

TECHNICAL DATASHEET

SUPERMICRO · TOWER SERVERS & WORKSTATIONS

Supermicro Server SYS-5039D-I

SKU SYS-5039D-I

Tower

Supermicro

SuperServer SYS-5039D-I

(Angled View – System)



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FORM FACTOR

Tower

MAX POWER (BASE)

306 W

HEAT OUTPUT

1,044 BTU/h

PRICE

On request



REQUEST A QUOTATION ONLINE

serverinvest.com/product/sys-5039d-i



01 Product overview

The Supermicro SYS-5039D-I is a server built on Intel Core with up to 64 GB of memory in 4 DIMM slots.

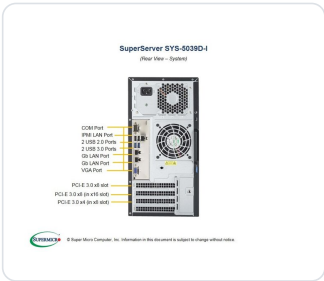
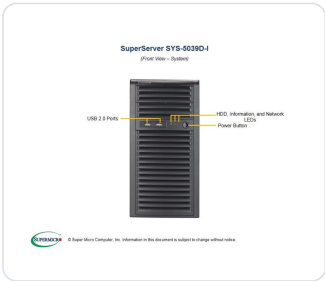
ServerInvest configures every SYS-5039D-I to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- Intel Core
- Up to 64 GB memory · 4 DIMM slots
- 4 Fixed 3.5" drive bays
- Power: 100 - 240V, 50-60Hz, 5 Amp
- Networking: Dual Intel I210-AT Gigabit Ethernet LAN ports

KEY SPECIFICATIONS

Form factor	Tower
Processor	Intel Core
Memory	4 DIMM slots, up to 64 GB
Drive bays	4
Typical power draw	450 W
Networking	Dual Intel I210-AT Gigabit Ethernet LAN ports



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

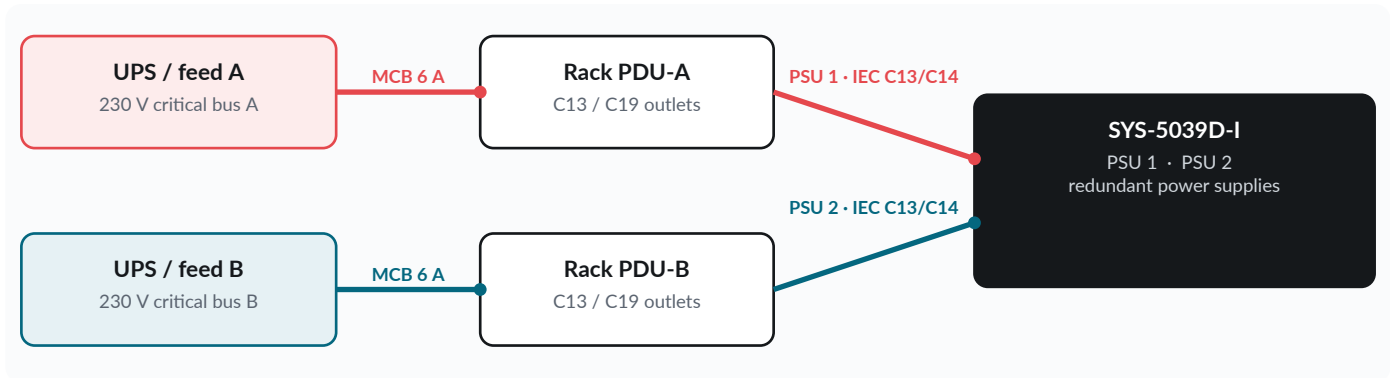
Annual IT energy (24/7)	1,357 kWh
Annual facility energy (PUE 1.5)	2,036 kWh
Annual energy cost	€271 IT · €407 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.53 t (grid factor 0.26 kg/kWh)
Power supplies	Redundant hot-swap PSUs — rating depends on the final configuration

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 Single Socket H4 (LGA 1151) supports:
Intel Xeon processor E3-1200 v6/v5,
Intel 7th/6th Gen Core i3,
Intel Pentium,
Intel Celeron processors
CPU TDP up to 80W

Note BIOS version 2.0 or above is required to support Intel Xeon Processor E3-1200 v6 series or 7th Generation Intel Core Processors

SYSTEM MEMORY

Memory Capacity 4x 288-pin DDR4 DIMM slots
Up to 64GB DDR4
ECC UDIMM

Memory Type 2400/2133/1866/1600MHz
ECC DDR4 SDRAM 72-bit,
288-pin
(UDIMM) gold-plated DIMMs

DIMM Sizes 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 Intel C232 chipset

SATA SATA3 (6Gbps) via C232 controller
RAID 0, 1, 5, 10 support

IPMI	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support ASPEED AST2400 BMC
Network Controllers	Dual Intel I210-AT Gigabit Ethernet LAN ports Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
VGA	ASPEED AST2400 BMC

INPUT / OUTPUT

SATA	6 SATA3 (6Gbps) ports
LAN	2 RJ45 Gigabit Ethernet LAN ports 1 RJ45 Dedicated IPMI LAN port
USB	5 USB 3.0 ports (2 rear + 2 via header + 1 Type A) 6 USB 2.0 ports (2 rear + 4 via headers)
VGA	1 VGA port
Serial Port / Header	1 COM port (1 rear)

EXPANSION SLOTS

PCI-Express	1 PCI-E 3.0 x8 (in x16 slot) 1 PCI-E 3.0 x8 slot 1 PCI-E 3.0 x4 (in x8 slot)
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SYSTEM BIOS

BIOS Type	128Mb SPI Flash EEPROM with AMI BIOS
BIOS Features	Plug and Play (PnP) APM 1.2 DMI 2.3 ACPI 1.0 / 2.0 USB Keyboard support SMBIOS 2.3 UEFI

CHASSIS

Form Factor	Mid-Tower
Model	CSE-731i-300B

DIMENSIONS AND WEIGHT

Height	14.25" (362mm)
Width	7.25" (184mm)
Depth	16.75" (425mm)
Gross Weight	40 lbs (18.1 kg)
Available Colors	Black

FRONT PANEL

Buttons	Power On/Off button
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LEDs	Power LED Hard drive activity LED Network activity LED System Information LED
Ports	2x Front side USB ports

DRIVE BAYS

Internal	4 Fixed 3.5" drive bays Enterprise SATA HDD only recommended
External	2 External 5.25" drive bays

SYSTEM COOLING

Fans	1x 9cm (rear) PWM fan w/ tool-less design 1x 8cm (front) cooling fan (optional) Optimized Cooling Technology at 25dB Whisper-Quiet Operation
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POWER SUPPLY

AC Voltage	100 - 240V, 50-60Hz, 5 Amp
DC Output	5V + 12V + 3.3V - 12V
+5V	19 Amp
+5V standby	2.0 Amp
+12V	11 Amp + 11.5 Amp
-12V	0.15 Amp
+3.3V	16.0 Amp
Certification	Bronze Certified [Test Report]

PC HEALTH MONITORING

CPU	Monitors for CPU Cores, +12V, +3.3V, +5V, +5V Standby, VBAT, Memory, Chipset Voltages. 6-Phase-switching voltage regulator
FAN	Low noise fan speed control
Temperature	Monitoring for CPU and chassis environment Thermal Control for 8x fan connectors PECI

OPERATING ENVIRONMENT / COMPLIANCE

RoHS	RoHS Compliant
Environmental Spec.	Operating Temperature: 10°C to 35°C (50°F to 95°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)

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

