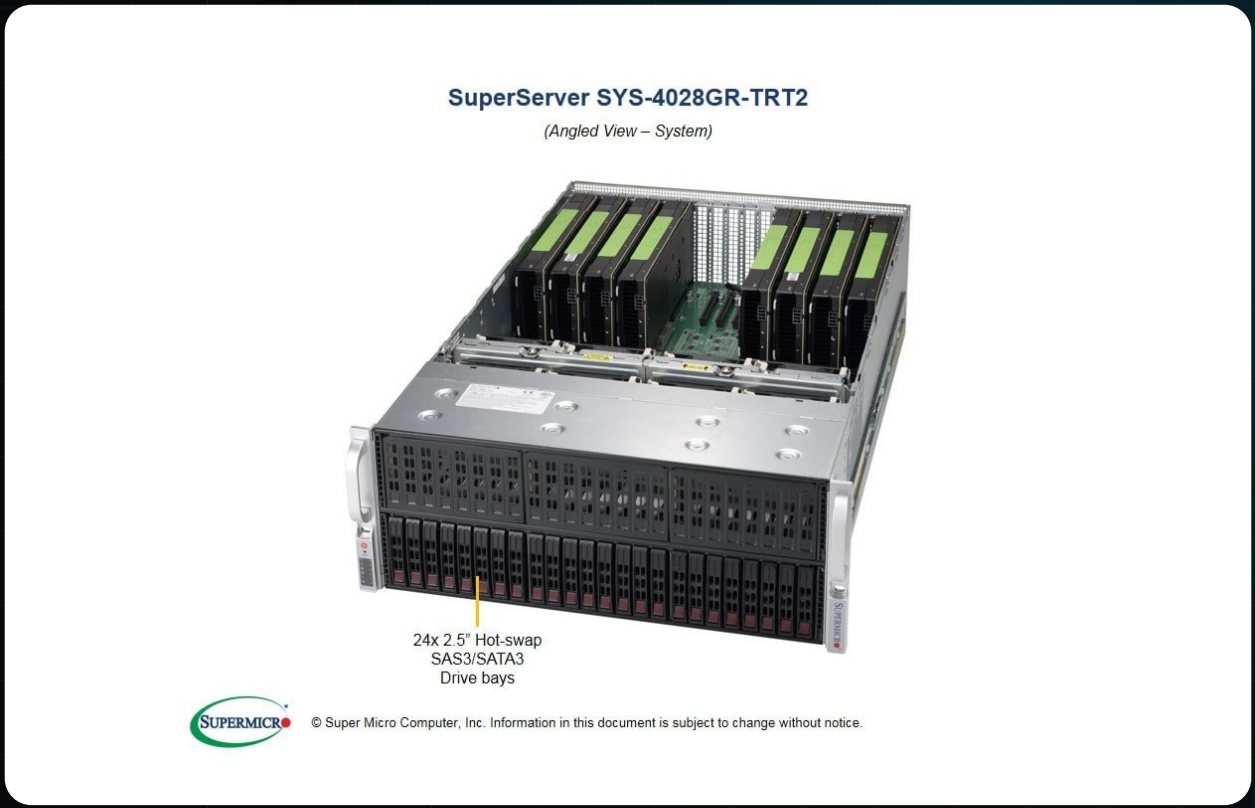
TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

# Supermicro Server SYS-4028GR-TRT2

SKU SYS-4028GR-TRT2 | 4U | Supermicro




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

ISO 9001 · ISO 14001 · ISO 27001 · cisco · tp-link · Omada by tp-link

REQUEST A QUOTATION ONLINE
serverinvest.com/product/sys-4028gr-trt2

## 01 Product overview

The Supermicro SYS-4028GR-TRT2 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.

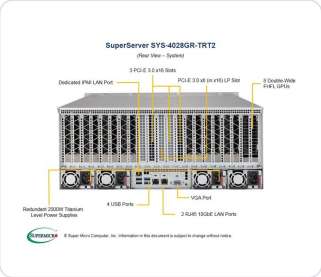
ServerInvest configures every SYS-4028GR-TRT2 to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

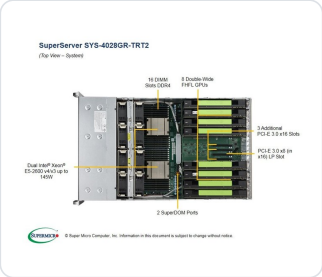
### HIGHLIGHTS

- Dual 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 – 120Vac
- Networking: Dual 10GBase-T Ports with Intel X540

### 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 10GBase-T Ports with Intel X540** |
| 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

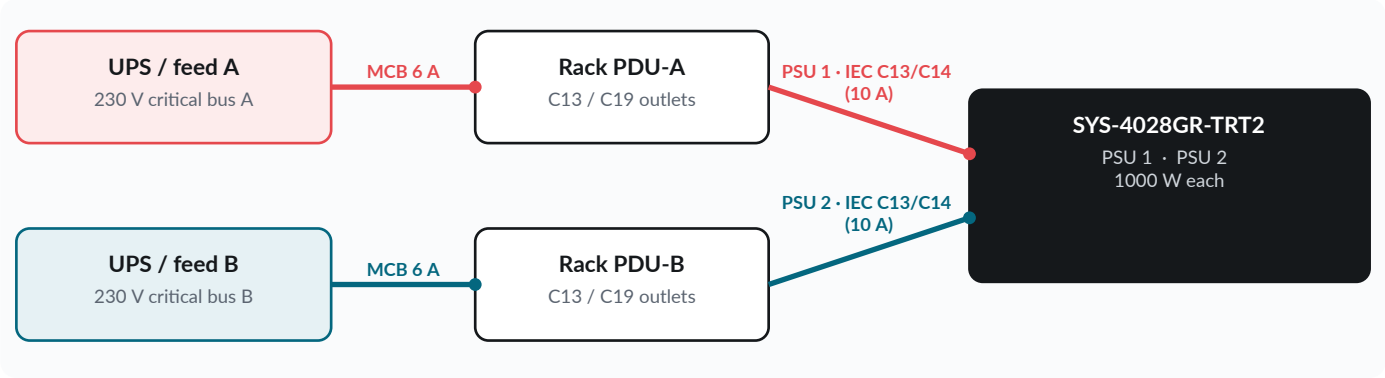
| | |
|---|---|
| Annual IT energy (24/7) | 2,669 kWh |
| Annual facility energy (PUE 1.5) | 4,004 kWh |
| Annual energy cost | €534 IT · €801 incl. cooling (at 0.20 €/kWh) |
| $CO_2$ emissions / year | 1.04 t (grid factor 0.26 kg/kWh) |
| Power supplies | 1× 1000 W |

| 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<br>v4 † /<br>v3 family<br>(up to 160W TDP)<br>*<br>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<br>Up to 3TB † ECC 3DS LRDIMM, 1.5TB ECC RDIMM |
| Memory Type | 2400 † /2133/1866/1600MHz ECC DDR4 SDRAM 72-bit |
| DIMM Sizes | RDIMM:<br>64GB, 32GB, 16GB, 8GB, 4GB<br>LRDIMM: 64GB, 32GB<br>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<br>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support<br>ASPEED AST2400 BMC |
| Network Controllers | Dual 10GBase-T Ports with Intel X540<br>Virtual Machine Device Queues reduce I/O overhead<br>Supports 10GBASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output |
| Graphics | ASPEED AST2400 BMC |

## INPUT / OUTPUT

| | |
|---|---|
| SATA | 10 SATA3 (6Gbps) ports |
| LAN | 2 RJ45 10GBase-T LAN ports<br>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)<br>APM 1.2<br>DMI 2.3<br>PCI 2.3<br>ACPI 1.0 / 2.0 / 3.0<br>USB Keyboard support<br>SMBIOS 2.7.1<br>UEFI |

## CHASSIS

| | |
|---|---|
| Form Factor | 4U Rackmountable<br>Rackmount Kit (MCP-290-00057-0N) |
| Model | CSE-418GTS-R4000B |

## DIMENSIONS

| | |
|---|---|
| Height | 7.0" (178mm) |
| Width | 17.2" (437mm) |
| Depth | 29" (737mm) |
| Weight | Net Weight: 65.5 lbs (29.7 kg)<br>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 | 11 PCI-E 3.0 x16 (FH, FL) slots<br>1 PCI-E 3.0 x8 (in x16) slots<br>Single Root Complex |

## 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<br>1800W: 200 – 220Vac<br>1980W: 220 – 230Vac<br>2000W: 230 – 240Vac<br>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<br>200-220Vac / 10-9.5A / 50-60Hz<br>220-230Vac / 10-9.8A / 50-60Hz<br>230-240Vac / 10-9.8A / 50-60Hz<br>200-240Vac / 11.8-9.8A / 50-60Hz (UL/cUL only) |
| +12V | Max: 83.3A / Min: 0A (100-120Vac)<br>Max: 150A / Min: 0A (200-220Vac)<br>Max: 165A / Min: 0A (220-230Vac)<br>Max: 166.7A / Min: 0A (230-240Vac)<br>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<br>[ 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.<br>4-Phase-switching voltage regulator with auto-sense from 0.6V-1.35V |
| FAN | 4-pin fan headers with tachometer status monitoring<br>Low noise fan speed control mode |
| Temperature | Monitoring for CPU and system environment<br>Thermal Control for 8 fan connectors |
| Other Features | Chassis intrusion detection |

## OPERATING ENVIRONMENT / COMPLIANCE

| | |
|---|---|
| RoHS | RoHS Compliant |
| Environmental Spec. | Operating Temperature:<br>10°C to 35°C (50°F to 95°F)<br>Non-operating Temperature:<br>-40°C to 70°C (-40°F to 158°F)<br>Operating Relative Humidity:<br>8% to 90% (non-condensing)<br>Non-operating Relative Humidity:<br>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.

NATCERT ISO 9001 · NATCERT ISO 14001 · NATCERT ISO 27001 · cisco · tp-link · Omada by tp-link

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