

TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro Server SYS-4029GP-TRT2

SKU SYS-4029GP-TRT2

4U

Supermicro

SuperServer SYS-4029GP-TRT2

(Angled View)



24x 2.5" Hot-swap
SAS/SATA3 Drive Bays



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FORM FACTOR

4U

MAX POWER (BASE)

602 W

HEAT OUTPUT

2,054 BTU/h

PRICE

On request



REQUEST A QUOTATION ONLINE

serverinvest.com/product/sys-4029gp-trt2



01 Product overview

The Supermicro SYS-4029GP-TRT2 is a server built on dual Dual Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Process processors with up to 6 TB of memory in 24 DIMM slots.

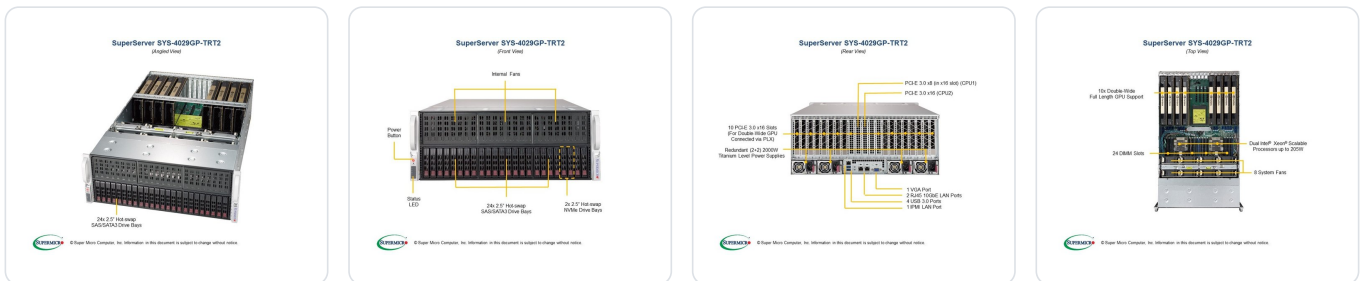
ServerInvest configures every SYS-4029GP-TRT2 to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- Dual Dual Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Process
- Up to 6 TB memory · 24 DIMM slots
- Up to 24x 2.5" SAS/SATA drive bays
- Power: 1000W: 100 – 120Vac
- Networking: Dual Port 10GbE from C622

KEY SPECIFICATIONS

Form factor	4U
Processor	2× Dual Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Process
Memory	24 DIMM slots, up to 6 TB
Drive bays	24 (24 NVMe)
Power supply	1× 1000 W
Typical power draw	750 W
Networking	Dual Port 10GbE from C622
Dimensions (W×H×D)	437 × 178 mm



02 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
143 W	374 W	602 W	2,054 BTU/h	0.6 kW	60%

Typical 374 W · max 602 W · single PSU rating 1000 W

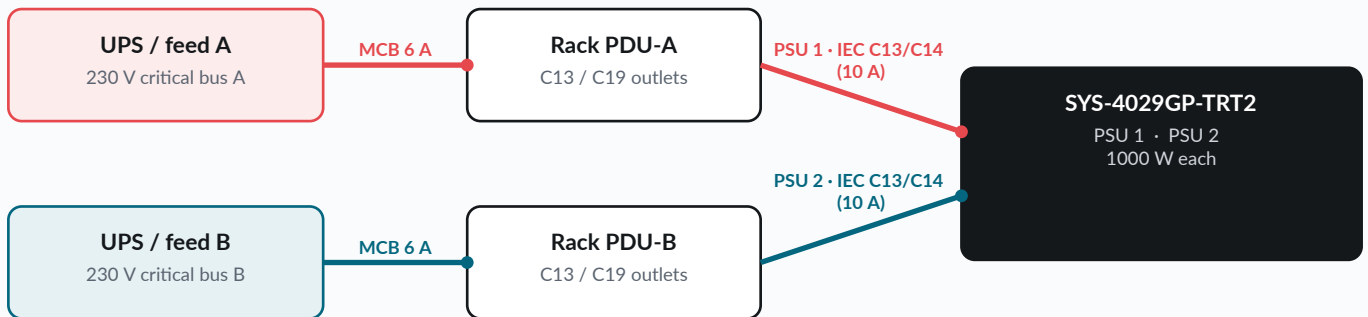
Annual IT energy (24/7)	2,669 kWh
Annual facility energy (PUE 1.5)	4,004 kWh
Annual energy cost	€534 IT · €801 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	1.04 t (grid factor 0.26 kg/kWh)
Power supplies	1× 1000 W

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	72 W	112 W	160 W
2× CPU (base configuration)	50 W	220 W	370 W
4× Memory (base configuration)	12 W	20 W	36 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 (10 A) power cords.
- Maximum current per feed: 2.8 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: 602 W = 2,054 BTU/h (0.6 kW).

04 Full specifications

PROCESSOR

CPU	Dual Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Processors and Intel Xeon Scalable Processors ‡ , 3 UPI up to 10.4GT/s Support CPU TDP 70-205W
Cores	Up to 28 Cores
Note	‡ BIOS version 3.2 or above is required to support 2nd Gen Intel Xeon Scalable processors (codenamed Cascade Lake-R)

GPU

Supported GPUs	10 Double-Width/Single-Width PCI-E 3.0 x16 Card (Full Height Full Length) NVIDIA V100, P40, T4, Quadro, RTX Supports both active and passive cooled GPUs Compatible GPU list
CPU-GPU Interconnect	PCI-E Gen 3 x16 Switch Single-Root PCIe Root Architecture Chart
GPU-GPU Interconnect	PCI-E, NVIDIA NVLink Bridge (Optional)

SYSTEM MEMORY

Memory Capacity	24 DIMM slots Up to 6TB 3DS ECC DDR4-2933MHz † RDIMM/LRDIMM Supports Intel Optane DCPMM ††
Memory Type	2933 † /2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM
Note	† 2933MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro †† Cascade Lake only. Contact your Supermicro sales rep for more info.

ON-BOARD DEVICES

Chipset	Intel C622 chipset
SATA	SATA3 (6Gbps) with RAID 0, 1, 5, 10
Network Controllers	Dual Port 10GbE from C622
IPMI	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Graphics	ASPEED AST2500 BMC

INPUT / OUTPUT

SATA	8 SATA3 (6Gbps) ports
LAN	2 RJ45 10GBase-T LAN ports 1 RJ45 Dedicated IPMI LAN port
USB	4 USB 3.0 ports (rear)
Video	1 VGA Connector
COM Port	1 COM port (header)

SYSTEM BIOS

BIOS Type	AMI 32Mb SPI Flash ROM
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MANAGEMENT

Software	Intel Node Manager IPMI 2.0 KVM with dedicated LAN SSM , SPM , SUM SuperDoctor 5 Watchdog
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PC HEALTH MONITORING

CPU	Monitors for CPU Cores, Chipset Voltages, Memory. 4+1 Phase-switching voltage regulator
FAN	Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors
Temperature	Monitoring for CPU and chassis environment Thermal Control for fan connectors

CHASSIS

Form Factor	4U Rackmountable Rackmount Kit (MCP-290-00057-0N)
Model	CSE-418GTS-R4000BP2

DIMENSIONS

Height	7.0" (178mm)
Width	17.2" (437mm)
Depth	29" (737mm)

Weight	Net Weight: 65.5 lbs (29.7 kg) Gross Weight: 100 lbs (45.3 kg)
Available Colors	Black

DRIVE BAYS / STORAGE

Hot-swap	Up to 24x 2.5" SAS/SATA drive bays 8x 2.5" SATA supported natively 2x 2.5" NVMe supported natively
M.2	1 NVMe based M.2 SSD Form Factors: 2260, 2280, 22110

EXPANSION SLOTS

PCI-Express	11 PCI-E 3.0 x16 (FHFL) slots - supporting up to 10 GPUs 1 PCI-E 3.0 x8 (FH, FL, in x16) slot
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SYSTEM COOLING

Fans	8 Hot-swap 92mm cooling fans
Shrouds	1 Air Shroud (MCP-310-41808-0B)

POWER SUPPLY

Total Output Power	1000W: 100 – 120Vac 1800W: 200 – 220Vac 1980W: 220 – 230Vac 2000W: 230 – 240Vac 2000W: 200 – 240Vac (UL/CUL only)
Dimension (W x H x L)	73.5 x 40 x 265 mm
Input	100-120Vac / 12.5-9.5A / 50-60Hz 200-220Vac / 10-9.5A / 50-60Hz 220-230Vac / 10-9.8A / 50-60Hz 230-240Vac / 10-9.8A / 50-60Hz 200-240Vac / 11.8-9.8A / 50-60Hz (UL/cUL only)
+12V	Max: 83.3A / Min: 0A (100-120Vac) Max: 150A / Min: 0A (200-220Vac) Max: 165A / Min: 0A (220-230Vac) Max: 166.7A / Min: 0A (230-240Vac) Max: 166.7A / Min: 0A (200-240Vac) (UL/cUL only)
12Vsb	Max: 2.1A / Min: 0A
Output Type	25 Pairs Gold Finger Connector
Certification	Titanium Level [Test Report]

OPERATING ENVIRONMENT

RoHS	RoHS Compliant
Environmental Spec.	Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F) Non-operating Temperature: -40°C to 60°C (-40°F to 140°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

