



Simplify your data center and accelerate hybrid cloud benefits with Hitachi Unified Compute Platform HC family of all-NVMe, all-flash and hybrid solutions. Compute, storage, virtualization and high availability are combined into a simple, scalable and reliable enterprise-grade hyperconverged infrastructure.

**DATASHEET** 

# Modernize IT With Full-Stack Hyperconverged Infrastructure

# Next-Generation Hyperconverged Solutions

Hitachi Unified Compute Platform HC (UCP HC), in collaboration with Intel Select Solutions program, offers a scalable, simple and reliable hyperconverged platform to modernize data center and edge computing. The integrated UCP HC appliance meets collective needs of business applications, databases, analytics, virtual desktops, remote and branch office (ROBO) and cloud hosting solutions. It offers industry-leading policy-based management and data protection solutions to help organizations deliver agile and efficient IT services to meet strategic goals (see Table 1).

## Agile

- Accelerate time to production by up to 80% with automated provisioning.
- Experience three times faster apps with all-NVMe flash storage.
- Deliver excellent performance with industry-leading software-defined storage embedded in VMware vSphere hypervisor kernel.
- Automate operations with policies to accelerate service provisioning.
- Accelerate high-performance processing applications with a next-generation graphics processing unit (GPU) enabled UCP HC.

## Resilient

- Continuing legendary Hitachi reliability, UCP HC delivers a robust foundation to run your important applications with aggressive recovery point and recovery time objective (RPO and RTO) requirements.
- Protect apps in a remote data center with rapid recoverability. Minimize the impact of site failure with five-minute RPO using vSphere host-based replication.
- Hitachi Unified Compute Platform Advisor (UCP Advisor) provides deep visibility into your physical and virtual stack and allows firmware upgrades in a nondisruptive manner. UCP Advisor's built-in remote monitoring software proactively monitors for potential issues and resolves them, before they impact operations.
- Hitachi's reliable one-stop support for the entire appliance provides a zero-worry experience to organizations using UCP HC.

#### **Cloud Efficient**

- UCP HC leverages Intel Xeon Scalable processor CPU and inexpensive storage, integrated with VMware vSphere and vSAN to reduce the total cost of ownership.
- High VM density supports a mix of applications, eliminating the need for storage sprawl.
- Advanced policy-based management engine ensures provisioning of the right storage services on the fly, with accurate quality of service (QoS) per VM.
- Manage UCP HC and traditional external storage systems with a common management framework, protecting investments in SAN storage.



#### TABLE 1. IMPORTANT FEATURES

- Hypervisor-embedded, software-defined storage.
- 2. High-performance, all-NVMe solutions.
- 3. Build hybrid cloud with VMware Cloud Foundation.
- 4. Interoperability with external storage.
- Unified management of hyperconverged infrastructure (HCI) and external SAN.
- 6. Up to seven times storage reduction.
- 7. Automated over-the-air firmware upgrade.
- 8. Enhanced deep learning and Al with Nvidia
- 9. Single support for entire HCI appliance.
- Validated reference architecture for key use cases, including configurations verified as Intel Select Solutions.

# TABLE 2. HITACHI UNIFIED COMPUTE PLATFORM HC FAMILY SPECIFICATIONS

Product	UCP HC V124N	UCP HC V225G	UCP HC V220F	UCP HC V120F	UCP HC V120	UCP HC V220
Configuration	All-NVMe Flash	All-flash, general pur- pose (GP) GPU-enabled	All-flash	All-flash (Intel Select Solutions* verified)	Hybrid	Hybrid
Form Factor	1 unit (U), 1 node	2U, 1 node	2U, 1 node	1U, 1 node	1U, 1 node	2U, 1 node
Processor	Intel Xeon Silver 4210R (10 cores, 2.4GHz, 100W), Intel Xeon Gold 6226R (16 cores, 2.90GHz, 150W), Intel Xeon Gold 6240R (24 cores, 2.40GHz, 165W), or Intel Xeon Platinum 8276L (28 cores, 2.20GHz, 165W)	Intel Xeon Silver 4210R (10 cores, 2.4GHz, 100W), Intel Xeon Gold 6256 (12 cores, 3.60GHz, 205W), Intel Xeon Gold 6226R (16 cores, 2.90GHz, 150W), Intel Xeon Gold 6240R (24 cores, 2.40GHz, 165W), Intel Xeon Gold 6242R (20 cores, 3.10GHz, 205W), or Intel Xeon Gold 6242R (20 cores, 3.10GHz, 205W), or Intel Xeon Gold 6248R (24 cores, 3.00GHz, 205W)  Nvidia options: one or four GP GPU Nvidia Tesla M10, Nvidia Tesla V100 (16GB or 32GB), or Nvidia Turing T4 Tensor Core	Intel Xeon Silver 4210R (10 cores, 2.4GHz, 100W), Intel Xeon Gold 6256 (12 cores, 3.60GHz, 205W), Intel Xeon Gold 6226R (16 cores, 2.90GHz, 150W), Intel Xeon Gold 6240R (24 cores, 2.40GHz, 165W), Intel Xeon Gold 6242R (20 cores, 3.10GHz, 205W), or Intel Xeon Gold 6248R (24 cores, 3.00GHz, 205W)	Intel Xeon Silver 4210R (10 cores, 2.4GHz, 100W), Intel Xeon Gold 6226R (16 cores, 2.90GHz, 150W), Intel Xeon Gold 6240R (24 cores, 2.40GHz, 165W), or Intel Xeon Platinum 8276L (28 cores, 2.20GHz, 165W)	Intel Xeon Silver 4210R (10 cores, 2.4GHz, 100W), Intel Xeon Gold 6226R (16 cores, 2.90GHz, 150W), Intel Xeon Gold 6240R (24 cores, 2.40GHz, 165W), or Intel Xeon Platinum 8276L (28 cores, 2.20GHz, 165W)	Intel Xeon Silver 4210R (10 cores, 2.4GHz, 100W), Intel Xeon Gold 6256 (12 cores, 3.60GHz, 205W), Intel Xeon Gold 6226R (16 cores, 2.90GHz, 150W), Intel Xeon Gold 6240R (24 cores, 2.40GHz, 165W), Intel Xeon Gold 6242R (20 cores, 3.10GHz, 205W), or Intel Xeon Gold 6248R (24 cores, 3.00GHz, 205W)
Raw Storage, per Node	3-80TB	4-47TB	2-193TB	4-77TB	2-18TB	12-64TB
Estimated Usable Capacity	5-210TB	6-124TB	204-328TB	7-200TB	1-9TB	6-32TB
Memory (traditional DIMMs, DDR4)	Up to 3.0TB per node	Up to 1.5TB per node	Up to 3.0TB per node	Up to 3.0TB per node	Up to 3.0TB per node	Up to 3TB per node
Memory (Intel Optane Persistent Memory)	6TB (12 x 512GB) PMem with up to 1.5TB (12 x 128GB) DDR4 cache	N/A	6TB (12 x 512GB) PMem with up to 1.5TB (12 x 128GB) DDR4 cache	Up to 3.0TB per node	Up to 3.0TB per node	Up to 3.0TB per node
Cache Tier	Intel Optane SSD P4600 (1.6TB) or P4800X 375 or 750GB	1x or 2x Intel: SSD S4600 960GB	Up to 8TB Intel SSD P4600 (NVMe) or up to 3.75GB Intel Optane SSD DC P4800X	Intel Optane SSD P4800X Series (375 or 750GB, 2.5 in., U.2) or 800Gb - 1.6TB NVMe SSD	1-2 x 960GB	480GB SATA SSD (1x to 4x) or 960GB SATA SSD (1x to 4x)
Network	Up to 4 x 10/25GbE SFP+; or up to 8 x 10GbE RJ45 or SFP+; or mix of 4 x 10 and 2 x 25GbE 2 x 100/50/40/25GbE port Mellanox Connect X5 EN dual port	Up to 4 x 10/25GbE SFP+; or up to 8 x 10GbE RJ45 or SFP+; or mix of 4 x 10 and 2 x 25GbE 2 x 100/50/40/25GbE port Mellanox Connect X5 EN dual port	Up to 4 x 10/25GbE SFP+; or up to 8 x 10GbE RJ45 or SFP+; or mix of 4 x 10 and 2 x 25GbE 2 x 100/50/40/25GbE port Mellanox Connect X5 EN dual port	Up to 4 x 10/25GbE SFP+; or up to 8 x 10GbE RJ45 or SFP+; or mix of 4 x 10 and 2 x 25GbE 2 x 100/50/40/25GbE port Mellanox Connect X5 EN dual port	Up to 4 x 10/25GbE SFP+; or up to 8 x 10GbE RJ45 or SFP+; or mix of 4 x 10 and 2 x 25GbE 2 x 100/50/40/25GbE port Mellanox Connect X5 EN dual port	Up to 4 x 10/25GbE SFP+; or up to 8 x10GbE RJ45 or SFP+; or mix of 4 x 10 and 2 x 25GbE 2 x 100/50/40/25GbE port Mellanox Connect X5 EN dual port
Management Network	One 1Gb/s BMC port	One 1Gb/s BMC port	One 1Gb/s BMC port	One 1Gb/s BMC port	One 1Gb/s BMC port	One 1Gb/s BMC port
Network Switch Support	Customer-supplied switch such as Arista, Cisco Nexus or any other switch that meets VMware vSAN requirements	Customer-supplied switch such as Cisco Nexus or any other switch that meets vSAN requirements	Customer-supplied switch such as Cisco Nexus or any other switch that meets vSAN requirements	Customer-supplied switch such as Cisco Nexus or any other switch that meets vSAN requirements	Customer-supplied switch such as Cisco Nexus or any other switch that meets vSAN requirements	Customer-supplied switch such as Cisco Nexus or any other switch that meets vSAN requirements
Maximum Nodes per Cluster	64	64	64	64	64	64
Maximum Nodes Manageable per VMware vCenter	2,000	2,000	2,000	2,000	2,000	2,000
Minimum Initial Order	2 node (minimum 4 nodes for Intel Select Solutions*)	2 node (minimum 4 nodes for Intel Select Solutions*)	2 node (minimum 4 nodes for Intel Select Solutions*)	2 node (minimum 4 nodes for Intel Select Solutions*)	2 node (minimum 4 nodes for Intel Select Solutions*)	2 node (minimum 4 nodes for Intel Select Solutions*)
Node Increment	1 node	1 node	1 node	1 node	1 node	1 node

<sup>\*</sup> For more details on Intel Select Solutions, visit https://www.intel.com/content/www/us/en/products/solutions/select-solutions/cloud/vmware-vsan-ver-2.html.

#### Hitachi Vantara







