

TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro Server SYS-E300-8D

SKU SYS-E300-8D

Compact

Supermicro



FORM FACTOR

Compact

MAX POWER (BASE)

306 W

HEAT OUTPUT

1,044 BTU/h

PRICE

On request



REQUEST A QUOTATION ONLINE
serverinvest.com/product/sys-e300-8d



01 Product overview

The Supermicro SYS-E300-8D is a server built on Intel Xeon D with up to 128 GB of memory.

ServerInvest configures every SYS-E300-8D 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 D
- Up to 128 GB memory
- 1x 2.5" fixed drive bay with bracket (when AOC area is not occupied)
- Networking: Dual 10G SFP+ from D-1500 SoC

KEY SPECIFICATIONS

Form factor	Compact
Processor	Intel Xeon D
Memory	up to 128 GB
Drive bays	1
Typical power draw	450 W
Networking	Dual 10G SFP+ from D-1500 SoC



02 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
73 W	190 W	306 W	1,044 BTU/h	0.3 kW	—

Typical 190 W · max 306 W

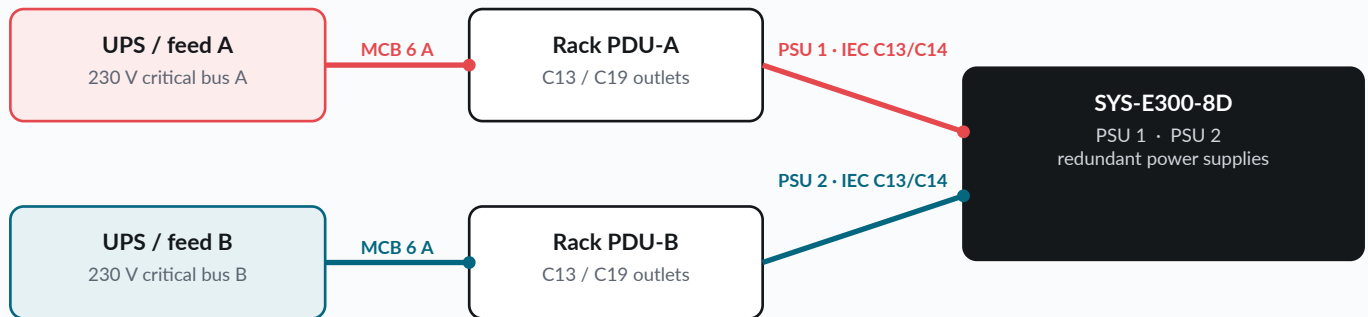
Annual IT energy (24/7)	1,357 kWh
Annual facility energy (PUE 1.5)	2,036 kWh
Annual energy cost	€271 IT · €407 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.53 t (grid factor 0.26 kg/kWh)
Power supplies	Redundant hot-swap PSUs — rating depends on the final configuration

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	38 W	59 W	85 W
CPU (base configuration)	25 W	110 W	185 W
2× Memory (base configuration)	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.

03 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 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: 306 W = 1,044 BTU/h (0.3 kW).

04 Full specifications

PROCESSOR/CACHE

CPU Intel Xeon processor D-1518 ,
2.2GHz; CPU TDP support 35W
FCBGA 1667

Cores / Cache 4 Cores, 8 Threads / 6MB

SYSTEM MEMORY

Memory Capacity 4x DDR4 DIMM sockets
Supports up to 128GB DDR4 ECC RDIMM
Supports up to 64GB DDR4 ECC/non-ECC UDIMM

Memory Type 2133/1866/1600MHz ECC DDR4 ECC RDIMM and ECC/Non-ECC UDIMM

DIMM Sizes 32GB, 16GB, 8GB, 4GB

Memory Voltage 1.2 V

Error Detection Corrects single-bit errors
Detects double-bit errors
(using ECC memory)

ON-BOARD DEVICES

Chipset System on Chip

SATA SoC controller for 4 SATA3 (6Gbps) ports; RAID 0,1,5,10 RSTe

Network Controllers Dual 10G SFP+ from D-1500 SoC
Quad 1GbE with Intel I350-AM4
Dual 1GbE with Intel I210

IPMI Support for Intelligent Platform Management Interface v2.0
IPMI 2.0 with virtual media over LAN and KVM-over-LAN support

Graphics Aspeed AST2400

USB 3.0 Intel SoC

TPM	TPM 2.0 header
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INPUT / OUTPUT

SATA	4 SATA3 (6Gbps) ports
LAN	2 10G SFP+ LAN ports 6 1GbE LAN ports 1 Dedicated IPMI LAN port
USB	2 USB 3.0 ports (rear)
Display	1 VGA port
DOM	2 SuperDOM (Disk on Module) power connectors
TPM	TPM 2.0 header

CHASSIS

Form Factor	Mini-1U
Model	CSE-E300

DIMENSIONS

Width	10.43" (264.8mm) / 15" (381mm) - pkg.
Height	1.7" (43mm) / 10.87" (276mm) - pkg.
Depth	8.9" (226mm) / 5.59" (142mm) - pkg.
Weight	Gross Weight: 7.5 lbs (3.4 kg) Net Weight: 3.45 lbs (1.56 kg)
Available Colors	Black

FRONT PANEL

Buttons	Power On/Off button
LEDs	Power LED (Hard drive activity LED)

EXPANSION SLOTS

PCI-Express	1 PCI-E 3.0 x8 slots
M.2	Interface: PCI-E 3.0 x4 Form Factor: M Key 2242/2280/22110 Support SATA devices
Mini PCI-E	Interface: PCI-E 2.0 x1 Support mSATA

DRIVE BAYS

Internal	1x 2.5" fixed drive bay with bracket (when AOC area is not occupied)
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SYSTEM COOLING

Fans	Passive CPU heat sink and max. 3x 40mm chassis fans
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SYSTEM BIOS

BIOS Type	128Mb SPI Flash with AMI BIOS
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BIOS Features	PCI 3.0 ACPI 5.0 USB Keyboard support Hardware BIOS Virus protection SMBIOS 2.8 UEFI 2.4 RTC (Real Time Clock) Wakeup
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MANAGEMENT

Software	Intel Node Manager IPMI 2.0 KVM with dedicated LAN NMI SUM SuperDoctor 5 Watch Dog
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Power Configurations	ACPI Power Management +12V DC Power Input Control of power-on for recovery from AC power loss CPU thermal trip support for processor protection M.2 NGFF connector, Node Manager Support, SDDC, System level control, UID, WOL
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Fan	Fans with tachometer status monitoring Status monitor for speed control Low noise fan speed control Pulse Width Modulated (PWM) fan connectors
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OPERATING ENVIRONMENT / COMPLIANCE

RoHS	RoHS Compliant
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Environmental Spec.	Operating Temperature: 0°C to 40°C (32°F to 104°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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05 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.



Interested in this solution?

Request a quotation online or talk to a solutions engineer — we reply within one business day.
office@serverinvest.com

