TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro Server SYS-4028GR-TR

SKU SYS-4028GR-TR | 4U | Supermicro

FORM FACTOR	MAX POWER (BASE)	HEAT OUTPUT	PRICE
4U	602 W	2,054 BTU/h	On request

REQUEST A QUOTATION ONLINE
serverinvest.com/product/sys-4028gr-tr

01 Product overview

The Supermicro SYS-4028GR-TR is a server built on dual Intel Xeon processor E5-2600 v4 † / v3 family (up to 160W TD processors with up to 3 TB of memory in 4 DIMM slots.

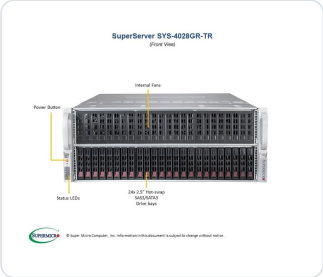
ServerInvest configures every SYS-4028GR-TR to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

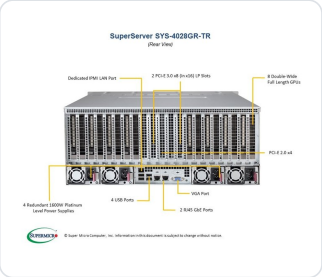
HIGHLIGHTS

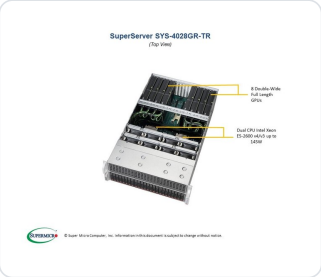
- Dual Intel Xeon processor E5-2600 v4 † / v3 family (up to 160W TD
- Up to 3 TB memory · 4 DIMM slots
- 24 Hot-swap 2.5" hard drive bays
- Power: 1000W: 100 – 127Vac
- Networking: Dual Gigabit Ethernet Ports with Intel i350

KEY SPECIFICATIONS

Form factor	4U
Processor	2× Intel Xeon processor E5-2600 v4 † / v3 family (up to 160W TD
Memory	4 DIMM slots, up to 3 TB
Drive bays	24
Power supply	1× 1000 W
Typical power draw	750 W
Networking	Dual Gigabit Ethernet Ports with Intel i350
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

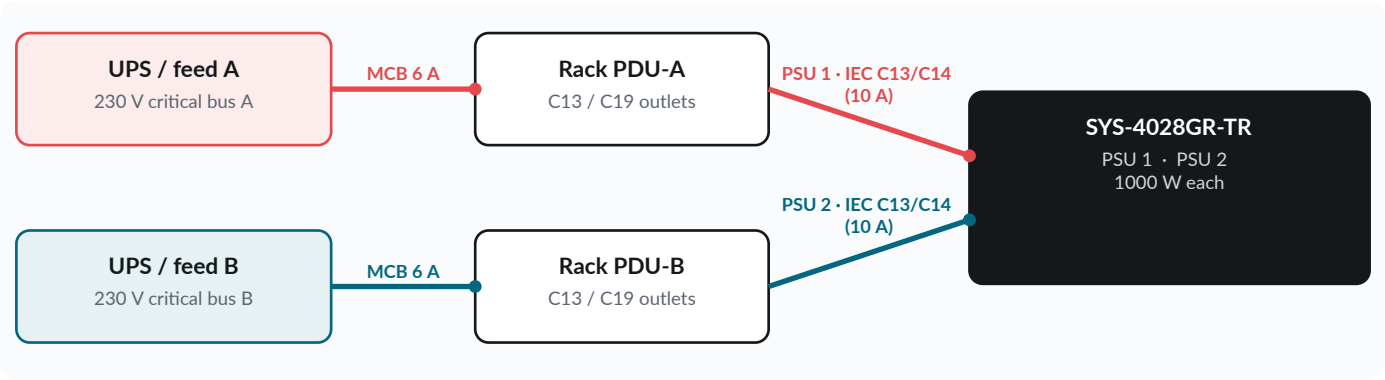
Annual IT energy (24/7)	2,669 kWh
Annual facility energy (PUE 1.5)	4,004 kWh
Annual energy cost	€534 IT · €801 incl. cooling (at 0.20 €/kWh)
CO_2 emissions / year	1.04 t (grid factor 0.26 kg/kWh)
Power supplies	1× 1000 W

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/CACHE	
CPU	Intel Xeon processor E5-2600 v4 † / v3 family (up to 160W TDP) * Dual Socket R3 (LGA 2011)
Cores / Cache	Up to 22 Cores † / Up to 55MB † Cache
System Bus	QPI up to 9.6 GT/s
Note	† BIOS version 2.0 or above is required
Note	* Please contact Supermicro Technical Support for additional information about frequency optimized CPUs and specialized system optimization.

SYSTEM MEMORY	
Memory Capacity	24x 288-pin DDR4 DIMM slots Up to 3TB † ECC 3DS LRDIMM, 1.5TB ECC RDIMM
Memory Type	2400 † /2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	RDIMM: 64GB, 32GB, 16GB, 8GB, 4GB LRDIMM: 64GB, 32GB 3DS LRDIMM: 128GB
Memory Voltage	1.2 V
Error Detection	Corrects single-bit errors

ON-BOARD DEVICES	
Chipset	Intel C612 chipset
SATA	SATA3 (6Gbps) with RAID 0, 1, 5, 10

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 Gigabit Ethernet Ports with Intel i350 Virtual Machine Device Queues reduce I/O overhead Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
Graphics	ASPEED AST2400 BMC

INPUT / OUTPUT

SATA	10 SATA3 (6Gbps) ports
LAN	2 RJ45 Gigabit Ethernet LAN ports 1 RJ45 Dedicated IPMI LAN port
USB	4 USB 3.0 ports
Video	1 VGA Connector
Serial Port	1 Serial header

SYSTEM BIOS

BIOS Type	128Mb SPI Flash EEPROM with AMI BIOS
BIOS Features	Plug and Play (PnP) APM 1.2 DMI 2.3 PCI 2.3 ACPI 1.0 / 2.0 / 3.0 USB Keyboard support SMBIOS 2.7.1 UEFI

CHASSIS

Form Factor	4U Rackmountable Rackmount Kit (MCP-290-00057-0N)
Model	CSE-418GTS-R3200B

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

Hot-swap	24 Hot-swap 2.5" hard drive bays

EXPANSION SLOTS

PCI-Express	8 PCI-E 3.0 x16 (double-width) slots 2 PCI-E 3.0 x8 (in x16) slots 1 PCI-E 2.0 x4 (in x16) slot

SYSTEM COOLING

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

POWER SUPPLY

Total Output Power	1000W: 100 – 127Vac 1600W: 200 – 240Vac
Dimension (W x H x L)	73.5 x 40 x 265 mm
Input	100-127Vac / 12.9A Max / 50-60Hz 200-240Vac / 9.5A Max / 50-60Hz
+12V	Max: 82A / Min: 0.1A (100-127Vac) Max: 132A / Min: 0.1A (200-240Vac)
12V SB	Max: 2A / Min: 0.2A
Output Type	25 Pairs Gold Finger Connector
Certification	Platinum Level [Test Report]

PC HEALTH MONITORING

CPU	Monitors for CPU Cores, +1.2V, 1.5V, +3.3V, +12V, (+3V, 1.0V, 1.2V, 1.8V, 1.1V) Standby, VBAT, Memory, Chipset Voltages. 4-Phase-switching voltage regulator with auto-sense from 0.6V-1.35V
FAN	4-pin fan headers with tachometer status monitoring Low noise fan speed control mode
Temperature	Monitoring for CPU and system environment Thermal Control for 8 fan connectors
Other Features	Chassis intrusion detection

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.

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Interested in this solution?
Request a quotation online or talk to a solutions engineer — we reply within one business day.
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