



# Datasheet

## Vantageo 24XX-CGPT

### Key Features

- AI/ML, Deep Learning Training and Inference
- High Performance Computing (HPC)
- Big Data Analytics
- Astrophysics Simulation
- Chemistry Simulation
- Research Laboratory/National Laboratory

1. Single Root System for excellent GPU peer to peer communication with sufficient CPU to GPU throughput
2. Dual Socket P (LGA 3647) support 2nd Gen Intel® Xeon® Scalable processors (Cascade Lake/Skylake)‡
3. 24 DIMMs; up to 6TB 3DS ECC DDR4-2933MHz† RDIMM/LRDIMM, Supports Intel® Optane™ DCPMM††
4. 11 PCI-E 3.0 x16 (FH, FL) slots 1 PCI-E 3.0 x8 (FH, FL in x16 slot)
5. Up to 24 Hot-swap 2.5" drive bays; 8x 2.5" SATA drives supported with included H/W, 2x 2.5" NVMe drives supported with included H/W, 1 NVMe based M.2 SSD
6. 2x 10GBase-T LAN ports via Intel C622
7. 8 Hot-swap 92mm RPM cooling fans
8. 2000W (2+2) Redundant Power Supplies **Titanium Level (96%+)**

# SPECIFICATIONS

## Chassis

Form Factor 4U Rackmountable

Model **24XX-CGPT**

## Processor / Cache

CPU

- Dual Socket P (LGA 3647)
- 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors‡, 3 UPI up to 10.4GT/s
- Support CPU TDP 70-205W

Cores • Up to 28 Cores

Note • BIOS version 3.2 or above is required to support 2nd Generation Intel Xeon Scalable Processors-SP (codenamed Cascade Lake-R)

## Dimensions

Width • 17.2" (437mm)

Height • 7" (178mm)

Available Colors • Black

Depth • 29" (737mm)

Weight • Gross Weight: 65.5 lbs (29.7 kg)  
• Net Weight: 100 lbs (45.3 kg)

## System Memory

Memory Capacity

- 24 DIMM slots
- Up to 6TB 3DS ECC DDR4- 2933MHz† RDIMM/LRDIMM
- Supports Intel® Optane™ DCPMM††

Memory Type

- 2933†/2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM

Note † 2933MHz in two DIMMs per channel can be achieved by using memory purchased from Vantageo †† Cascade Lake only. Contact your Vantageo sales rep for more info

## Expansion Slots

PCI - Express • 11 PCI-E 3.0 x16 (FHFL) slots supporting up to 10 GPUs

• 1 PCI-E 3.0 x8 (FH, FL, in x16) slot

## On-Board Devices

Chipset Intel® C622 chipset

Network Controllers Dual Port 10GbE from C622

IPMI •Support for Intelligent Platform Management Interface v.2.0  
•IPMI 2.0 with virtual media over LAN and KVM-over-LAN support

SATA SATA3 (6Gbps) with RAID 0, 1, 5, 10

Graphics ASPEED AST2500 BMC

# SPECIFICATIONS

## Input / Output

- USB • 4 USB 3.0 ports (rear)
- VGA • 1 VGA Connector
- SATA • 8 SATA3 (6Gbps) ports

- COM Port • 1 COM port (header)
- LAN • 2 RJ45 10GBase-T LAN ports  
• 1 J45 Dedicated IPMI LAN port

## Drive Bays

- Hot-Swap • Up to 24x 2.5" SAS/SATA drive bays  
• 8x 2.5" SATA supported natively  
• 2x 2.5" NVMe supported natively

- M.2 • 1 NVMe based M.2 SSD  
• Form Factors: 2260, 2280, 22110

## GPU

- Supported GPUs • 10 Double-Width/Single-Width PCI-E 3.0 x16 Card (Full Height Full Length)  
• NVIDIA V100, P40, T4, Quadro, RTX  
• Supports both active and passive cooled GPUs  
• [Compatible GPU list](#)

- CPU-GPU Interconnect • PCI-E Gen 3 x16 Switch Single-Root  
• [PCIe Root Architecture Chart](#)

## System Cooling

- Fans • 8 Hot-swap 92mm cooling fans

## System BIOS

BIOS Type AMI 32Mb SPI Flash ROM

## Management

- Software • Intel® Node Manager, IPMI2.0, KVM with dedicated LAN , SSM, SPM, SUM, SuperDoctor® 5, Watchdog

## Operating Environment

- RoHS • RoHS Compliant

- Environmental Spec. • Operating Temperature: 10°C - 35°C (50°F - 95°F)  
• Non-operating Temperature: -40°C - 60°C (-40°F - 140°F)  
• Operating Relative Humidity: 8% to 90% (non-condensing)  
• Non-operating Relative Humidity: 5% to 95% (non-condensing)

## PC Health Monitoring

- |             |   |  |
|-------------|---|--|
| CPU         | <ul style="list-style-type: none"> <li>Monitors for CPU Cores, Chipset Voltages, Memory</li> </ul>                          | <ul style="list-style-type: none"> <li>4+1 Phase-switching voltage regulator</li> </ul>      |
| FAN         | <ul style="list-style-type: none"> <li>Fans with tachometer monitoring</li> <li>Status monitor for speed control</li> </ul> | <ul style="list-style-type: none"> <li>Pulse Width Modulated (PWM) fan connectors</li> </ul> |
| Temperature | <ul style="list-style-type: none"> <li>Monitoring for CPU and chassis environment</li> </ul>                                | <ul style="list-style-type: none"> <li>Thermal Control for fan connectors</li> </ul>         |

# SPECIFICATIONS

## Power Supply (76mm Width)

2000W Redundant Power Supplies with PMBus

<p><b>Total Output Power</b></p> <ul style="list-style-type: none"> <li>• 1000W: 100 – 120Vac</li> <li>• 1800W: 200 – 220Vac</li> <li>• 1980W: 220 – 230Vac</li> <li>• 2000W: 230 – 240Vac</li> <li>• 2000W: 200 – 240Vac (UL/CUL only)</li> </ul>	<p><b>Dimension (W x H x L)</b></p> <ul style="list-style-type: none"> <li>• 73.5 x 40 x 265 mm</li> </ul>
<p><b>Input</b></p> <ul style="list-style-type: none"> <li>• 100-120Vac / 12.5-9.5A / 50-60Hz</li> <li>• 200-220Vac / 10-9.5A / 50-60Hz</li> <li>• 220-230Vac / 10-9.8A / 50-60Hz</li> <li>• 230-240Vac / 10-9.8A / 50-60Hz</li> <li>• 200-240Vac / 11.8-9.8A / 50-60Hz (UL/cUL only)</li> </ul>	<p><b>+12V</b></p> <ul style="list-style-type: none"> <li>• Max: 83.3A / Min: 0A (100-120Vac)</li> <li>• Max: 150A / Min: 0A (200-220Vac)</li> <li>• Max: 165A / Min: 0A (220-230Vac)</li> <li>• Max: 166.7A / Min: 0A (230-240Vac)</li> <li>• Max: 166.7A / Min: 0A (200-240Vac) (UL/cUL)</li> </ul>
<p><b>12Vsb</b></p> <ul style="list-style-type: none"> <li>• Max: 2.1A / Min: 0A</li> </ul>	<p><b>Output Type</b></p> <ul style="list-style-type: none"> <li>• 25 Pairs Gold Finger Connector</li> </ul>

Certification



Titanium Level  
[ Test Report ]

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