



LAND



SEA



AIR

AV600-RH-A45

MILITARY IP65 GPU COMPUTER



MIL-STD
810

- MIL-STD 810 Thermal, Shock, Vibration, Humidity / EMI / EMC
- IP65 Chassis with D38999 Connectors
- Intel® 13th Gen Raptor Lake-H Core™ i7-13800 HRE Processor
- Up to 96GB DDR5 5200MHz SO-DIMM, non-ECC
- NVIDIA RTX™ A4500 /16GB GDDR6 memory 5888 CUDA Cores
- 18V~36V DC-Input
- Extreme Temperature: -40°C to +60°C Degree
- Dimensions: 250(W) x 350 (L) x 122 (H) mm

Special Request:

- Frame Grabber: 4x CH HD-SDI
- 10GbE : Dual 10GbE (Intel X710) Ethernet Ports
- Conformal coating on electronics

Specifications

System

CPU	Intel® 13 Gen Raptor Lake-H Processors, integrated Intel® Iris® Xe Graphics Intel® Core® i7-13800HRE, 45W , 14C/20T, Freq. 2.5/5 GHz, 24MB cache
Memory type	16GB DDR5 5200 SO-DIMM, Up to 96GB , non-ECC
GPU	NVIDIA RTX™ A4500, 16GB GDDR6 memory, 5888 CUDA cores
Expansion Slot	2 x Full-size mini PCIe (with SIM card slot) 2 x M.2 2280 M key (both PCIe x4 from PEG) 2 x SATAIII

Storage

SATA	1 x 2.5" 4TB SSD , Hot Swappable SSD/HDD slot
M.2	1 x M.2 2280 M key 512GB SSD+ 1x M.2 2280 M key 4TB SSD

Ethernet

Ethernet	2 x 10/100/1000 /2.5G Ethernet Ports (One from CPU module)
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Front I/O

DC-IN	1 x DC-IN with D38999 connector
X1	1 x USB3.0 with D38999 connector
X2	1 x mDP with D38999 connector
X3	1 x GbE T-Base with D38999 connector
X4	1 x GbE T-Base with D38999 connector
LED	1 x SSD/HDD LED indicator
switch	1 x IP65 power button , with LED indicator
Storage	1 x Swappable tray

Power

Power input	18V~36V DC-Input
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Application, Operating System

Application	Military Platforms Requiring Compliance Where Harsh Temperature, Shock, Vibration, Altitude, Dust Conditions.
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Physical

Dimension	250(W) x 350 (L) x 122 (H)mm
Weight	9.8 kg
Chassis	Aluminum Alloy
Heatsink	Heatsink Aluminum Alloy with Air Cooler, Corrosion Resistant

Environmental

Green Product	RoHS, WEEE compliance
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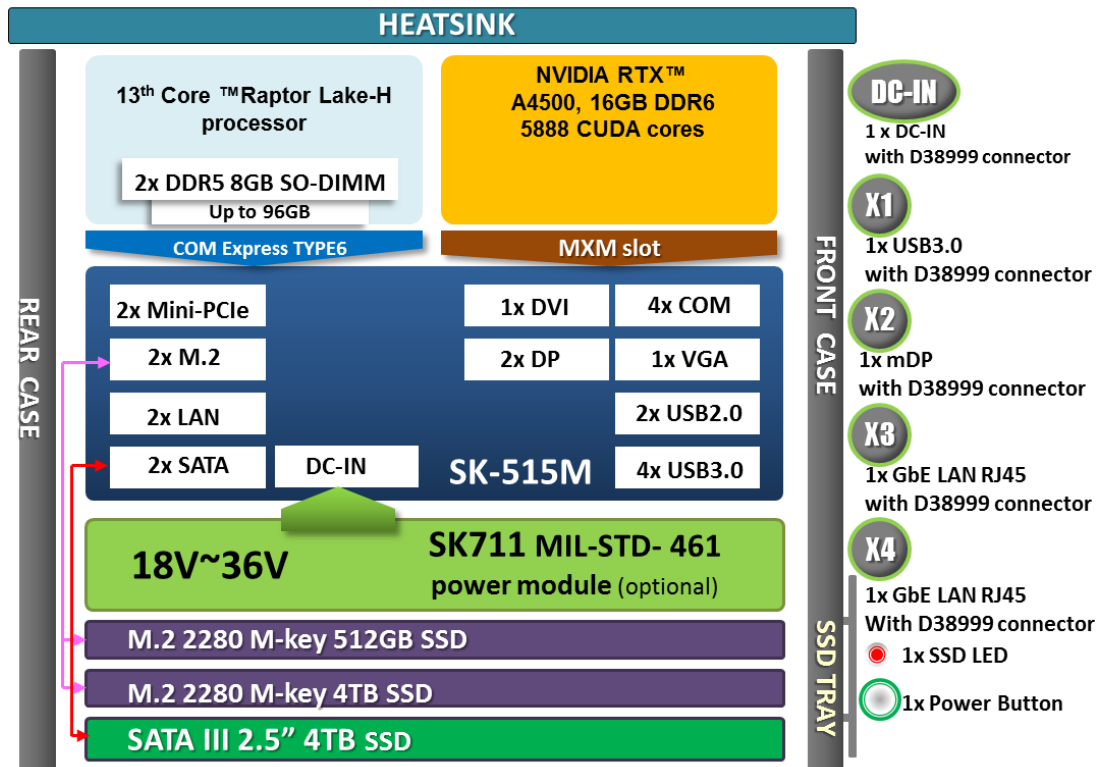
Operating Temp.	-40°C to +60°C
Storage Temp.	-40°C to +85°C
Relative Humidity	5% to 95%, non-condensing
Operation System	
Operating System	Windows 10 / 11 64Bit, Linux by option
RoHS	RoHS compliant

Ordering Information

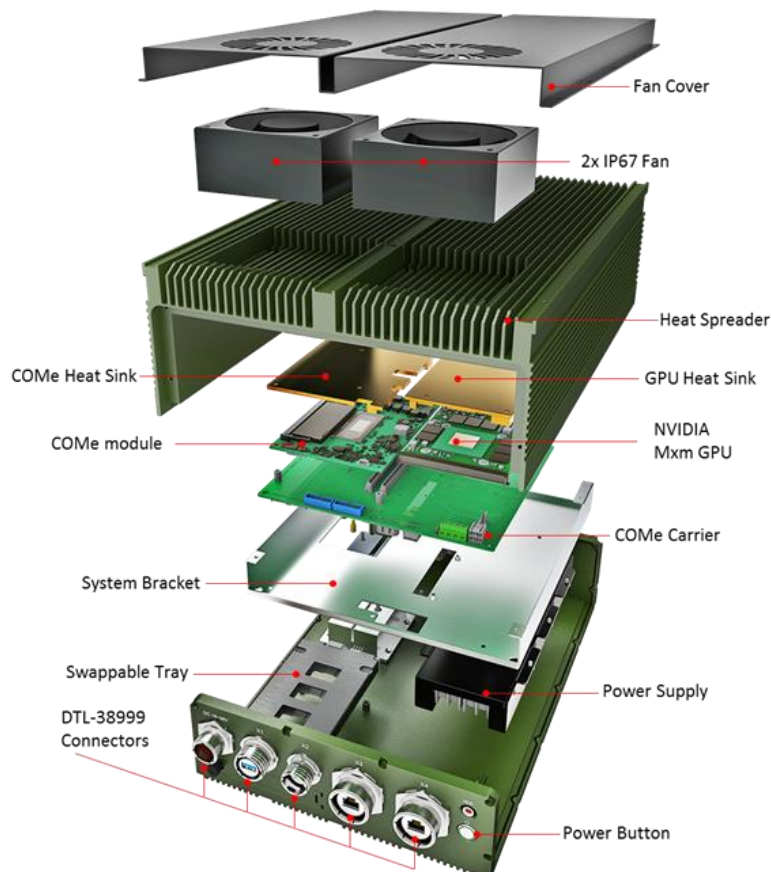
IP65 Military Mission GPU Computer Intel® Raptor Lake-H I7-13800HRE, up to 96GB 5200 MHz SO-DIMM , 4 x COM, 1 x USB3.0, 2 x USB 2.0, 1 x VGA, 4x DI/DO, MXM GPU RTX A2000 4GB/8GB & RTX A4500 16GB GDDR6 Memory, MIL-STD-461/1275 Power DC-IN 18~36V, Operation Temp. -40°C to 60°C, RoHS

Model No.		AV600-RH-A204	AV600-RH-A208	AV600-RH-A45EH	AV600-RH-A45EH-C	AV600-RH-A45EH-D
CPU		Intel® 13th Raptor Lake-H i7-13800HRE				
RAM		16GB DDR5 5200MHz SO-DIMM (Up to 96GB)				
MXM GPU		MXM A2000(4G)	MXM A2000(8G)	MXM A4500(16G)	MXM A4500(16G)	MXM A4500(16G)
Storage		1 x M.2 2280 NVMe 512GB SSD				
		1 x 2.5" SATA III SSD		1 x 2.5" SATA III 4TB SSD		
		1x M.2 2280 NVMe 4TB SSD				
I/O	Power	24FC4PA, 4pin, Nickel(Silver), compatible TVS07RF-13-4PA				24ZC4PA, 4pin, DC-IN, Black Zinc Nickel(Black)
	X1	USB3FTV7ANF312, Nickel plating (Silver), USB3.0 TYPE A				USB3FTV7AZN, USB3.0 TYPE A, Black zinc nickel (Black)
	X2	MDPFTV7ANF312, Nickel plating (Silver),mini-DP				MDPFTV7AZNF312, mini-DP, Black zinc Nickel(Black)
	X3	RJFTV6A7SA1N, nickel plating (Silver),CAT6A RJ45				RJFTV6A7SA1ZN, CAT6A RJ45, Black zinc nickel (Black)
	X4	RJFTV6A7SA1N, nickel plating (Silver),CAT6A RJ45				RJFTV6A7SA1ZN, CAT6A RJ45, Black zinc nickel (Black)
3G-SDI		2 x In/Out 3G-SDI (Optional)				

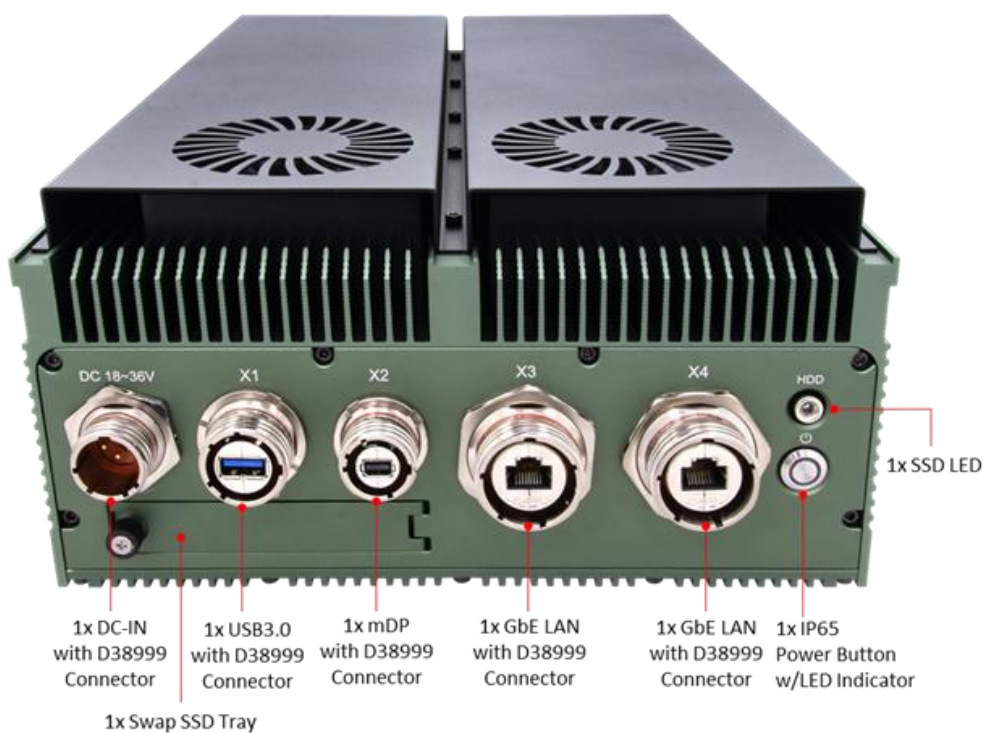
Block Diagram



Thermal Solution



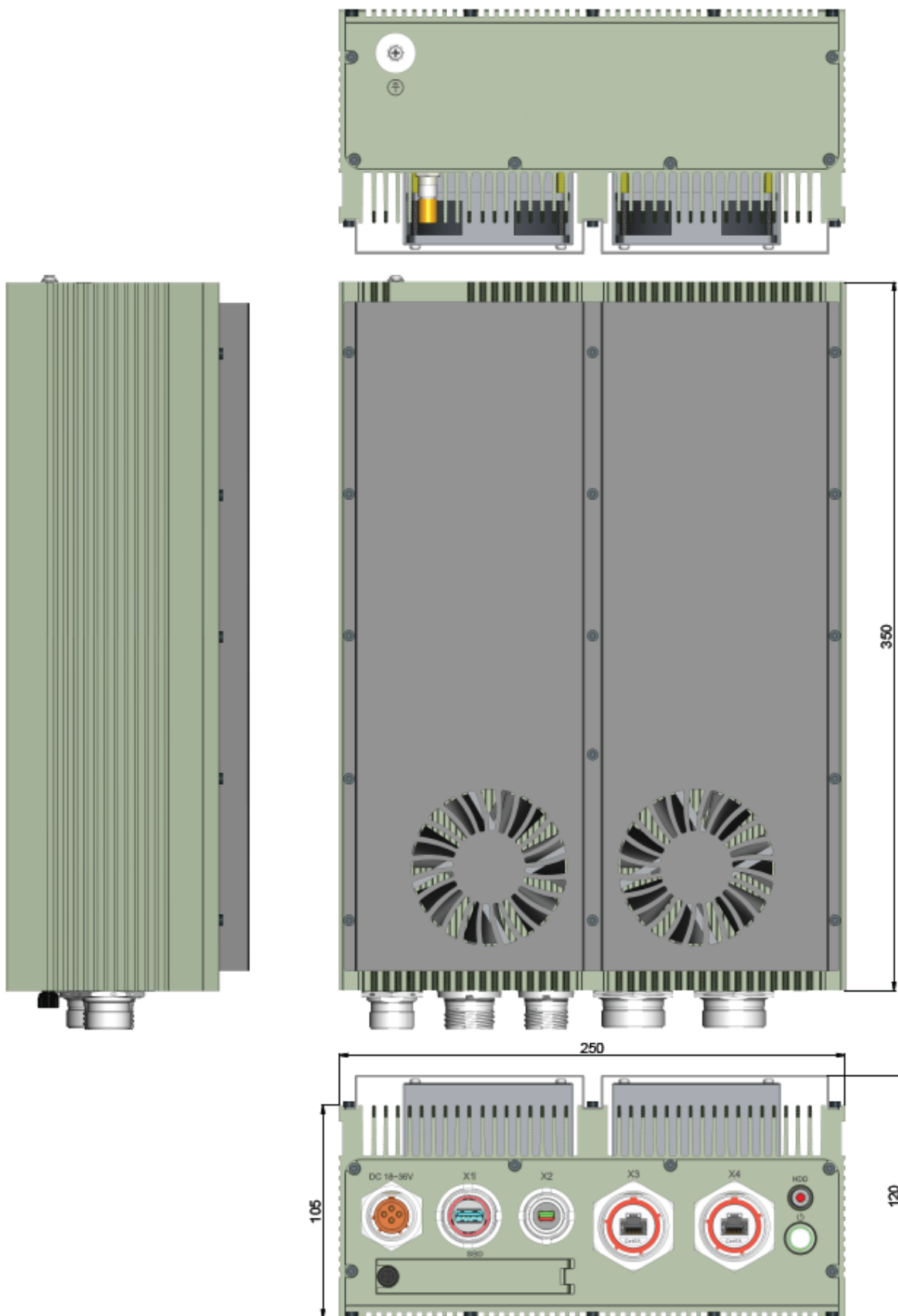
Appearance



AV600-RH-A45EH-D: Black Zinc Nickel (Black) conn. I/O with Handle.



Dimension



This datasheet is for marketing purposes only and does not constitute a warranty. All specifications, dimensions, and data are subject to change without notice. For the latest specifications and updates, please contact your 7STARLAKE representative.