THOR200-RH-i7A20

2U/2 Military GPU Server with Intel 13th Raptor Lake

Features

- MIL-STD 810 Thermal, shock, vibration, Humidity
- MIL-STD 461 EMI / EMC
- Intel® Raptor Lake-H i7-13800HRE Processors (up to 14 cores)
- NVidia RTX A2000 (2560 CUDA);
- Up to 64GB DDR5 SO-DIMM
- 1x Swappable SSD Tray
- 18V~36V DC-IN
- 3x 3G-SDI support 1080P 60fps H.264 H/W Encode
- 1x PAL support 1080P 30/25fps
- Conformal Coating
- IP65 Chassis with D389999

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 NVIDIA® RTX™ A2000 - Ampere Architecture - 2560 CUDA® cores, 20 RT Cores, and 80 Tensor Cores - 8GB GDDR6 memory, 128-bit
TPM	Chipset: Infineon, Type: TPM 2.0
BIOS	AMI UEFI BIOS
USB	1x USB 3.0
Ethernet	2x 1GbE LAN Ports
Storage	1x 2.5” SATA SSD (1x Swappable SSD Tray)
COM Port	4x RS232
Power Type	18V ~ 36V DC-IN
Operating Temp.	-20°C to +60°C
Dimension	220mm(W) x 350mm(L) x 88mm(H)
3G-SDI	3x 3G-SDI support 1080p 60fps, H.264 H/W Encode
PAL	1x PAL support 1080P 30/25fps

FRONT I/O

X1	1x 1GbE LAN + 1x VGA with D38999 connector
X2	1x USB 3.0 with D38999 connector
X3	4x RS232 with D38999 connector
X4	1x PAL with BNC connector
X5	1x DC-in with D38999 connector
X6~X8	3x 3G-SDI with BNC connectors
Power Button	1x Power Button with LED back light
LED	1x SSD LED

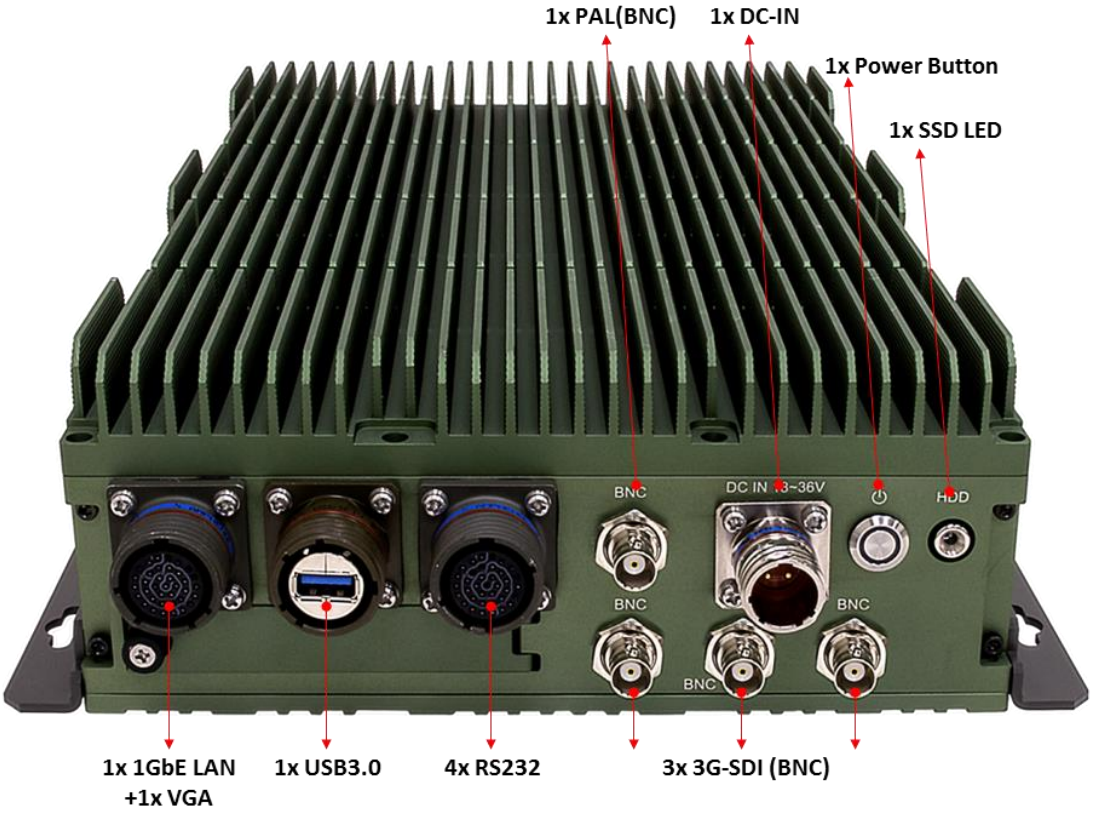
Environmental

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.
MIL-STD-461	CE102 basic curve, 10kHz - 30 MHz RE102-4, (1.5 MHz) -30 MHz - 5 GHz RS103, 200 MHz - 3.2 GHz, 50 V/m equal for all frequencies EN 61000-4-2: Air discharge: 8 kV, Contact discharge: 6kV EN 61000-4-3: 10V/m EN 61000-4-4: Signal and DC-Net: 1 kV EN 61000-4-5: Leads vs. ground potential 1kV, Signal und DC-Net: 0.5 kV CE and FCC
MIL-STD-1275	Steady State –20V~33V, Surge Low – 18V/500ms, Surge High – 100V/500ms Emitted spikes Injected Voltage surges Emitted voltage surges Voltage ripple (2V) Voltage spikes Starting Operation Reverse polarity
Operating Temp	-20℃ to +60°C (ambient with air flow)
Storage Temp.	-40℃ to +85°C
Relative Humidity	5% to 95%, non-condensing.

Ordering Information

	THOR200-X13-A20	THOR200-RH-i7A20	THOR200-X13-A45
CPU	I7-13800HRE	I7-13800HRE	I7-13800HRE
GPU	NVIDIA RTX A2000	NVIDIA RTX A2000	NVIDIA RTX A4500
RAM	DDR5 64GB	DDR5 64GB	DDR5 64GB
Storage	1x 2.5” SATA Drive	1x 2.5” SATA Drive	1x 2.5” SATA Drive
PSU	18V~36V MIL-STD-461	18V~36V	18V~36V MIL-STD-461
I/O	1x USB3.0	1x USB3.0	1x USB3.0
	2x RS232	4x RS232	2x RS232
	2x LAN	1x LAN	2x LAN
	1x VGA	1x VGA	1x VGA
	1x DC	1x DC	1x DC
		3x 3G-SDI	3G-SDI, CAN bus
	-	1x PAL	

Appearance



Dimension