

TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro IOT SuperServer SYS-211E-FRN2T

X13 2U Short-depth front I/O System with 2 x 10G ports, 2x 2.5" NVMe drive bays and redundant AC PSU

SKU SYS-211E-FRN2T

2U

LGA4677

Supermicro



FORM FACTOR

2U

MAX POWER (BASE)

269 W

HEAT OUTPUT

918 BTU/h

PRICE

from €5,120**CONFIGURE & QUOTE ONLINE**serverinvest.com/product/sys-211e-frn2t

01 Product overview

The Supermicro SYS-211E-FRN2T is a 2U IoT Server built on Intel Xeon Scalable 4th/5th Gen with up to 2 TB of memory in 8 DIMM slots.

X13 2U Short-depth front I/O System with 2 x 10G ports, 2x 2.5" NVMe drive bays and redundant AC PSU.

The chassis accepts up to 3 GPU accelerators for AI, rendering and HPC workloads.

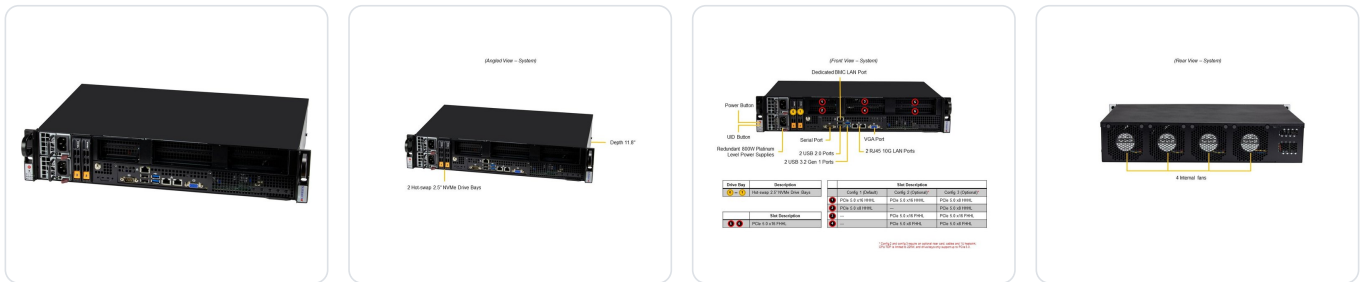
ServerInvest configures every SYS-211E-FRN2T to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- Intel Xeon Scalable 4th/5th Gen
- Up to 2 TB memory · 8 DIMM slots
- Total 2 bays 2 front hot-swap 2.5" NVMe drive bays
- Up to 3 GPUs
- Power: 2x 800W
- Networking: 2 QSFP28 25GbE with Intel XXV710 (optional)

KEY SPECIFICATIONS

Form factor	2U
Processor	Intel Xeon Scalable 4th/5th Gen
Socket	LGA4677
Memory	8 DIMM slots, up to 2 TB
Memory type	DDR5-5600 ECC RDIMM
Drive bays	2 (2 NVMe)
GPU	Up to 3 GPUs
Power supply	2× 800 W
Typical power draw	530 W
Networking	2 QSFP28 25GbE with Intel XXV710 (optional)
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 IOT SuperServer SYS-211E-FRN2T	1
Processor	Intel Xeon Bronze 3408U Processor 8 Cores (22.5M Cache, 1.80/1.90 GHz) 125W	1
Memory	16GB 5600MT/s DDR5 ECC Registered DIMM Module	2
Warranty & support	3-year return-to-base warranty (included)	1

Base configuration from

€5,120
excl. VAT

03 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
80 W	179 W	269 W	918 BTU/h	0.3 kW	34%

Typical 179 W · max 269 W · single PSU rating 800 W

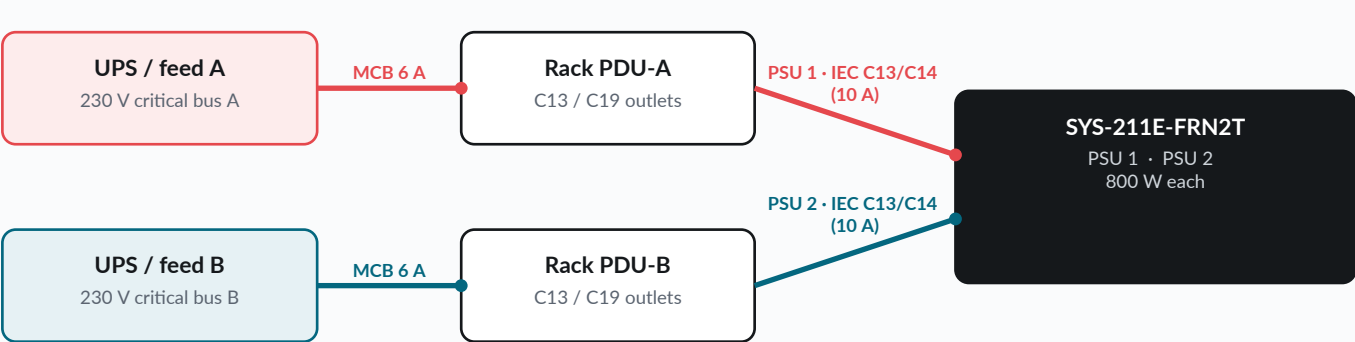
Annual IT energy (24/7)	1,308 kWh
Annual facility energy (PUE 1.5)	1,962 kWh
Annual energy cost	€262 IT · €392 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.51 t (grid factor 0.26 kg/kWh)
Power supplies	2× 800 W redundant (N+1)

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	50 W	77 W	110 W
CPU — Intel Xeon Bronze 3408U Processor 8 Cores	19 W	81 W	125 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: 1.2 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: 269 W = 918 BTU/h (0.3 kW).

05 Full specifications

MOTHERBOARD	
	Super X13SEM-TF
PROCESSOR	
CPU	Single Socket E (LGA-4677) 5th Gen Intel Xeon / 4th Gen Intel Xeon Scalable processors
Core Count	Up to 60C/120T; Up to 112.5MB Cache

Note

Supports up to 350W TDP CPUs (Air Cooled)*

*Air Cooled CPUs with TDP over 205W only supported under specific conditions. Contact a Supermicro representative for details.

GPU

Max GPU Count	Up to 3 single-width GPUs
Supported GPU	NVIDIA PCIe: A2 Intel PCIe: Intel Data Center GPU Flex 140
CPU-GPU Interconnect	PCIe 5.0 x16 CPU-to-GPU Interconnect
GPU-GPU Interconnect	PCIe

SYSTEM MEMORY

Memory	Slot Count: 8 DIMM slots Max Memory (2DPC): Up to 2TB 5600MT/s ECC DDR5 RDIMM View Memory Options
Memory Voltage	1.1V

ON-BOARD DEVICES

NVMe	NVMe; RAID 0/1 support(Intel VROC RAID key required) View NVMe Options
Network Connectivity	2 QSFP28 25GbE with Intel XXV710 (optional) 2 QSFP+ 40GbE with Intel X710-BM2 (optional) 4 RJ45 1GbE with Intel I350 (optional) 2 QSFP28 100GbE with Intel E810-CAM2 (optional) 2 RJ45 10GBASE-T with Intel X550 2 SFP+ 10GbE with Intel X710-BM2 (optional) 2 QSFP56 100GbE (optional) 4 QSFP28 25GbE with Intel E810-CAM1 (optional) 2 QSFP56 200GbE (optional) View AOC Options

INPUT / OUTPUT

LAN	1 RJ45 1 GbE Dedicated BMC LAN port 2 RJ45 10 GbE LAN ports (Intel X550-AT2)
USB	2 USB 2.0 ports (front) 2 USB 3.2 Gen1 ports (front)
Video	1 VGA port
Serial	1 port

SYSTEM BIOS

BIOS Type	AMI 256MB SPI Flash
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MANAGEMENT

Software	SuperCloud Composer (SCC) Supermicro Server Manager (SSM) Supermicro Update Manager (SUM) Supermicro SuperDoctor 5 (SD5) Super Diagnostics Offline (SDO) Supermicro Thin-Agent Service (TAS) SuperServer Automation Assistant (SAA) New!
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Power configurations	ACPI Power Management Power-on mode for DC power recovery
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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	CPU thermal trip support, PEPI Monitoring for CPU and chassis environment

CERTIFICATIONS

Operating Systems	Oracle Linux 9.2, RHEL 8.8, RHEL 9.2, Windows Server 2022 View all OS Compatibility and Certification Matrix
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CHASSIS

Form Factor	2U Rackmount
Model	CSE-211M

DIMENSIONS AND WEIGHT

Height	3.5" (88.9 mm)
Width	17.2" (436.88 mm)
Depth	11.8" (298.8 mm)
Package	13.3" (H) x 19.3" (W) x 23.3" (D)
Weight	Gross Weight: 22 lbs (10 kg) Net Weight: 17 lbs (7.7 kg)
Available Color	Silver/Black

FRONT PANEL

Buttons	Power On/Off UID button
LED	HDD activity LAN1 activity LAN2 activity Power status System information

EXPANSION SLOTS

PCI-Express (PCIe) Configuration	Default 2 PCIe 5.0 x16 FHHL slots 1 PCIe 5.0 x16 HHHL slot 1 PCIe 5.0 x8 HHHL slot Option A* 3 PCIe 5.0 x16 FHHL slots 1 PCIe 5.0 x16 HHHL slot 1 PCIe 5.0 x8 FHHL slot Option B* 3 PCIe 5.0 x16 FHHL slots 2 PCIe 5.0 x8 HHHL slots 1 PCIe 5.0 x8 HHHL slot (*Requires additional parts, please see the optional parts list for details. For more details on PCIe slot configuration options, please refer to the system callout images above.) View AOC Options
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DRIVE BAYS / STORAGE

Drive Bays Configuration	Default: Total 2 bays 2 front hot-swap 2.5" NVMe drive bays View NVMe Options
M.2	2 M.2 NVMe slots (M-key 2280/22110) View M.2 Options

SYSTEM COOLING

Fans	Up to 4x 4-PIN PWM 8cm Fan(s)
Air Shroud	1 Air Shroud

POWER SUPPLY

2x 800W

2x 800W Redundant Platinum Level (94%) power supplies

Dimension (WxHxL)

54.5 x 40.25 x 220 mm

OPERATING ENVIRONMENT

Environmental Spec.	Operating Temperature: 0°C to 45°C (32°F to 113°F) Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)
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ENVIRONMENTAL / RECYCLING

Recycle	Return Server-End of Life Product
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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-211e-frn2t/datasheet/manufacture

