

TECHNICAL DATASHEET

SUPERMICRO · TOWER SERVERS & WORKSTATIONS

Supermicro Server SYS-5029C-TN2

SKU SYS-5029C-TN2

Tower

Supermicro

SuperServer SYS-5029C-TN2*(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-5029c-tn2

01 Product overview

The Supermicro SYS-5029C-TN2 is a server built on Intel Core with up to 64 GB of memory in 2 DIMM slots.

ServerInvest configures every SYS-5029C-TN2 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 · 2 DIMM slots
- 4 Hot-swap 3.5" drive bays
- Power: 100 - 240V, 50 - 60Hz
- Networking: Single LAN with Intel Ethernet Controller I210-AT

KEY SPECIFICATIONS

Form factor	Tower
Processor	Intel Core
Memory	2 DIMM slots, up to 64 GB
Drive bays	6
Typical power draw	450 W
Networking	Single LAN with Intel Ethernet Controller 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

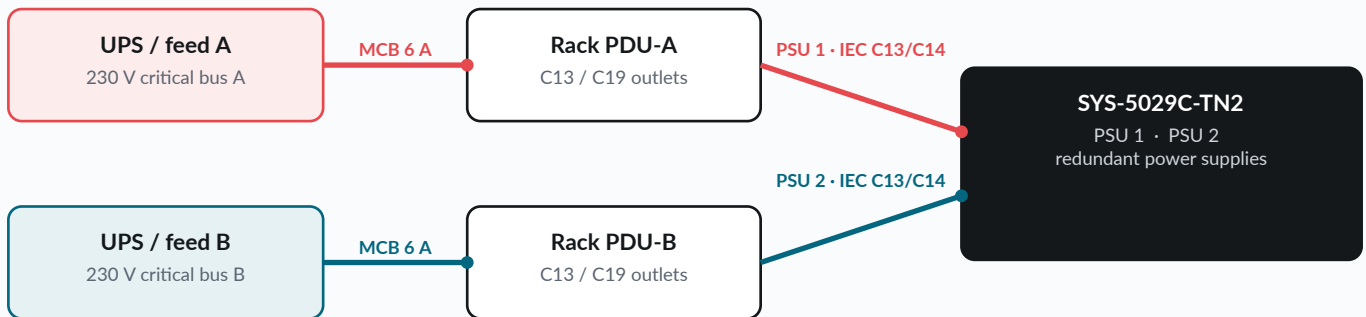
Annual IT energy (24/7)	1,357 kWh
Annual facility energy (PUE 1.5)	2,036 kWh
Annual energy cost	€271 IT · €407 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.53 t (grid factor 0.26 kg/kWh)
Power supplies	Redundant hot-swap PSUs — rating depends on the final configuration

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
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: 9th/8th Gen Intel Core i9/i7/i5/i3 / Pentium / Celeron processor CPU TDP support Up to 65W TDP
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SYSTEM MEMORY

Memory Capacity	Up to 64GB Unbuffered non-ECC SO-DIMM, DDR4-2666MHz 2 DIMM slots
Memory Type	DDR4-2666MHz Unbuffered non-ECC SO-DIMM
DIMM Sizes	32GB, 16GB
Memory Voltage	1.2 V
Error Detection	Corrects single-bit errors Detects double-bit errors (using ECC memory)

ON-BOARD DEVICES

Chipset	Intel Q370 chipset
SATA	Q370 controller for 5 SATA3 ports; RAID 0, 1, 5, 10
Network Controllers	Single LAN with Intel Ethernet Controller I210-AT Single LAN with Intel PHY I219LM LAN controller
Audio	ALC 888S HD Audio
Graphics	3 Independent Displays

INPUT / OUTPUT

SATA	5 SATA3 (6Gbps) ports via PCH
LAN	2 RJ45 Gigabit Ethernet LAN ports

USB	4 USB 3.1 (2 type A and 2 type C in rear)
Display	1 DVI - D port 1 HDMI port 1 DP (Display Port) 1 eDP (Embedded Display Port) 3 Independent Displays 2 COM ports support RS-232/422/485
Audio	HD Audio (Mic In / Line Out)
TPM	1 TPM Header & Chip

MANAGEMENT

Software	SuperDoctor 5 Watch Dog Non-maskable Interrupt (NMI) Chassis intrusion detection
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CHASSIS

Form Factor	Mini Tower
Model	CSE-721TQ-350B

DIMENSIONS AND WEIGHT

Height	9.45" (240mm)
Width	8.27" (210mm)
Depth	11" (279mm)
Weight	Gross Weight: 15 lbs (6.8 kg)
Available Colors	Black

FRONT PANEL

Buttons	Power On/Off button System Reset button
LEDs	Power LED Hard drive activity LED Network activity LEDs System Information LED
Ports	2 USB 3.1 Gen1 ports

EXPANSION SLOTS

PCI-E	1 PCI-E 3.0 x16 (Low-profile)
M.2	M.2 M key: PCI-E 3.0 x4, NVMe support 2242/2280 length M.2 E Key: PCI-E 3.0 x1, support 2230 length

DRIVE BAYS

HDD	4 Hot-swap 3.5" drive bays 2 internal 2.5" drive bays
Peripheral	1 slim DVD-ROM bay

POWER SUPPLY

AC Voltage	100 - 240V, 50 - 60Hz
+5V	Max:15 Amp; Min:0.2 Amp
+12V	Max:28 Amp; Min:0.1 Amp @100V-240V
-12V	Max: 0.3 Amp Min: 0.05 Amp
+3.3V	Max: 10 Amp Min: 0.1 Amp
5VSB	Max: 2 Amp Min: 0.05 Amp
Certification	Gold Certified

PC HEALTH MONITORING

CPU	Monitors for CPU Cores, +1.8V, +3.3V, +5V, +-12V, +3.3V Standby, +5V Standby, VBAT, Memory, Chipset Voltages. 3+0 CPU switch phase voltage regulator CPU thermal trip support
FAN	Low noise fan speedcontrol
Temperature	Monitoring for CPU and chassis environment Thermal Control for 4x 4-pin fan connectors Platform Environmental Control Interface (PECI)

SYSTEM BIOS

BIOS Type	UEFI 256Mb
BIOS Features	ACPI 6.0 SMBIOS 2.7 Plug and Play (PnP) RTC (Real Time Clock) Wakeup PCI F/W 3.0

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 60°C (-40°F to 140°F) Operating Relative Humidity: 20% to 95% (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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