



LAND



SEA



AIR

# HPC3000-AL

3U IP67 Dual-GPU Rugged Server with Intel

® Core I9-12900 Processor



MIL-STD

461

MIL-STD

810

- Intel® 12<sup>th</sup> Gen Alder Lake Core® I9-12900 (16xC) Processor
- 2TB NVMe Gen 4.0 (W/R,3000MB/sec)-System Drive  
4xSATA Drive Bay (SAS/SATA) RAID10
- 4 x 10GbE , 2 x GbE
- 2 x Nvidia Quadro RTX A2000 GPU (3,328 CUDA)
- DC-DC 24V (500W)  
Options for Redundant AC 100~240V Input
- MIL-STD-810 Thermal, shock, vibration, Humidity / EMI  
EMC Resistance
- MIL-STD -461 24V~40V DC (optional)
- Extreme Temperature : -20 ~+55 degree



# Specifications

## System

CPU	Intel® 12th Gen Alder Lake(S) Core™ I9-12900 65W(16 Core, 2.40GHz, Up to 5.10Ghz)
Memory type	Up to 128GB Unbuffered non-ECC UDIMM, DDR5-4000MHz

## Display

GPU	Dual NVIDIA Quadro RTX A2000, PCI-E (12GB-GDDR6, CUDA 3,328)
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## Storage

NVMe	2TB NVMe 4.0 M.2 (R/W, 3000MB/sec) Option : 2TB RAID1 NVMe 4.0 (R/W, 3000MB/sec)
HDD/SSD	4 x 2.5" Easy Swap HDD/SSD , RAID 10 Support

## Ethernet

Ethernet	2 x Intel® I350-AM4 4x Intel 10GbE (SFP+) X710-DA4 (Options)
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## Front I/O

USB3.0	2 x DTL38999(USB3FTV7AZNF312)
10GbE	4 x DTL38999(LCFTV6MDGN)
GbE	2 x DTL38999(LCFTV6MDGN)
IPMI	1 x DTL38999(LCFTV6MDGN)
VGA	1 x DTL38999(TV07RW-9-09S)
COM	1 x DTL38999(TV07RW-9-09S)
DIO	1 x DTL38999(TV07RW-9-09S)
DC-IN	1 x DTL38999(TV06RW09-98S)
Power Button	1 x Power Button with LED backlight
SDD	1 x SSD light 4 x 2.5" Easy swap HDD/SSD Tray

## Power Requirement

Power Input	DC-DC 24V (500W) Option 1 : Redundant AC 100~240V Input
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Option 2 : MIL-STD -461 24~40V DC-IN

## Application

Application Military Platforms Requiring Compliance MIL-STD-810G  
Embedded Computing and applications subject to Harsh Temperature, Shock, Vibration, Altitude, Dust and EMI Conditions.

## OS support list

Windows Windows 10

Linux By request

## Environment

Dimension 480x112x500 mm (WxHxD)

Classis Aluminum Alloy, Corrosion Resistant

Operation Temp. -20 to +55°C

Storage Temp. -40 to +85°C

Relative Humidity 5% to 95%, non-condensing

EMC 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-461 (Options):  
CE102 basic curve, 10kHz - 30 MHz  
RE102-4, (1.5 MHz) -30 MHz - 5 GHz  
RS103, 1.5 MHz - 5 GHz, 50 V/m equal for all frequencies

MIL-STD-810 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 514.6, Vibration Category 24/Non-Operating (Category 20 &

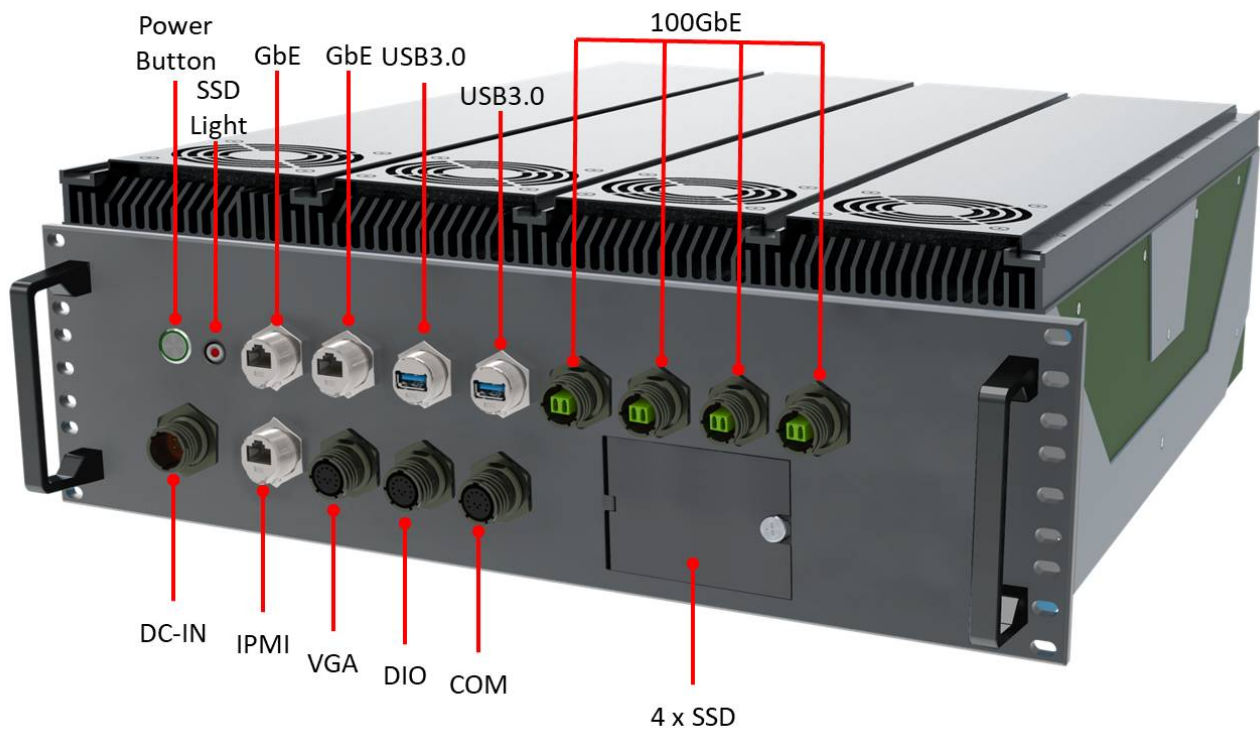
24,Vibration)

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)

## Front I/O



## Ordering Information

Model	Description
<b>HPC3000-AL-D</b>	3U IP67 Conduction Cooled Rugged Dual-GPU Server platform supporting NVIDIA® QUADRO RTX A2000 and Intel® Core®I9-12900 processor, 4 x 10GbE, 2 x GbE, 1 x IPMI, 1 x VGA, 1 x COM, 1 x DIO, DC-DC 24V, Operation Temp. -20 to +55°C
<b>HPC3000-AL-A</b>	3U IP65 Conduction Cooled Rugged Dual-GPU Server platform supporting NVIDIA® QUADRO RTX 2000 and Intel® Core®I9-12900 processor, 4 x 10GbE, 2 x GbE, 1 x IPMI, 1 x VGA, 1 x COM, 1 x DIO, AC 100~240V, Operation Temp. -20 to +55°C
<b>HPC3000-AL-M</b>	3U IP67 Conduction Cooled Rugged Dual-GPU Server platform supporting NVIDIA® QUADRO RTX 2000 and Intel® Core®I9-12900 processor, 4 x 10GbE, 2 x GbE, 1 x IPMI, 1 x VGA, 1 x COM, 1 x DIO, MIL-STD-461 DC-IN 24~40V, Operation Temp. -20 to +55°C