TECHNICAL DATASHEET

SUPERMICRO · EDGE & EMBEDDED

Supermicro IoT SuperServer SYS-E100-13AD-H

Fanless Box PC with Intel i7-1265UE and supporting 2x 2.5GbE LAN ports and 2 HDMI ports

SKU SYS-E100-13AD-H | 1U | Supermicro

FORM FACTOR	MAX POWER (BASE)	HEAT OUTPUT	PRICE
1U	306 W	1,044 BTU/h	from €1,400

ISO 9001 · ISO 14001 · ISO 27001 · cisco · tp-link · Omada by tp-link

CONFIGURE & QUOTE ONLINE

serverinvest.com/product/sys-e100-13ad-h

01 Product overview

The Supermicro SYS-E100-13AD-H is a Fanless Embedded IoT Server built on Intel Core with up to 64 GB of memory in 2 DIMM slots.

Fanless Box PC with Intel i7-1265UE and supporting 2x 2.5GbE LAN ports and 2 HDMI ports.

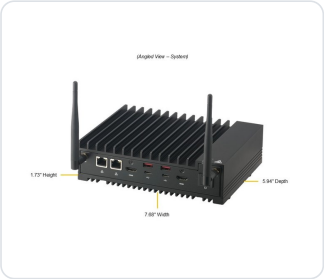
ServerInvest configures every SYS-E100-13AD-H to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

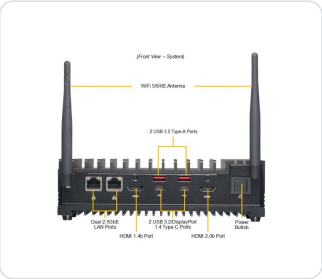
KEY SPECIFICATIONS

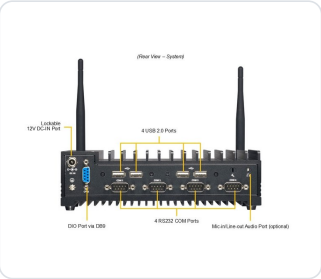
Form factor	**1U**
Processor	**Intel Xeon D / Atom (embedded)**
Memory	**2 DIMM slots, up to 64 GB**
Typical power draw	**490 W**
Networking	**2 RJ45 2.5GbE with Intel I225-IT**
Dimensions (W×H×D)	**437 × 44 mm**

HIGHLIGHTS

- Intel Core
- Up to 64 GB memory · 2 DIMM slots
- 1 M.2 PCIe 4.0 x4 NVMe slot (M-key 2242/2280)
- Power: 1x 84W
- Networking: 2 RJ45 2.5GbE with Intel I225-IT







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-E100-13AD-H**	1
Memory	16GB 5600MT/s DDR5 ECC Registered DIMM Module	2
Warranty & support	3-year return-to-base warranty (included)	1

Base configuration from **€1,400** excl. VAT

03 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

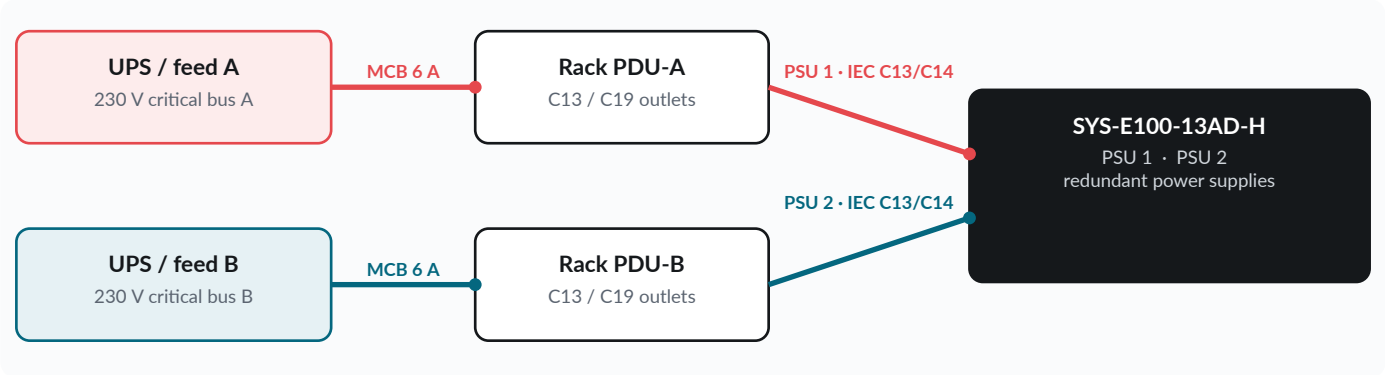
Annual IT energy (24/7)	1,357 kWh
Annual facility energy (PUE 1.5)	2,036 kWh
Annual energy cost	€271 IT · €407 incl. cooling (at 0.20 €/kWh)
CO_2 emissions / year	0.53 t (grid factor 0.26 kg/kWh)
Power supplies	Redundant hot-swap PSUs — rating depends on the final configuration

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	38 W	59 W	**85 W**
2× Memory 16 GB DIMM	6 W	10 W	**18 W**
CPU (base configuration)	25 W	110 W	**185 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 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).

05 Full specifications

MOTHERBOARD	
	Super X13SAN-H-WOHS

PROCESSOR	
CPU	Single FCBGA-1744 Intel Core i7-1265UE
Core Count	Up to 10C/20T; Up to 12MB Cache

Note	Supports up to 28W TDP CPUs (Air Cooled)

SYSTEM MEMORY

Memory	Slot Count: 2 DIMM slots/2 Channels Max Memory (2DPC): Up to 64GB 4800MT/s non-ECC DDR5 SO-DIMM View Memory Options
Memory Voltage	1.1V

ON-BOARD DEVICES

Network Connectivity	2 RJ45 2.5GbE with Intel I225-IT View AOC Options

INPUT / OUTPUT

LAN	2 RJ45 2.5 GbE LAN ports (Intel I225-IT)
USB	2 USB 3.2 Gen1 Type-C ports (front) 2 USB 3.2 Gen1 Type-A ports (front) 4 USB 2.0 Type-A ports (Rear)
Video	1 HDMI 2.0b port(s) (Front) 1 HDMI 1.4b port(s) (Front) 2 Mini-DP 1.4 ports (Front)
Serial	4 COM ports (Rear)
TPM	1 TPM Onboard/port 80

SYSTEM BIOS

BIOS Type	AMIUEFI
BIOS Features	ACPI 6.4 SMBIOS 3.5 or later UEFI 2.8 PCI F/W 3.0

MANAGEMENT

Software	Supermicro SuperDoctor 5 (SD5)
Power configurations	ACPI Power Management CPU thermal trip support for processor protection Control of power-on for recovery from AC power loss DC 12V~24V Wide power range input Force power-on by jumper

SECURITY

Hardware	Trusted Platform Module (TPM) 2.0

CERTIFICATIONS

Operating Systems	RHEL 9.0, Windows 10 View all OS Compatibility and Certification Matrix

CHASSIS

Form Factor	Fanless Embedded
Model	CSE-E101-04

DIMENSIONS AND WEIGHT

Height	1.73" (44 mm)
Width	7.68" (195 mm)
Depth	5.94" (150 mm)
Package	5.12" (H) x 11.81" (W) x 11" (D)
Weight	Gross Weight: 4.3 lbs (1.95 kg) Net Weight: 2.16 lbs (0.98 kg)
Palletized Packing (W x H x L)	54.3" (1380 mm) x 78.5" (1993 mm) x 35" (890 mm)
Available Color	Black

FRONT PANEL

Buttons	Power On/Off Power On/Off
LED	HDD Status HDD Status LAN1 activity LAN1 activity LAN2 activity LAN2 activity Power status Power status

EXPANSION SLOTS

M.2	1 M.2 SATA slot (B-key 2242/2280; USB 3.0) 1 M.2 slot (E-key 2230(default))
PCI-Express (PCIe) Configuration	View AOC Options

DRIVE BAYS / STORAGE

M.2	1 M.2 PCIe 4.0 x4 NVMe slot (M-key 2242/2280) 1 M.2 SATA slot (B-key 2242/2280; USB 3.0) View M.2 Options

SYSTEM COOLING

Fans	N/A

POWER SUPPLY

	1x 84W 1x 84W power supply Dimension (WxHxL) 160 x 32.2 x 58 mm

OPERATING ENVIRONMENT

RoHS	RoHS Compliant
Environmental Spec.	Operating Temperature: 0°C to 50°C (32°F to 122°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)

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.

NATCERT ISO 9001 · NATCERT ISO 14001 · NATCERT ISO 27001 · cisco · tp-link · Omada by tp-link

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-e100-13ad-h/datasheet/manufacturer