

TECHNICAL DATASHEET

SUPERMICRO · EDGE & EMBEDDED

Supermicro Server SYS-E100-9W-IA-C

SKU SYS-E100-9W-IA-C

Compact

Supermicro

SuperServer SYS-E100-9W-IA

(Angled View – System)



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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-e100-9w-ia-c



01 Product overview

The Supermicro SYS-E100-9W-IA-C is a server built on Intel Celeron Processor 4305UE Single Socket FCBGA-1528 Syst with up to 64 GB of memory in 2 DIMM slots.

ServerInvest configures every SYS-E100-9W-IA-C 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 Celeron Processor 4305UE Single Socket FCBGA-1528 Syst
- Up to 64 GB memory · 2 DIMM slots
- Networking: Single LAN with Intel I210IT

KEY SPECIFICATIONS

Form factor	Compact
Processor	Intel Celeron Processor 4305UE Single Socket FCBGA-1528 Syst
Memory	2 DIMM slots, up to 64 GB
Typical power draw	450 W
Networking	Single LAN with Intel I210IT



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

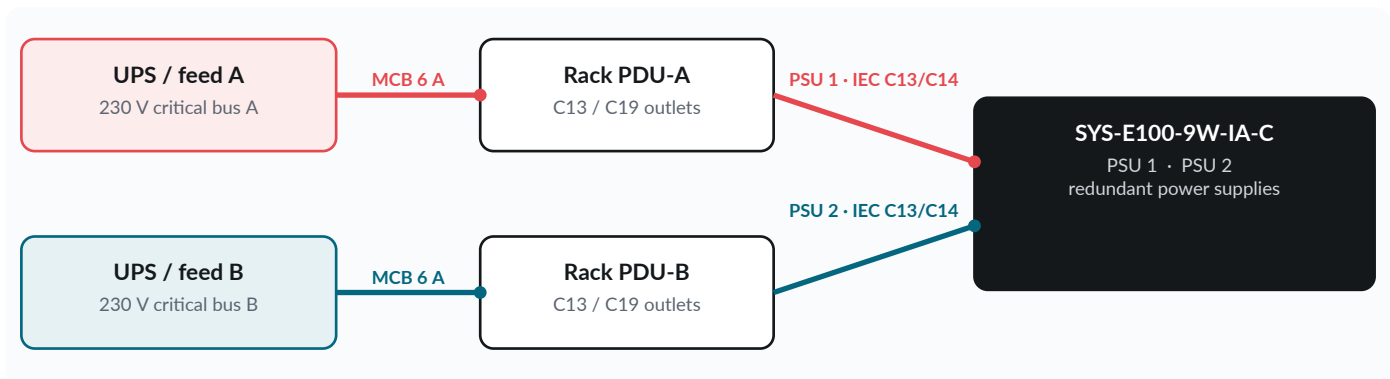
Annual IT energy (24/7)	1,357 kWh
Annual facility energy (PUE 1.5)	2,036 kWh
Annual energy cost	€271 IT · €407 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.53 t (grid factor 0.26 kg/kWh)
Power supplies	Redundant hot-swap PSUs — rating depends on the final configuration

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 Celeron Processor 4305UE Single Socket FCBGA-1528 System-on-Chip CPU TDP support 15W
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Note	BIOS version 2.0 or above is required
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SYSTEM MEMORY

Memory Capacity	Up to 64GB Unbuffered non-ECC SO-DIMM, DDR4 2133MHz, in 2 DIMM slots
Memory Type	DDR4 up to 2133MHz
DIMM Sizes	32GB, 16GB, 8GB, 4GB
Memory Voltage	1.2V

ON-BOARD DEVICES

Chipset	System on Chip
Network Controllers	Single LAN with Intel I210IT Single LAN with Intel PHY I219LM
Audio	ALC 888S HD Audio
Video	Intel UHD Graphics 620

INPUT / OUTPUT

LAN	2 RJ45 Gigabit Ethernet LAN ports
USB	4 USB 3.1 Gen2 ports (Type A), 4 USB 2.0 (Type A)
Video Output	1 HDMI and 1 Display Port
COM Port	4 COM ports: 2 RS232, 2 RS232/422/485, RS-485 supports auto flow control

Audio	1 HD Audio header (Mic-in/Line-Out) (option)
Others	8-bit configurable GPIO via DB9 1 TPM Chip

CHASSIS

Form Factor	3.5" SBC
Model	CSE-E101-IA2

DIMENSIONS

Width	7.64" (194mm) / 11.81" (300mm) - pkg.
Height	4.52" (115mm) / 5.12" (130mm) - pkg.
Depth	4.96" (126mm) / 11" (279mm) - pkg.
Weight	Gross Weight: 4.3 lbs (1.95 kg) Net Weight: 3.7 lbs (1.68 kg)
Available Colors	Black

FRONT PANEL

Buttons	Power On/Off button
LEDs	Power LED and Hard drive activity LED

EXPANSION SLOTS

M.2	Key: B-Key, M-Key, E-Key M.2 2242/3042/2280 B-Key (USB 3.0/2.0 x1, SATA Gen3 x1) with nano SIM holder M.2 2230 E-Key (CNVi/PCI-E 3.0 x1/USB2) M.2 2242/2280 M-Key (PCI-E 3.0 x4, SATA Gen 3 x1), NVMe support
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SYSTEM COOLING

Fans	Fan-less design
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SYSTEM BIOS

BIOS Type	AMI UEFI
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MANAGEMENT

Software	SuperDoctor 5 Watch Dog
Power Configurations	+12V ~ +24V DC Wide power range input ACPI Power Management Control of power-on for recovery from AC power loss Force Power On by Jumper CPU thermal trip support for processor protection

OPERATING ENVIRONMENT / COMPLIANCE

RoHS	RoHS Compliant
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Environmental Spec.

Operating Temperature:
0°C ~ 50°C (32°F ~ 122°F) with 0.7 m/s air flow
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)
Operational Vibration, IEC 60068-2-64, 5 Grms, random, 5~500 Hz, 1hr/axis
Operational Shock, IEC 60068-2-27, 30G, half sine, 11ms
The use of industrial grade wide-temperature peripherals is required to meet 50°C operating temperature.

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.
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