

RUC100-RH

**SFF RUGGED GPU COMPUTER,
INTEL 13TH RAPTOR LAKE-H**



- MIL-STD 810 Thermal, Shock, Vibration, Humidity
- Intel® Raptor Lake-H i7-13800HRE Processors (14 cores)
- Standard MXM Type 3.1 Support NVIDIA® GTX® / RTX® GPU
- Dual 10G Fiber Network (Intel® X710-BM2)(option)
- Up to 64GB DDR5 SO-DIMM
- Extreme Temperature Support -40°C to 55°C
- 9V~36V DC-IN

Specifications

SYSTEM

COM Express CPU (Type 6)	Intel® Core™ i7-13800HRE, 2.5/5.0 GHz, 24MB, 45W, 14C, 20T
GPU Module Options	NVIDIA® Ampere RTX A1000, 60W, 4GB GDDR6, 2,048 CUDA Cores NVIDIA® Ampere RTX A2000, 60W, 8GB GDDR6, 2,560 CUDA Cores NVIDIA® Ampere RTX A4500, 80W/115W, 16GB GDDR6, 5,888 CUDA Cores NVIDIA® Ada Lovelace RTX 3500 Ada, 115W, 12GB GDDR6, 5,120 CUDA Cores NVIDIA® Ada Lovelace RTX 5000 Ada, 115W, 16GB GDDR6, 9,728 CUDA Cores
Compatibility	COM Express® TYPE 6

DISPLAY

DP	2x Display Port outputs from GPU
VGA	1x output from COM Express (option)

STORAGE

M.2	1x 2280 M-key (SATA only)
SATA	2x SATA III

EXPANSION

PCIe/104	Type2
Mini-PCIe	2x

ETHERNET

Ethernet	2 x 10/100/1000 Ethernet Ports(One from CPU module) 2x 10G SFP+ (option) 4x 1GbE T-Base RJ45 (option)
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FRONT I/O

USB	4x USB 3.0
Serial Port	
Audio	1x MIC-in, 1x Line-out
LAN	2x 1GbE RJ45
Display	2x DP ports
Power switch	1x Power Button with LED back light

LED	1x HDD/SSD LED
REAR I/O	
Serial port	2x RS232/422/485 (option)
LAN	4x 1GbE RJ45 (option)
	2x 10GbE SFP+ (option)
Power in	1x 4P Terminal jack
POWER SYSTEM	
Input Power	9~36V (4P Terminal Block)
Power Consumption	Max. 120W
MECHANICAL & ENVIRONMENTAL	
Dimension	220 x 250 x 66 mm
Operating Temp	-20°C to 55°C
Extreme Temp	-40°C to 55°C
Storage Temp	-40°C to 85°C
Relative Humidity	10% to 90%, non-condensing
Reliability	Designed & Manufactured using ISO 9001 Certified Quality Program.
MIL-STD-810 Test	<p>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)</p> <p>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)</p> <p>Method 501.5, Procedure I (Storage/High Temperature)</p> <p>Method 501.5, Procedure II (Operation/High Temperature)</p> <p>Method 502.5, Procedure I (Storage/Low Temperature)</p> <p>Method 502.5, Procedure II (Operation/Low Temperature)</p> <p>Method 503.5, Procedure I (Temperature shock)</p> <p>Method 507.5, Procedure II (Temperature & Humidity)</p> <p>Method 514.6, Vibration Category 24/Non-Operating (Category 20 & 24, Vibration)</p> <p>Method 514.6, Vibration Category 20/Operating (Category 20 & 24, Vibration)</p> <p>Method 516.6, Shock-Procedure V Non-Operating (Mechanical Shock)</p> <p>Method 516.6, Shock-Procedure I Operating (Mechanical Shock)</p>
STANDARD COMPLIANCE	
OS Support	Windows 10/11, Ubuntu

*All specifications and photos are subject to change without notice.

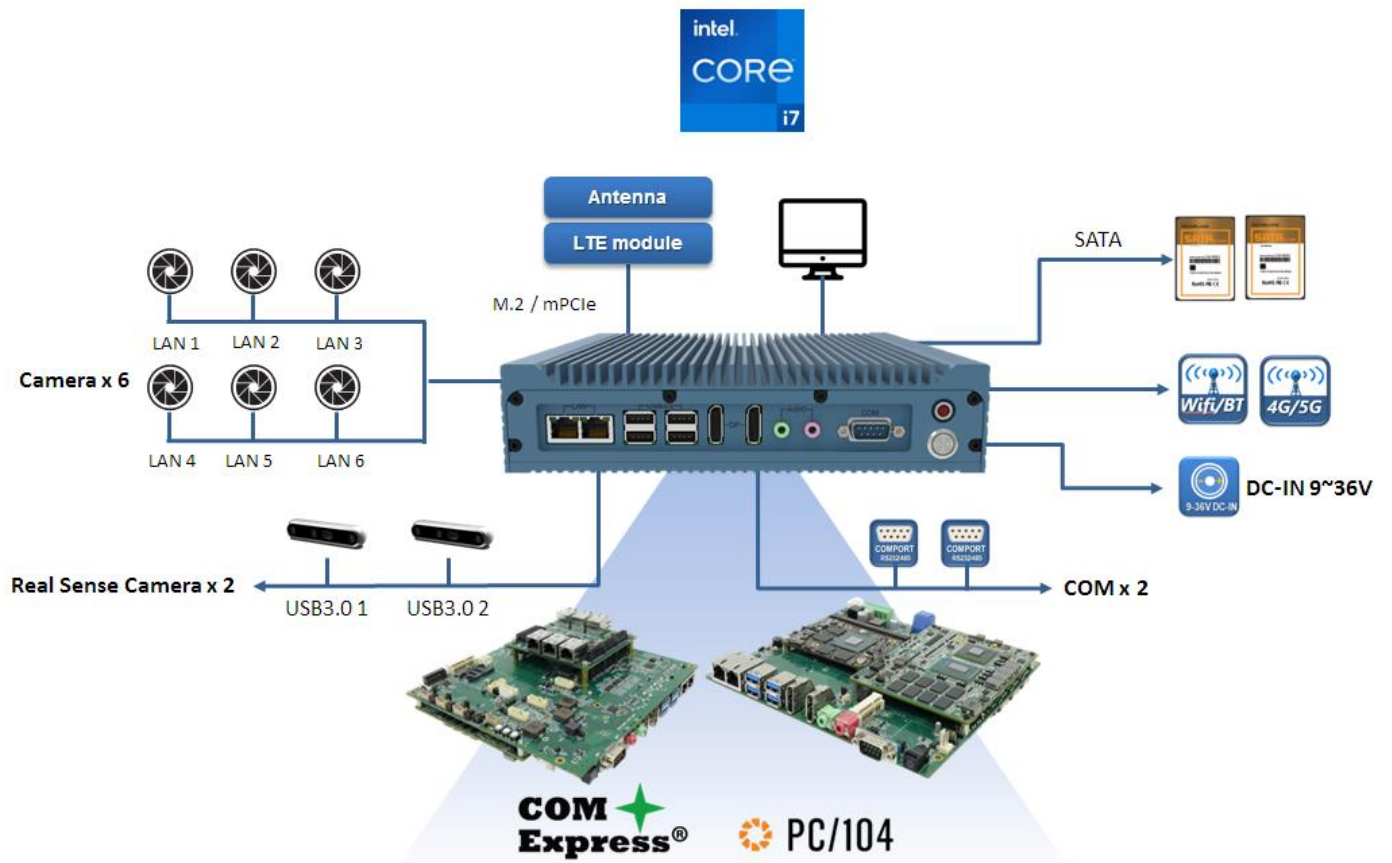
Appearance



Ordering Information

	ROC100-RH
CPU	I7-13800HRE
GPU	N/A
RAM	Up to 64GB DDR5 SO-DIMM
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.
	4x USB3.0
	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 or 2x 10GbE SFP+ (option)
	2x RS232/422/485
	1x 4P Terminal : 9V~36V DC-IN
Dimension	220(W) x 250(L) x 66(H) mm

Block Diagram



Dimension

