



ROC100

SFF Rugged GPU Computer, Intel 13th Raptor Lake(H),

Intel Arc™ A730M



Features

- Intel® Raptor Lake-H i7-13800HRE Processors (14 cores)
- Dual 10G Fiber Network (Intel ® X710-BM2)
- Intel Arc™ A730M (24X^e Cores, 12GB GDDR6)
- Nvidia MXM A4500 (5888 CUDA, 16GB GDDR6)
- Up to 64GB DDR5 SO-DIMM
- MIL-STD 810 Thermal, Shock, Vibration, Humidity
- COM Express Type 6 with MXM-GPU expansion
- Extreme Temperature Support -40°C to 85°C
- 9V~36V DC-IN

Specifications

System

Processor	Intel® Core™ i7-13800HRE, 2.5/5.0 GHz, 24MB, 45W, 14C, 20T
Memory type	Up to 64GB DDR5 SO-DIMM
Graphic	Embedded Intel Arc™ A730M - A-series discrete GPU - 24 Xe-Cores -12GB GDDR6 memory 192-bit Embedded NVIDIA® RTX™ A4500 /A2000 - Ampere Architecture - 5888/2560 CUDA® cores, 46/20 RT Cores, and 184/80Tensor Cores - 16GB/8GB GDDR6 memory, 256/128-bit
TPM	Chipset: Infineon, Type: TPM 2.0
BIOS	AMI UEFI BIOS
USB	4x USB 3.0 + 2x USB2.0
Ethernet	2x 2.5GbE LAN Ports 2x 10GbE SFP+ (Option)
Storage	1x M.2 2280 M-key SATA SSD, up to 2TB
COM Port	4x RS232/422/485 (function select by jumper)
GPIO	4x DI/DO(4 in / 4 out)
Power Type	9V ~ 36V DC-IN
Operating Temperature	-40°C to +85°C
Dimension	220mm(W) x 230mm(L) x 60.6mm(H)

Front I/O

LAN	2x 2.5GbE LAN T-Base
USB	2x USB 3.0 2x USB2.0
Display	2x DP ports
Audio	1x Lin-out + 1x Mic-in
COM	1x RS232
Switch	Power Switch with Backlight

LED HDD/SSD indicator LED

Rear I/O

LAN 4x 1GbE LAN – TBase

COM 2x RS232/422/485

Power 4P terminal Block, 9V~36V DC-IN

Environmental

MIL-STD-810 Test Method 500.5, Procedures I and II (Altitude, Operation):
12,192M, (40,000 ft) for the initial cabin altitude (18.8Kpa or 2.73 Psia)
Method 500.5, Procedures III and IV (Altitude, Non-Operation):
15,240, (50,000 ft) for the initial cabin altitude (14.9Kpa or 2.16 Psia)
Method 501.5, Procedure I (Storage/High Temperature)
Method 501.5, Procedure II (Operation/High Temperature)
Method 502.5, Procedure I (Storage/Low Temperature)
Method 502.5, Procedure II (Operation/Low Temperature)
Method 503.5, Procedure I (Temperature shock)
Method 507.5, Procedure II (Temperature & Humidity)
Method 509.7 Salt Spray (50±5)g/L
Method 514.6, Vibration Category 24/Non-Operating (Category 20 & 24, Vibration)
Method 514.6, Vibration Category 20/Operating (Category 20 & 24, Vibration)
Method 516.6, Shock-Procedure V Non-Operating (Mechanical Shock)
Method 516.6, Shock-Procedure I Operating (Mechanical Shock)

Reliability No Moving Parts; Passive Cooling.
Designed & Manufactured using ISO 9001 Certified Quality Program.

Operating Temp -40°C to +85°C (ambient with air flow)

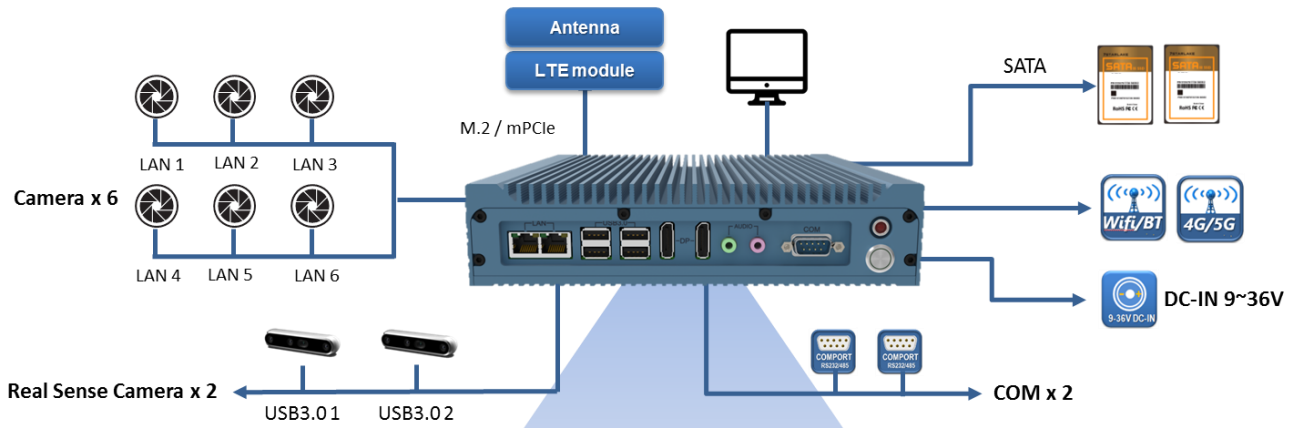
Storage Temp. -40°C to +85°C

Relative Humidity 5% to 95%, non-condensing.

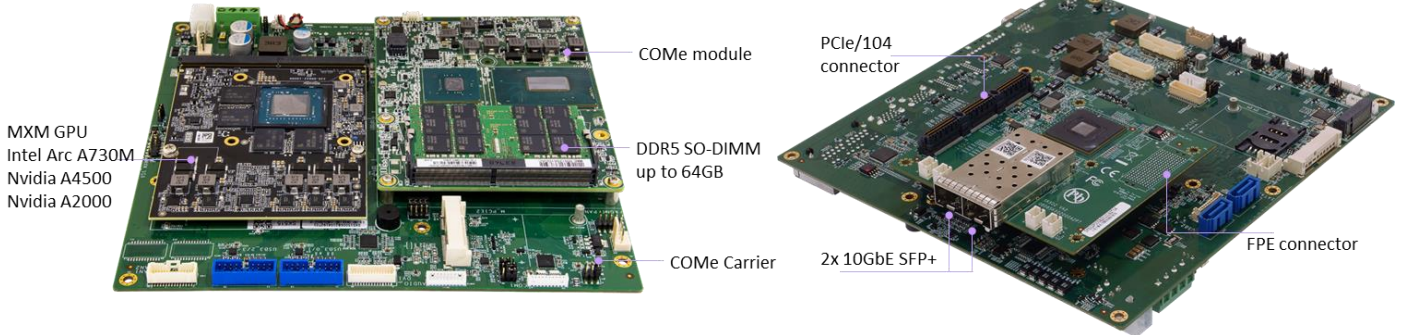
Ordering Information

	ROC100-RSH-A73	ROC100-RSH-A45	ROC100-RSL
CPU	I7-13800HRE		
GPU	Intel Arc A730M	NVIDIA MXM A4500	NVIDIA MXM A2000
RAM	DDR5 64GB		
Storage	1x M.2 2280 M-key SATA SSD up to 2TB		
PSU	9V~36V DC-IN		
Front I/O	2x 2.5GbE LAN T-Base.(2x 10GbE SFP+ option)		
	2x USB3.0 + 2x USB2.0		
	2x DP ports		
	1x Lin-out + 1x Mic-in		
	1x RS232 (Front I/O)		
	Power Switch + HDD/SSD LED		
Rear I/O	4x 1GbE LAN T-Base		
	2x RS232/422/485		
	1x 4P Terminal : 9V~36V DC-IN		
Dimension	220(W) x 230(L) x 60.6(H) mm		220(W) x 230(L) x 50(H) mm

Block Diagram :



COM Express® PC/104



Appearance

ROC100-RSH:

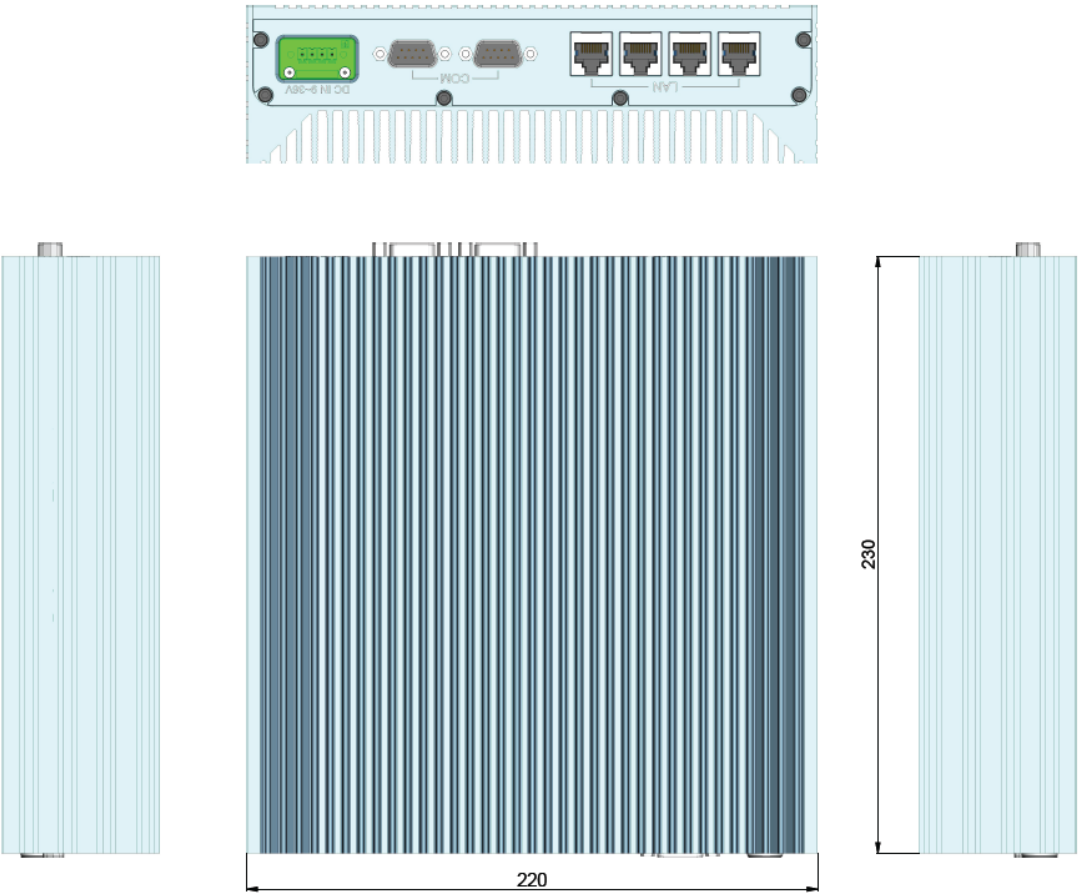


ROC100-RSL:



Dimension

ROC100-RSH:



ROC100-RSL:

