

## TECHNICAL DATASHEET

SUPERMICRO • MULTI-NODE &amp; TWIN

# Supermicro 2U GrandTwin Server SYS-210GT-HNC8F

2U 4-node UP GrandTwin with 4 2.5" SAS/SATA drives per node

SKU SYS-210GT-HNC8F

2U

LGA4189

Supermicro



FORM FACTOR

**2U**

MAX POWER (BASE)

**333 W**

HEAT OUTPUT

**1,136 BTU/h**

PRICE

**On request**

REQUEST A QUOTATION ONLINE

[serverinvest.com/product/sys-210gt-hnc8f](https://serverinvest.com/product/sys-210gt-hnc8f)

## 01 Product overview

The Supermicro SYS-210GT-HNC8F is a 2U GrandTwin Server built on Intel Xeon Scalable 3rd Gen with up to 4 TB of memory in 16 DIMM slots.

2U 4-node UP GrandTwin with 4 2.5" SAS/SATA drives per node.

ServerInvest configures every SYS-210GT-HNC8F 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 Xeon Scalable 3rd Gen
- Up to 4 TB memory · 16 DIMM slots
- Total 4 bays 4 front hot-swap 2.5" NVMe/SAS/SATA drive bays
- Power: 1x 2200W
- Networking: Via IO Module

### KEY SPECIFICATIONS

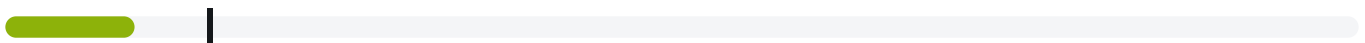
|                    |                             |
|--------------------|-----------------------------|
| Form factor        | 2U                          |
| Processor          | Intel Xeon Scalable 3rd Gen |
| Socket             | LGA4189                     |
| Memory             | 16 DIMM slots, up to 4 TB   |
| Drive bays         | 4 (4 NVMe)                  |
| Power supply       | 1× 2200 W                   |
| Typical power draw | 450 W                       |
| Networking         | Via IO Module               |
| Dimensions (W×H×D) | 437 × 89 mm                 |



## 02 Power & thermal

Calculated for the base configuration

|      |         |         |             |         |          |
|------|---------|---------|-------------|---------|----------|
| IDLE | TYPICAL | MAXIMUM | HEAT (MAX)  | COOLING | PSU LOAD |
| 86 W | 210 W   | 333 W   | 1,136 BTU/h | 0.3 kW  | 15%      |



Typical 210 W · max 333 W · single PSU rating 2200 W

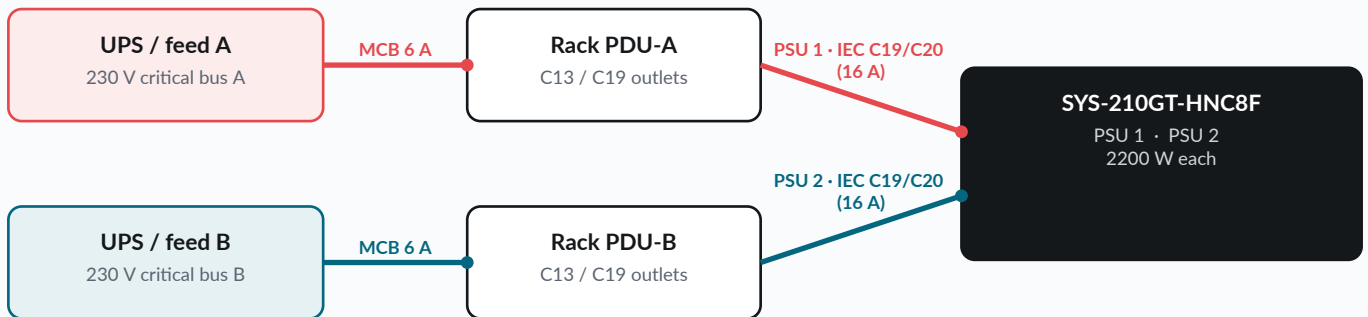
|                                  |                                              |
|----------------------------------|----------------------------------------------|
| Annual IT energy (24/7)          | 1,514 kWh                                    |
| Annual facility energy (PUE 1.5) | 2,271 kWh                                    |
| Annual energy cost               | €303 IT · €454 incl. cooling (at 0.20 €/kWh) |
| CO <sub>2</sub> emissions / year | 0.59 t (grid factor 0.26 kg/kWh)             |
| Power supplies                   | 1× 2200 W                                    |

| POWER BY COMPONENT              | IDLE | TYPICAL | MAX   |
|---------------------------------|------|---------|-------|
| Chassis, motherboard, fans, BMC | 50 W | 77 W    | 110 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 C19/C20 (16 A) power cords.
- Maximum current per feed: 1.5 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: 333 W = 1,136 BTU/h (0.3 kW).

### 04 Full specifications

#### MOTHERBOARD

Super X12SPT-GC

#### PROCESSOR (PER NODE)

|            |                                                                       |
|------------|-----------------------------------------------------------------------|
| CPU        | Single Socket P+ (LGA-4189)<br>3rd Gen Intel Xeon Scalable processors |
| Core Count | Up to 40C/80T; Up to 60MB Cache                                       |
| Note       | Supports up to 270W TDP CPUs (Air Cooled)                             |

#### SYSTEM MEMORY (PER NODE)

|                |                                                                                                                                                                             |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Memory         | Slot Count: 16 DIMM slots/2 Channels<br>Max Memory (1DPC): Up to 2TB 3200MT/s ECC DDR4 RDIMM<br>Max Memory (2DPC): Up to 4TB 2666MT/s ECC DDR4 RDIMM<br>View Memory Options |
| Memory Voltage | 1.2V                                                                                                                                                                        |

#### ON-BOARD DEVICES (PER NODE)

|                      |                                                        |
|----------------------|--------------------------------------------------------|
| SAS                  | SAS (12Gbps) via Broadcom 3808; (IT mode)              |
| Network Connectivity | Via IO Module<br>View AIOM Options<br>View AOC Options |

#### INPUT / OUTPUT (PER NODE)

|       |                                     |
|-------|-------------------------------------|
| LAN   | 1 RJ45 1 GbE Dedicated BMC LAN port |
| USB   | 2 USB 3.0 ports                     |
| Video | 1 VGA port                          |

## SYSTEM BIOS

|           |                    |
|-----------|--------------------|
| BIOS Type | AMI 32MB Flash ROM |
|-----------|--------------------|

## MANAGEMENT

|          |                                                                                                                                                                                                                                                            |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Software | SuperCloud Composer (SCC)<br>Supermicro Server Manager (SSM)<br>Supermicro Update Manager (SUM)<br>Supermicro SuperDoctor 5 (SD5)<br>Super Diagnostics Offline (SDO)<br>Supermicro Thin-Agent Service (TAS)<br>SuperServer Automation Assistant (SAA) New! |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## SECURITY

|          |                                                                                                                               |
|----------|-------------------------------------------------------------------------------------------------------------------------------|
| Hardware | Trusted Platform Module (TPM) 2.0<br>Silicon Root of Trust (RoT) – NIST 800-193 Compliant                                     |
| Features | Cryptographically Signed Firmware<br>Secure Boot<br>Secure Firmware Updates<br>Automatic Firmware Recovery<br>System Lockdown |

## PC HEALTH MONITORING

|             |                                                                                                                   |
|-------------|-------------------------------------------------------------------------------------------------------------------|
| CPU         | 7+1 Phase-switching voltage regulator<br>Monitors for CPU Cores, Chipset Voltages, Memory.                        |
| Fan         | Fans with tachometer monitoring<br>Pulse Width Modulated (PWM) fan connectors<br>Status monitor for speed control |
| Temperature | Monitoring for CPU and chassis environment                                                                        |

## CERTIFICATIONS

|                   |                                                                                                                                                                   |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating Systems | ESXi 7.0 U3, Oracle Linux 8.3, RHEL 7.9, RHEL 8.2, Windows Server 2019, Windows Server 2022<br><a href="#">View all OS Compatibility and Certification Matrix</a> |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## CHASSIS

|             |                     |
|-------------|---------------------|
| Form Factor | 2U Rackmount        |
| Model       | CSE-GT214BF-R2K21BP |

## DIMENSIONS AND WEIGHT

|                 |                                                                |
|-----------------|----------------------------------------------------------------|
| Height          | 3.46" (88 mm)                                                  |
| Width           | 17.67" (449 mm)                                                |
| Depth           | 28" (711.2 mm)                                                 |
| Package         | 9.76" (H) x 24.65" (W) x 45.28" (D)                            |
| Weight          | Gross Weight: 88 lbs (39.9 kg)<br>Net Weight: 68 lbs (30.8 kg) |
| Available Color | Silver                                                         |

## FRONT PANEL

|         |                                                                                                  |
|---------|--------------------------------------------------------------------------------------------------|
| Buttons | Power On/Off button<br>UID button                                                                |
| LED     | HDD activity LED<br>Network activity LEDs<br>Power status LED<br>Universal Information (UID) LED |

## EXPANSION SLOTS (PER NODE)

|                                  |                                                                       |
|----------------------------------|-----------------------------------------------------------------------|
| PCI-Express (PCIe) Configuration | Default<br>1 PCIe 4.0 x16 LP slot<br><a href="#">View AOC Options</a> |
|----------------------------------|-----------------------------------------------------------------------|

## DRIVE BAYS / STORAGE (PER NODE)

|                          |                                                                                                            |
|--------------------------|------------------------------------------------------------------------------------------------------------|
| Drive Bays Configuration | Default: Total 4 bays 4 front hot-swap 2.5" NVMe/SAS/SATA drive bays<br><a href="#">View Drive Options</a> |
| M.2                      | 2 M.2 NVMe/SATA slots (M-key)<br><a href="#">View M.2 Options</a>                                          |

## SYSTEM COOLING

|      |                                          |
|------|------------------------------------------|
| Fans | Up to 2x 16.5K RPM Heavy Duty 8cm Fan(s) |
|------|------------------------------------------|

## POWER SUPPLY

1x 2200W  
1x 2200W Redundant Titanium Level (96%) power supply  
Dimension (WxHxL)  
106.5 x 84 x 245.3 mm

## OPERATING ENVIRONMENT

|                     |                                                                                                                                                                                                                                           |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RoHS                | RoHS Compliant                                                                                                                                                                                                                            |
| Environmental Spec. | Operating Temperature: 5°C to 40°C (41°F to 104°F)<br>Non-operating Temperature: -30°C to 60°C (-22°F to 140°F)<br>Operating Relative Humidity: 8% to 80% (non-condensing)<br>Non-operating Relative Humidity: 8% to 90% (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](mailto:office@serverinvest.com)

Official manufacturer datasheet: [serverinvest.com/product/sys-210gt-hnc8f/datasheet/manufacture](https://serverinvest.com/product/sys-210gt-hnc8f/datasheet/manufacture)

