



# AV600-RH

## Military IP66 Mission Computer



- MIL-STD 810 Thermal, shock, vibration, Humidity / EMI / EMC
- IP66 Chassis with D38999 connectors
- Intel® 13th Gen. Raptor Lake-H Core® I7-13800 HRE processor
- Up to 64GB DDR5 4800MHz SO-DIMM, non-ECC
- Soldered 64 GB NVMe
- NVIDIA RTX™ A2000/A4500 4GB/8GB/16GB GDDR6 memory 2048/2560/5888 CUDA cores
- MIL-STD-461 18V~36V DC-Input (Options for MIL-704/1275)
- Extreme Temperature : -40°C to +60°C Degree
- Optional with External GPU Turbo Kit
- Dimensions : 250(W) x 325 (L) x 122 (H) mm

### Special Request:

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



LAND



SEA



AIR



# Specifications

## System

CPU	Intel® 13 Gen. Raptor Lake-H Processors, up to 14 cores, integrated Intel® Iris® Xe Graphics eligible - Intel® Core® i7-13800HRE, 45W Raptor Lake 13th Gen, 14C, Freq. 2.5/5 GHz, 24MB cache
Memory type	Up to 64GB DDR5 4800MHz SO-DIMM, non-ECC
GPU	NVIDIA RTX™ A2000/A4500 4GB/8GB/16GB GDDR6 memory, 2048/2560/5888 CUDA cores
On Board Storage	64GB NVMe SSD
Expansion Slot	2x Full-size mini PCIe (1 with mSATA supported) -1 with mSATA/USB2.0/PCIeX1 support -1 with SIM/USB2.0/PCIeX1 support 1 x 2280 M key (SATA only)

## Storage

SATA	1x 2.5" SSD, Hot Swappable SSD/HDD slot
M.2	1x 2280 M key (SATA only)

## Ethernet

Ethernet (Internal)	2x 10/100/1000 Ethernet Ports
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## Front I/O

DC-IN	1x DC-IN with D38999 connector
X1	1x COM(RS232) + 3 x COM(RS232/422/485) with D38999 connector
X2	2x GbE + 2 x USB 2.0 with D38999 connector
X3	1x DIDO 4in/4out + 1 x VGA with D38999 connector
X4	1x USB3.0 with D38999 connector
LED	1x SSD/HDD LED indicator
switch	1x IP65 power button , with LED indicator

## Power

Power input	MIL-STD -461 18V~36V DC-Input
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## Application, Operating System

Application	Military Platforms Requiring Compliance to MIL-STD-810 Where Harsh Temperature, Shock, Vibration, Altitude, Dust and MIL-461 EMI Conditions.
OS	Windows® 10 64-bit / Linux (support by request)

## Physical

Dimension	250(W) x 325 (L) x 122 (H)mm
Weight	11Kg
Chassis	Aluminum Alloy
Heatsink	Heatsink Aluminum Alloy with Air Cooler, Corrosion Resistant

## Environmental

Green Product	RoHS, WEEE compliance
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

## MIL-STD-810 Specifications

- Method 500.5, Procedures I and II (Altitude, Operation):  
12,192 M, (40,000 ft) for the initial cabin altitude (18.8 Kpa or 2.73 Psia)
- Method 500.5, Procedures III and IV (Altitude, Non-Operation):  
15,240, (50,000 ft) for the initial cabin altitude (14.9 Kpa 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 & 4,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)

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## MIL-STD-461

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CE102 basic curve, 10 kHz - 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: 10 V/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

EN55022 : Class A

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## MIL-STD-1275 (Options)

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Steady State : 20V-33V

Surge Low : 18V/500ms

Surge High : 100V/500ms

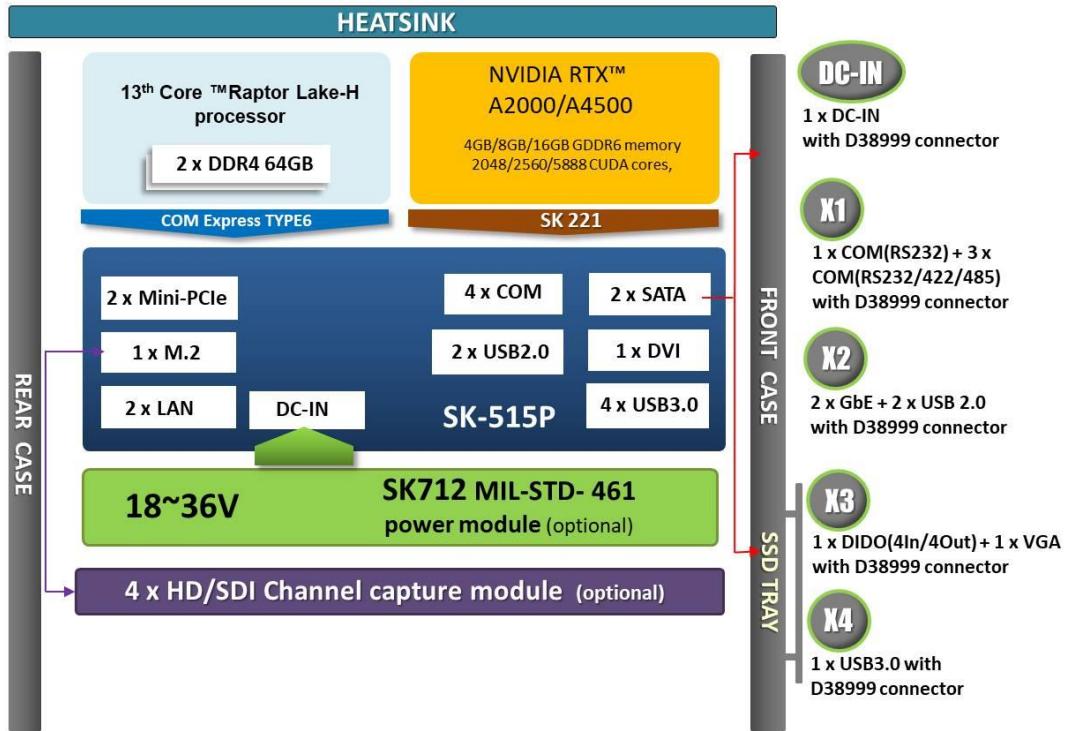
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## Ordering Information

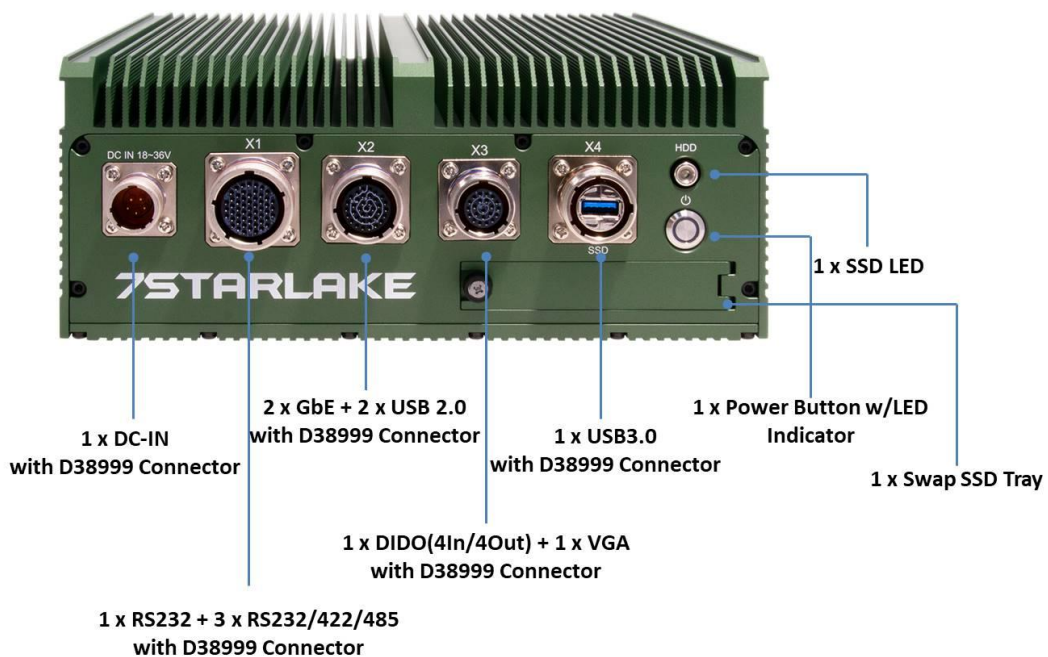
IP66 Military Mission GPU Computer Intel® Raptor Lake-H I7-13800HRE, up to 64GB 4800 MHz SO-DIMM , 4 x COM, 1 x USB3.0, 2 x USB 2.0, 1 x VGA, 1 x DIDO, MXM GPU RTX A2000 4GB/8GB & RTX A4500 16GB GDDR6 Memory, MIL-STD-461/1275 Power DC-IN 18~36V, Operation Temp. -40°C to 60°C, RoHS

	AV600-RH-A24	AV600-RH-A28	AV600-RH-A45
<b>CPU</b>	Intel® Core® I7-13800HRE(14C)		
<b>RAM</b>	DDR5, Up to 64G 4800MHz SO-DIMM		
<b>MXM GPU</b>	RTX A2000 4GB GDDR6	RTX A2000 8GB GDDR6	RTX A4500 16GB GDDR6
<b>Storage</b>	2 x 2.5" SATAIII 4TB 1 x M.2 SATAIII 2TB		
<b>I/O</b>	X1	1 x RS232 + 3 x RS232/422/485	
	X2	2 x GbE + 2 x USB 2.0	
	X3	1 x DIDO + 1 x VGA	
	X4	1 x USB3.0	
		1 x DC-IN	
	1 x Swap SSD Tray		

# Block Diagram



# Appearance



# Dimension

