

SuperWorkstation SYS-751GE-TNRT

DP rackmount tower 4-GPU workstation with closed-loop liquid cooling



Key Applications

High Performance Computing, Engineering/scientific research, AI/Deep Learning Training,

Key Features

- Acoustically optimized for quiet operation;
- 5th/4th Gen Intel® Xeon® Scalable processor support;
- Intel® C741 Chipset;
- 6 PCle 5.0 x16;
- 8x 2.5" peripheral drive bays Up to 8x NVMe SSD support;
- Closed-loop liquid cooling for CPUs and GPUs;
- Supports up to four liquid-cooled GPUs;



Form Factor	Tower or 5U Rackmount
	Enclosure: 454.7 x 218.4 x 701mm (17.9" x 8.6" x 27.6")
	Package: 388 x 655 x 956mm (15.3" x 25.8" x 37.6")
Processor	Dual Socket E (LGA-4677)
	5th Gen Intel® Xeon® / 4th Gen Intel® Xeon® Scalable processors
	Up to 64C/128T; Up to 320MB Cache per CPU
GPU	Max GPU Count: Up to 4 double-width GPU(s)
	Supported GPU: NVIDIA PCIe: A100
	CPU-GPU Interconnect: PCIe 4.0 x16 CPU-to-GPU Interconnect
	GPU-GPU Interconnect: NVIDIA® NVLink® Bridge (optional)
System Memory	Slot Count: 16 DIMM slots
	Max Memory (1DPC): Up to 2TB 5600MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 8 bay(s)
	 8 front hot-swap 2.5" NVMe/SAS*/SATA drive bay(s)
	(*SAS support may require additional storage controller and/or cables, please see the optional parts list for
	details)
	M.2: 2 M.2 NVMe slot(s) (M-key 2280/22110)
Expansion Slots	Default
	• 6 PCle 5.0 x16 FHFL slot(s)
On-Board Devices	SATA: SATA (6Gbps); RAID 0/1/5/10 support
	Chipset: Intel® C741
	Network Connectivity: 2 RJ45 10GbE with Intel® X550-AT2
	1 RJ45 1GbE with ASPEED AST2600
	1 SFP28 25GbE (optional)
Input / Output	LAN: 1 P. 145 1 GhE Dedicated IPMLLAN port(s)

Input / Output LAN: 1 RJ45 1 GbE Dedicated IPMI LAN port(s)

2 RJ45 10 GbE LAN port(s) USB: 2 USB 3.2 Gen1 port(s) (front) 3 USB 3.2 Gen1 port(s) (rear) 1 USB 3.2 Gen2 port(s) (rear)

Video: 1 VGA port(s)

DOM: 2 SATA **DOM** (Disk on Module) port(s)

Audio: 7.1 HD Audio Line Out







CPUI CPUI

System Cooling Fans: 1 fan 8cm Fan(s)
1 liquid cooling Fan(s)
2 fan 12cm Fan(s)

Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)

Power Supply 1x 2200W Redundant Titanium Level power supply

System BIOS BIOS Type: AMI 32MB SPI Flash EEPROM

Management SuperCloud Composer; Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); SuperDoctor® 5;

Super Diagnostics Offline; TAS: Supermicro Thin-Agent Service (TAS); SAA(new!)

PC Health Monitoring CPU: Monitors for CPU Cores, Chipset Voltages, Memory

8+4 Phase-switching voltage regulator
FAN: Fans with tachometer monitoring
Status monitor for speed control

Pulse Width Modulated (PWM) fan connectors Temperature: Monitoring for CPU and chassis environment

Thermal Control for fan connectors

Dimensions and Weight Weight: Gross Weight: 121 lbs (55 kg)

Net Weight: 88 lbs (44 kg) Available Color: Black Front & Black Body

Operating Environment Operating Temperature: 10°C ~ 25°C (50°F ~ 77°F)

Non-operating Temperature: -40°C to 60°C (-40°F to 140°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)

Motherboard Super X13DEG-QT

Chassis CSE-759TS-R2K21BP