

TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro 2U MegaDC Server SYS-212MT-FNR

2U UP X14 MegaDC with Modular Front I/O

SKU SYS-212MT-FNR

2U

LGA4710

Supermicro



FORM FACTOR

2U

MAX POWER (BASE)

296 W

HEAT OUTPUT

1,010 BTU/h

PRICE

On request

CONFIGURE & QUOTE ONLINE

serverinvest.com/product/sys-212mt-fnr

01 Product overview

The Supermicro SYS-212MT-FNR is a 2U MegaDC Server built on Intel Xeon 6 with up to 4 TB of memory in 16 DIMM slots.

2U UP X14 MegaDC with Modular Front I/O.

The chassis accepts up to 2 GPU accelerators for AI, rendering and HPC workloads.

ServerInvest configures every SYS-212MT-FNR to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- Intel Xeon 6
- Up to 4 TB memory · 16 DIMM slots
- Total 8 bays 8 front hot-swap E1.S PCIe 5.0 x4 NVMe drive bays
- Up to 2 GPUs
- Power: 2x 2000W
- Networking: 1 RJ45 10GbE with Intel E610

KEY SPECIFICATIONS

Form factor	2U
Processor	Intel Xeon 6
Socket	LGA4710
Memory	16 DIMM slots, up to 4 TB
Memory type	DDR5-6400 ECC RDIMM
Drive bays	16 (16 NVMe)
GPU	Up to 2 GPUs
Power supply	2× 2000 W
Typical power draw	1350 W
Networking	1 RJ45 10GbE with Intel E610
Dimensions (W×H×D)	437 × 89 mm



02 Base configuration

Components included in the listed base price — every part can be changed in the online configurator

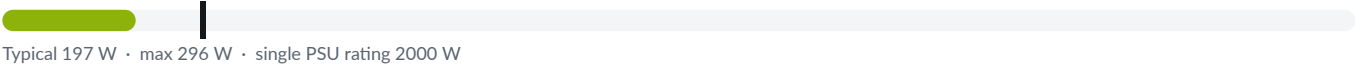
COMPONENT	DESCRIPTION	QTY
Base system	Supermicro 2U MegaDC Server SYS-212MT-FNR	1
Processor	Intel Xeon 6505P Processor 12 Cores (48M Cache, 2.20Ghz) 150W	1
Memory	16GB 6400MT/s DDR5 ECC Registered DIMM Module	2
Warranty & support	3-year return-to-base warranty (included)	1

Price on request — contact us for a tailored quotation

03 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
84 W	197 W	296 W	1,010 BTU/h	0.3 kW	15%



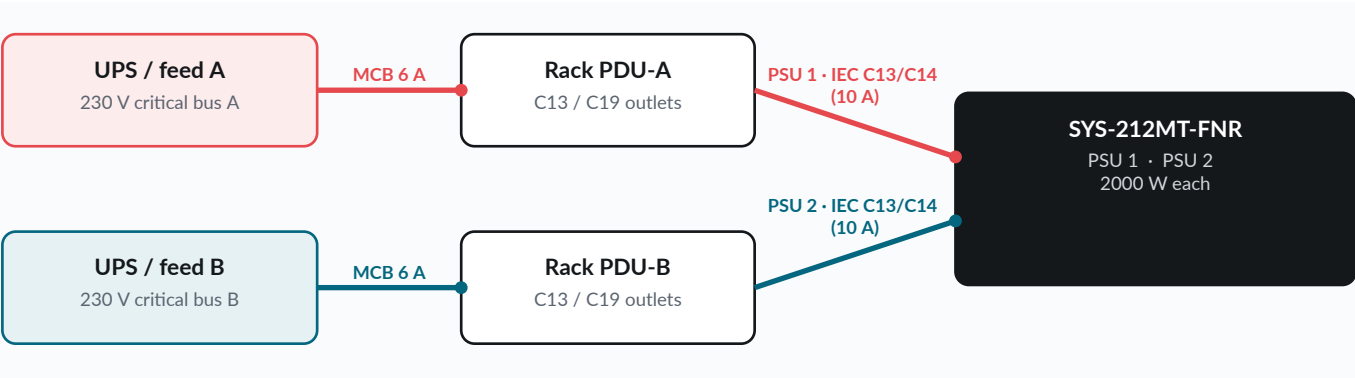
Annual IT energy (24/7)	1,429 kWh
Annual facility energy (PUE 1.5)	2,144 kWh
Annual energy cost	€286 IT · €429 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.56 t (grid factor 0.26 kg/kWh)
Power supplies	2× 2000 W redundant (N+1)

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	50 W	77 W	110 W
CPU — Intel Xeon 6505P Processor 12 Cores	23 W	98 W	150 W
2× Memory 16 GB DIMM	6 W	10 W	18 W

DC loads converted to wall power at 94% PSU efficiency; typical load assumed 70% of the time. Engineering estimates — confirm with the manufacturer's power calculator for critical designs.

04 Power connection diagram

Dual-feed (A/B) connection for redundant power supplies



- Connect PSU 1 to PDU-A and PSU 2 to PDU-B (independent feeds) using IEC C13/C14 (10 A) power cords.
- Maximum current per feed: 1.4 A at 230 V — each feed must be able to carry the full load if the other fails.
- Recommended protection per PDU circuit: MCB 6 A, curve C; RCD according to local regulations.
- Heat to remove at full load: 296 W = 1,010 BTU/h (0.3 kW).

05 Full specifications

MOTHERBOARD

Super X14SBPM

PROCESSOR

CPU Single Socket E2 (LGA-4710)
Intel Xeon 6700/6500 series processors with P-cores or 6700 series processors with E-cores

Core Count	P-cores: Up to 86C/172T; Up to 336MB Cache E-cores: Up to 144C/144T; Up to 108MB Cache
Note	Supports up to 350W TDP CPUs (Air Cooled)

GPU

Max GPU Count	Up to 2 double-width GPUs
Supported GPU	NVIDIA PCIe: H200 NVL (141GB), L40S, NVIDIA RTX PRO 4500 Blackwell, NVIDIA RTX PRO 6000 Blackwell Server Edition View GPU Options
CPU-GPU Interconnect	PCIe Gen5 x16
GPU-GPU Interconnect	NVIDIA NVLink

SYSTEM MEMORY

Memory	Slot Count: 16 DIMM slots Max Memory (2DPC): Up to 4TB 6000MT/s ECC DDR5 RDIMM View Memory Options
Memory Voltage	1.1V

ON-BOARD DEVICES

NVMe	NVMe; RAID 0/1/5/10 support(Intel VROC RAID key required)
Network Connectivity	1 RJ45 10GbE with Intel E610 View AOC Options

INPUT / OUTPUT

LAN	1 RJ45 1 GbE Dedicated BMC LAN port 1 RJ45 10 GbE LAN port (Intel E610)
USB	2 USB 3.0 ports (front)
Video	1 Mini-DP port (Front)
Serial	1 COM (Micro USB) port (Front)
TPM	1 TPM Onboard TPM & TPM Header

SYSTEM BIOS

BIOS Type	AMI 64MB Flash ROM
-----------	--------------------

MANAGEMENT

Software	SuperCloud Composer (SCC) Supermicro Server Manager (SSM) Super Diagnostics Offline (SDO) Supermicro Thin-Agent Service (TAS) SuperServer Automation Assistant (SAA) New!
Power configurations	Power-on mode for AC power recovery ACPI Power Management

SECURITY

Hardware	Trusted Platform Module (TPM) 2.0 Silicon Root of Trust (RoT) – NIST 800-193 Compliant
----------	---

Features	Cryptographically Signed Firmware Secure Boot Secure Firmware Updates Automatic Firmware Recovery Supply Chain Security: Remote Attestation Runtime BMC Protections System Lockdown
----------	---

PC HEALTH MONITORING

CPU	Monitors for CPU Cores, Chipset Voltages, Memory
Fan	Fans with tachometer monitoring Pulse Width Modulated (PWM) fan connectors Status monitor for speed control
Temperature	Monitoring for CPU and chassis environment Thermal Control for fan connectors

CERTIFICATIONS

Operating Systems	RHEL 10.2, Windows Server 2022, Windows Server 2025 View all OS Compatibility and Certification Matrix
-------------------	---

CHASSIS

Form Factor	2U Rackmount
Model	CSE-LB23MTS-R000NDP

DIMENSIONS AND WEIGHT

Height	3.5" (88.9 mm)
Width	17.2" (436.88 mm)
Depth	17" (431.8 mm)
Package	11" (H) x 26.5" (W) x 34" (D)
Weight	Gross Weight: 59 lbs (26.76 kg) Net Weight: 35.3 lbs (16 kg)
Available Color	Black

FRONT PANEL

Buttons	Power On/Off UID button
LED	HDD activity Network activity Power status System information (overheat/UID)

EXPANSION SLOTS

PCI-Express (PCIe) Configuration	Default 2 PCIe 5.0 x16 FHFL double-width slots 1 PCIe 5.0 x8 FHHHL slot 1 PCIe 5.0 x8 LP slot 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible) View AOC Options
CXL Support	Up to 2 CXL 2.0 x16/x8 devices

M.2	1 M.2 PCIe 5.0 x2 NVMe slot (M-key 22110(default)/2280)
-----	---

DRIVE BAYS / STORAGE

Drive Bays Configuration	Default: Total 8 bays 8 front hot-swap E1.S PCIe 5.0 x4 NVMe drive bays Option A: Total 8 bays 8 front hot-swap E3.S 1T PCIe 5.0 x4 NVMe drive bays Option B: Total 8 bays 8 front hot-swap E3.L 1T PCIe 5.0 x4 NVMe drive bays
--------------------------	---

M.2	1 M.2 PCIe 5.0 x2 NVMe slot (M-key 22110(default)/2280) View M.2 Options
-----	---

SYSTEM COOLING

Fans	5 Hot-Swappable, High Performance PWM 80x80x38mm Fan(s)
------	---

Air Shroud	1 Air Shroud
------------	--------------

POWER SUPPLY

2x 2000W
2x 1000W
2x 750W
2x 1600W
2x 2000W
2x 2000W Redundant (1 + 1) Titanium Level (96%) Hot-plug power supplies
Dimension (WxHxL)
73.5 x 40 x 203 mm

OPERATING ENVIRONMENT

RoHS	RoHS Compliant
------	----------------

Environmental Spec.	Name: A2 Operating Temperature: 10°C to 35°C (50°F to 95°F) Non-operating Temperature: -30°C to 60°C (-40°F to 140°F) Operating Relative Humidity: 8% to 80% (max 21° DP; non-condensing) Non-operating Relative Humidity: 8% to 90% (max 38° DP; non-condensing)
---------------------	---

ENVIRONMENTAL / RECYCLING

Recycle	Return Server-End of Life Product
---------	-----------------------------------

06 Built, tested & supported by ServerInvest

Engineered configuration

Every option validated for socket, memory channels, PCIe lanes, power and cooling.

48-hour burn-in

Assembled, firmware-updated and stress-tested before it leaves our workshop.

3-year warranty

Standard on every system, with on-site next-business-day upgrades available.

Rack-ready delivery

Rails, cable management and labelling included — delivered across Europe.



Ready to order or need changes?

Configure this system online or talk to a solutions engineer — we reply within one business day.

office@serverinvest.com

Official manufacturer datasheet: serverinvest.com/product/sys-212mt-fnr/datasheet/manufacturerr

