# CloudDC SuperServer AS -1116CS-TN

1U UP CloudDC with DC-MHS, up to 12 hot-swap 2.5" NVMe/SAS/SATA bays and 2 PCIe 5.0 x16 slots + 1 PCIe 5.0 x16 AIOM slot

## Key Applications

Virtualization, HPC, CDN, Edge Nodes, Cloud Computing, Data Center Optimized, Storage Headnode,

## Key Features

- All-in-one platform for cloud data centers, based on the OCP Data Center Modular Hardware System (DC-MHS) with flexible I/O and storage configurations
  Based on Modular DeNsity Optimized HPM Form Factor (M-DNO)
  Support DC-SCM module with OpenBMC;
- Single AMD EPYC™ 9005/9004 Series Processor;
- Support up to DDR5 12 DIMM slots (1DPC), speed up to 6400MT/s (Please check System Memory Section for detail);
- 2 PCIe 5.0 x16 FHHL slots;
- Flexible networking options with 1 AIOM networking slot (OCP NIC 3.0 compatible)
  1 RJ45 1 GbE Dedicated BMC LAN Port (DC-SCM);
- 8 Hot-swap 2.5" NVMe/SATA/SAS drive bays
  Optional 4 Hot-swap 2.5" NVMe/SAS/SATA drive bays
  Optional RAID support via storage add-on card;
- Support up to 2 FHHL GPU accelerator cards;
- Dual 1600W / 2000W Redundant Titanium Level power supplies
  (Power supply full redundancy based on configuration and application load);

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|---|---|
| Form Factor | 1U Rackmount<br>Enclosure: 437 x 43 x 747mm (17.2" x 1.7" x 29.4")<br>Package: (23.8" x 8.1" x 40.6") |
| Processor | Single processor(s)<br>AMD EPYC™ 9005/9004 Series Processors<br>Up to 192C/384T |
| GPU | Max GPU Count: Up to 2 single-width GPUs<br>CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect |
| System Memory | Slot Count: 12 DIMM slots/12 Channels<br>Max Memory (1DPC): Up to 3TB 6400MT/s ECC DDR5 RDIMM (AMD EPYC™ 9005 Series Processor)<br>Max Memory (1DPC): Up to 3TB 4800MT/s ECC DDR5 RDIMM (AMD EPYC™ 9004 Series Processor) |
| Drive Bays Configuration | Default: Total 8 bays<br>• 8 front hot-swap 2.5" PCIe 5.0 NVMe*/SAS*/SATA* drive bays<br>Option A: Total 12 bays<br>• 12 front hot-swap 2.5" PCIe 5.0 NVMe*/SAS*/SATA* drive bays<br>(*NVMe/SAS/SATA support may require additional storage controller and/or cables, please see the optional parts list for details)<br>M.2: 2 M.2 PCIe 3.0 x2 NVMe slots (M-key 2280(default)/22110) |
| Expansion Slots | PCI-Express (PCIe) Configuration: Default<br>    • 2 PCIe 5.0 x16 FHHL slots<br>    • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)<br>CXL Support: Up to 2 CXL 2.0 x16 devices |
| On-Board Devices | Chipset: System on Chip<br>Network Connectivity: Via AIOM<br>IPMI: Support for Intelligent Platform Management Interface v.2.0<br>    IPMI 2.0 with virtual media over LAN and KVM-over-LAN support |
| Input / Output | LAN: 1 RJ45 1 GbE Dedicated BMC LAN port<br>USB: 1 USB 2.0 Type-A port(Rear)<br>    1 USB 3.2 Gen1 Type-A port(Rear)<br>Video: 1 VGA port(Rear)<br>TPM: 1 TPM header |

*(Front View – System)*

| Drive Bay | Description |
|---|---|
| 0 — 7 | 8 Hot-swap 2.5" NVMe/SAS/SATA* Drive Bays |

*NVMe/SAS/SATA support requires additional parts from the optional parts list



*(Front View – System)*
Optional Configuration

| Drive Bay | Description |
|---|---|
| 0 — 11 | 12 Hot-swap 2.5" NVMe/SAS/SATA* Drive Bays |

*NVMe/SAS/SATA support requires additional parts from the optional parts list

| | |
|---|---|
| **System Cooling** | Fans: Up to 8 Counter-Rotating PWM 40x40x56mm Fan(s)<br>Air Shroud: 1 Air Shroud |
| **Power Supply** | 2x 1000W Redundant (1 + 1) Titanium Level (96%) power supplies |
| **System BIOS** | BIOS Type: AMI 64MB SPI Flash EEPROM<br>BIOS Features: Plug and Play (PnP)<br>　　　　　　　　SMBIOS 3.5 or later<br>　　　　　　　　UEFI 2.8<br>　　　　　　　　USB Keyboard support<br>　　　　　　　　ACPI 6.5 |
| **Management** | SuperCloud Composer®; Supermicro Server Manager (SSM); Super Diagnostics Offline (SDO); KVM with dedicated LAN ; IPMI 2.0; Supermicro Thin-Agent Service (TAS); OOB Management Package (SFT-OOB-LIC ); SuperServer Automation Assistant (SAA) New!; IPMIView |
| **PC Health Monitoring** | CPU: Monitors for CPU Cores, Chipset Voltages, Memory<br>FAN: Fans with tachometer monitoring<br>　　　Status monitor for speed control<br>　　　Pulse Width Modulated (PWM) fan connectors<br>Temperature: Monitoring for CPU and chassis environment<br>　　　　　　　　Thermal Control for fan connectors<br>Voltage:<br>System temperature, Memory temperature, CPU temperature, 3.3V standby, +5V standby, +5V, +3.3V, +12V, CPU thermal trip support |
| **Dimensions and Weight** | Weight: Gross Weight: 49 lbs (22.2 kg)<br>　　　　　Net Weight: 34 lbs (15.4 kg)<br>Available Color: Black |
| **Operating Environment** | Operating Temperature: 10°C to 35°C (50°F to 95°F)<br>Non-operating Temperature: -30°C to 60°C (-22°F to 140°F)<br>Operating Relative Humidity: 8% to 80% (non-condensing)<br>Non-operating Relative Humidity: 8% to 90% (non-condensing) |
| **Motherboard** | **Super H14SHM** |
| **Chassis** | **CSE-MD101TS-R000NDP** |