

TECHNICAL DATASHEET

SUPERMICRO · TOWER SERVERS & WORKSTATIONS

Supermicro Server SYS-5039C-T

SKU SYS-5039C-T

Tower

Supermicro

SuperWorkstation SYS-5039C-T

(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-5039c-t



01 Product overview

The Supermicro SYS-5039C-T is a server built on Intel Core with up to 128 GB of memory in 4 DIMM slots.

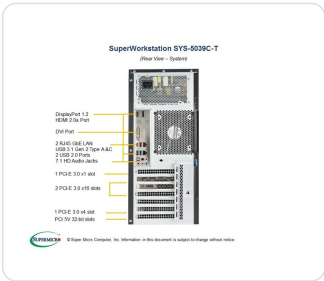
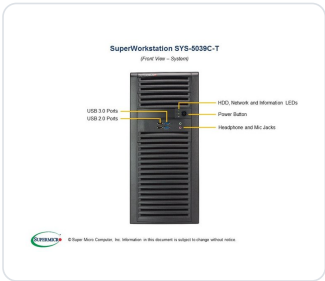
ServerInvest configures every SYS-5039C-T to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- Intel Core
- Up to 128 GB memory · 4 DIMM slots
- 4 Fixed 3.5" drive bays
- Power: 100 - 240V, 50-60Hz
- Networking: Single LAN with Intel I210-AT

KEY SPECIFICATIONS

Form factor	Tower
Processor	Intel Core
Memory	4 DIMM slots, up to 128 GB
Drive bays	8
Typical power draw	450 W
Networking	Single LAN with Intel I210-AT



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

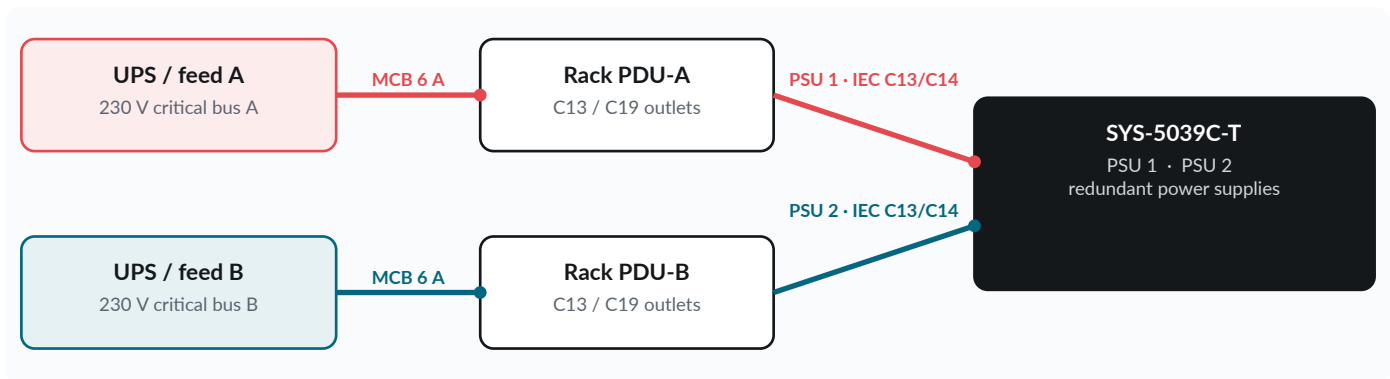
Annual IT energy (24/7)	1,357 kWh
Annual facility energy (PUE 1.5)	2,036 kWh
Annual energy cost	€271 IT · €407 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.53 t (grid factor 0.26 kg/kWh)
Power supplies	Redundant hot-swap PSUs — rating depends on the final configuration

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
2x 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

CPU	Single Socket H4 (LGA 1151), CPU TDP support up to 95W Support Intel Xeon processor E-2100 / E-2200 series, 8th/9th Gen. Intel Core i9/i7/i5/i3 Processors, Intel Celeron, Intel Pentium
Core/Cache	Up to 8-Cores

SYSTEM MEMORY

Memory Capacity	4 DIMM slots Up to 128GB * ECC/non-ECC UDIMM Up to DDR4-2666MHz
Memory Type	2666/2400/2133MHz ECC DDR4 SDRAM
DIMM Sizes	64GB, 32GB, 16GB, 8GB
Note	* BIOS must be 1.0c or newer

ON-BOARD DEVICES

Chipset	Intel C246 chipset
SATA	SATA3 (6Gbps) via Intel C246 controller RAID 0, 1, 5, 10 support
Network Controllers	Single LAN with Intel I210-AT Single LAN with Intel PHY I219LM

INPUT / OUTPUT

SATA	8 SATA3 (6Gbps) ports from Intel C246
LAN	2 RJ45 Ethernet LAN ports

USB	2 USB 3.1 Gen 2 Type A and Type C (rear) 4 USB 3.1 Gen 1 (2 rear + 2 front) 2 USB 2.0 (front)
Video	1 HDMI (2.0a) port 1 DVI-D port, 1 DisplayPort 1.2 port
Audio	7.1 HD Jacks
Serial Port / Header	1 COM port (header)
TPM	1 TPM 2.0 Header

EXPANSION SLOTS

PCI-Express	2 PCI-E 3.0 x16 running at NA/16 or 8/8 1 PCI-E 3.0 x4 slot 1 PCI-E 3.0 x1 slot 1 PCI 32bit 5V slot
M.2	M.2 Interface: 2 PCI-E 3.0 x4 M.2 Form Factor: 2260/ 2280/ 22110 M.2 Key: M-Key U.2 Interface: 1 PCI-E 3.0 x4 (Shared with M.2#2)

SYSTEM BIOS

BIOS Type	UEFI 256Mb
BIOS Features	ACPI 3.0 or later SMBIOS 2.7 or later SPI dual/quad speed support RTC wakeup

CHASSIS

Form Factor	Mid-Tower
Model	CSE-732D4-668B CSE-732D4-500B update per Steve 1/15/21 --->

DIMENSIONS AND WEIGHT

Height	16.7" (424mm)
Width	7.6" (193mm)
Depth	20.68" (525.3mm)
Gross Weight	35.5 lbs (16.1 kg)
Available Colors	Black

FRONT PANEL

Buttons	Power On/Off button
LEDs	Power LED Hard drive activity LED Network activity LED System Information LED
Ports	2 USB 2.0 ports, 2 USB 3.1 Gen 1 ports 1 Line-out, 1 Mic-in

DRIVE BAYS

Internal	4 Fixed 3.5" drive bays Optional 4 internal 2.5" drive bays Enterprise SATA HDD only recommended
Peripheral	2 Standard 5.25" Peripheral drive bays 1 Internal 3.5" Fixed device bay

SYSTEM COOLING

Fans	1x 12cm rear exhaust fan Optional 1x 12cm front cooling fan
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POWER SUPPLY

AC Voltage	100 - 240V, 50-60Hz
+5V	20 Amp
+5V standby	2 Amp
+12V	Max: 54A & Min: 0.2A (100Vac-240Vac)
-12V	0.1 Amp
+3.3V	15 Amp
Certification	Platinum Certified
AC Voltage	100 - 240V, 50-60Hz, 7-3.5 Amp
+5V	20 Amp
+5V standby	3 Amp
+12V1	17 Amp
+12V2	17 Amp
+12V3	17 Amp
+12V4	18 Amp
-12V	0.5 Amp
+3.3V	15 Amp
Certification	Bronze Certified [Test Report]

PC HEALTH MONITORING

CPU	Monitors for CPU Cores, +1.8V, +3.3V, +5V, +-12V, +3.3V Standby, +5V Standby, VBAT, Memory, Chipset Voltages. 4+2-Phase-switching voltage regulator
FAN	Low noise fan speed control
Temperature	Monitoring for CPU and chassis environment Thermal Control for 5x 4-pin fan connectors PECI

OPERATING ENVIRONMENT / COMPLIANCE

RoHS	RoHS Compliant
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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.
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