



LAND



SEA



AIR

HPC3000-IL

3U IP65 Dual-GPU Rugged Server with Intel®

Xeon Ice Lake-SP Processor



- Intel® 3rd Gen Ice Lake Xeon® Silver 4316(20xC) Processor, up to Xeon® Platinum 8380(40xC) Processor
- 2TB NVMe Gen 3.0 (W/R,3000MB/sec)-System Drive
8xSATA Drive Bay (SAS/SATA) RAID10
- 2 x 10GbE, Option : 2 x 100GbE(QSFP28)
- 2 x Nvidia Quadro RTX A4000 GPU (6,144 CUDA)
Option 1 : Nvidia Quadro RTX A4500 GPU (7,168 CUDA)
Option2 : Nvidia RTX A2000 GPU (3,328 CUDA)
- DC-DC 24V (800W)
Option1 : for Redundant AC 100~240V Input
Option2 : MIL-STD -461 18V~36V DC
- MIL-STD-810 Thermal, shock, vibration, Humidity EMI / EMC Resistance
- Extreme Temperature : -20 ~+55 degree



Specifications

SYSTEM

CPU	Intel® Ice Lake Xeon™ Sliver 4316 150W (20 Core, 2.3GHz, Up to 3.4Ghz) Option : Intel® Ice Lake Xeon™ Platinum 8380 270W (40 Core, 2.3GHz, Up to 3.4Ghz)
Memory type	Up to 2TB ECC RDIMM, DDR4-3200MHz

DISPLAY

GPU	Dual x NVIDIA Quadro RTX A4000 PCI-E(16GB-GDDR6, CUDA 6,144) Option 1 : NVIDIA Quadro RTX A4500 PCI-E (20GB-GDDR6, CUDA 7,168) Option 2 : NVIDIA Quadro RTX A2000 PCI-E (12GB-GDDR6, CUDA 3,328)
-----	--

STORAGE

NVMe	2TB NVMe 3.0 M.2 (R/W, 3000MB/sec) Option : 2TB RAID1 NVMe 3.0 (R/W, 3000MB/sec)
HDD/SSD	8 x 2.5" Easy Swap HDD/SSD Tray RAID 10 Support

ETHERNET

Ethernet	2 x 10GbE Intel® X550 Option : 2 x Intel 100GbE (QSFP28) E810-CQDA2*2
----------	--

FRONT I/O

USB3.0	2 x DTL38999(USB3FTV7AZNF312)
100GbE(Optional)	2 x DTL38999(LCFTV6MDGN)
10GbE	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 8 x 2.5" Easy swap HDD/SSD Tray Option : AES Button

CMOS SWOP	1 x CMOS SWOP Battery
-----------	-----------------------

POWER REQUIREMENT

Power Input	DC-DC 24V (800W) Option 1 : Redundant AC 100~240V Input Option 2 : MIL-STD -461 18~36V DC-Input
-------------	---

APPLICATION

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

OS SUPPORT LIST

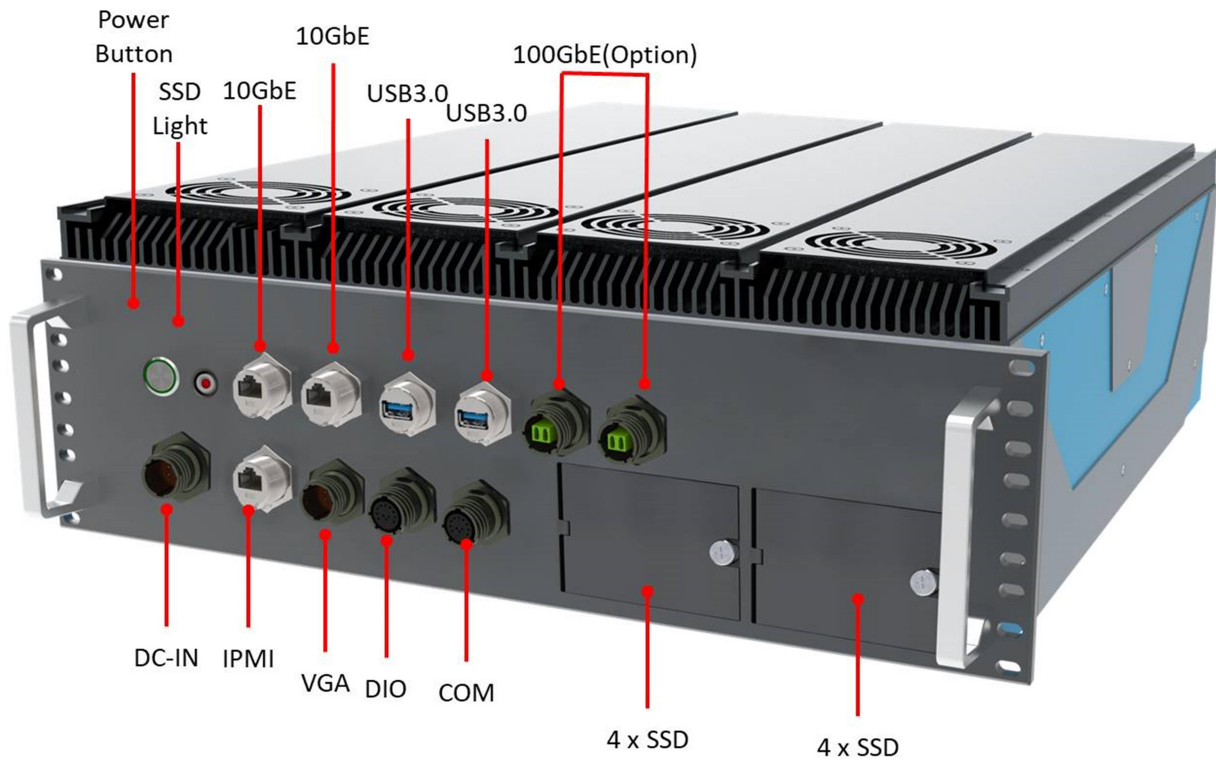
Windows	Windows 10
Linux	By request

ENVIRONMENT

Dimension	480x132x500 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 Spec	HPC3000-IL -2A40D	HPC3000-IL -2A40A	HPC3000-IL -2A40M	HPC3000-IL -1A45M
CPU	Xeon Silver 4316	Xeon Silver 4316	Xeon Silver 4316	Xeon Silver 4316
RAM	DDR4 Up to 2TB	DDR4 Up to 2TB	DDR4 Up to 2TB	DDR4 Up to 2TB
GPU-1	PCI-E RTX A4000	PCI-E RTX A4000	PCI-E RTX A4000	PCI-E RTX A4500
GPU-2	PCI-E RTX A4000	PCI-E RTX A4000	PCI-E RTX A4000	PCI-E RTX A2000
LAN	2 x10GbE	2 x10GbE	2 x10GbE	2 x10GbE
NIC(Optional)	2x100GbE (QSFP28)	2x100GbE (QSFP28)	2x100GbE (QSFP28)	2x100GbE (QSFP28)
USB 3.0	2	2	2	1
IPMI	1	1	1	1
VGA	1	1	1	1
Power	DC-DC 24V	AC100~240V	MIL-461 28VDC	MIL-461 28VDC
System Drive	2TB NVMe Gen 3.0 (W/R,3000MB/sec)			
Storage	8xSATA Drive Bay (SAS/SATA) RAID10			2x SATA
AES (Button)	N/A	N/A	N/A	YES
CMOS SWOP Battery	N/A	N/A	N/A	YES
Operation Temp	-20 to +55°C			