1500MHz)
Memory	GDDR6 8 GB 128bit	GDDR6 8GB 128bit	6GB GDDR6 96bit	4GB GDDR6 64bit
Memory Clock	1375 MHz	1250 MHz	2000 MHz	1500 MHz
Memory Bandwidth	176.0 GB/s	256.0 GB/s	192.0 GB/s	96 GB/s
Single Precision	8.958 TFLOPS	14.176 TFLOPS	8.218 TFLOPS	4.5 TFLOPS
TOPS	-	232	194	-
CUDA	2560	3072	2560	1024
Tensor Core	80	96	80	32
RT core	20	24	20	16
TGP	50W	56.5W	35W	35W
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