

TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

# Supermicro Server SYS-1019D-14CN-RAN13TP

SKU SYS-1019D-14CN-RAN13TP

1U

Supermicro

## SuperServer SYS-1019D-14CN-RAN13TP+

(Angled View – System)



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FORM FACTOR

**1U**

MAX POWER (BASE)

**306 W**

HEAT OUTPUT

**1,044 BTU/h**

PRICE

**On request**



REQUEST A QUOTATION ONLINE

[serverinvest.com/product/sys-1019d-14cn-ran13tp](https://serverinvest.com/product/sys-1019d-14cn-ran13tp)



## 01 Product overview

The Supermicro SYS-1019D-14CN-RAN13TP is a server built on Intel Xeon D with up to 512 GB of memory in 4 DIMM slots.

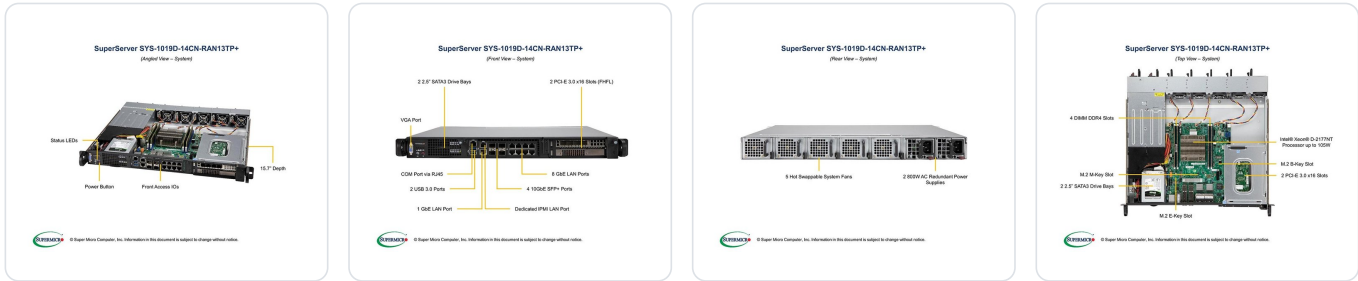
ServerInvest configures every SYS-1019D-14CN-RAN13TP to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

### HIGHLIGHTS

- Intel Xeon D
- Up to 512 GB memory · 4 DIMM slots
- 2 Internal 2.5" drive bays
- Power: 100-240 V, 50-60 Hz
- Networking: Quad 10G SFP+ via SoC

### KEY SPECIFICATIONS

|                    |                            |
|--------------------|----------------------------|
| Form factor        | 1U                         |
| Processor          | Intel Xeon D               |
| Memory             | 4 DIMM slots, up to 512 GB |
| Drive bays         | 2                          |
| Typical power draw | 450 W                      |
| Networking         | Quad 10G SFP+ via SoC      |
| Dimensions (W×H×D) | 437 × 44 mm                |



## 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

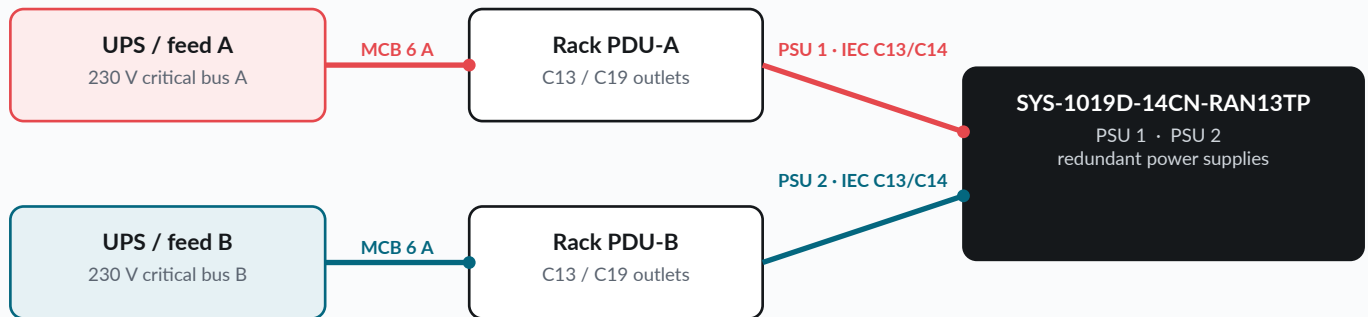
|                                  |                                                                     |
|----------------------------------|---------------------------------------------------------------------|
| Annual IT energy (24/7)          | 1,357 kWh                                                           |
| Annual facility energy (PUE 1.5) | 2,036 kWh                                                           |
| Annual energy cost               | €271 IT · €407 incl. cooling (at 0.20 €/kWh)                        |
| CO <sub>2</sub> 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

|               |                                                                                                      |
|---------------|------------------------------------------------------------------------------------------------------|
| CPU           | Intel Xeon processor D-2177NT<br>Single Socket FCBGA-2518 supported, CPU TDP supports Up to 105W TDP |
| Cores / Cache | 14 Cores, 28 Threads                                                                                 |

#### SYSTEM MEMORY

|                 |                                                                           |
|-----------------|---------------------------------------------------------------------------|
| Memory Capacity | Up to 512GB DDR4 ECC LRDIMM<br>Up to 256GB DDR4 ECC RDIMM<br>4 DIMM slots |
| Memory Type     | 2666/2400/2133MHz ECC DDR4 L/RDIMM<br>Operating speed up to 2400MHz       |
| DIMM Sizes      | 128GB, 64GB, 32GB, 16GB                                                   |
| Memory Voltage  | 1.2 V                                                                     |

#### ON-BOARD DEVICES

|                     |                                                                                     |
|---------------------|-------------------------------------------------------------------------------------|
| Chipset             | System on Chip (SoC)                                                                |
| SATA                | SATA3 (6Gbps) ports via SoC controller                                              |
| Network Controllers | Quad 10G SFP+ via SoC<br>8x 1GbE with Intel I350-AM4<br>Single 1GbE with Intel I210 |
| IPMI                | ASPEED AST2500<br>Support for Intelligent Platform Management Interface v.2.0       |
| Video               | VGA via Aspeed AST2500 BMC                                                          |

#### INPUT / OUTPUT

|      |                       |
|------|-----------------------|
| SATA | 2 SATA3 (6Gbps) ports |
|------|-----------------------|

|                      |                                                                                             |
|----------------------|---------------------------------------------------------------------------------------------|
| LAN                  | 9 RJ45 Gigabit Ethernet LAN ports<br>4 10G SFP+ LAN ports<br>1 RJ45 Dedicated IPMI LAN port |
| USB                  | 2 USB 3.0 ports (front)                                                                     |
| Video                | 1 VGA port                                                                                  |
| Serial Port / Header | 1 COM via RJ45                                                                              |
| TPM                  | 1 TPM Header & Chip both                                                                    |

## SYSTEM BIOS

|           |            |
|-----------|------------|
| BIOS Type | UEFI 256Mb |
|-----------|------------|

## MANAGEMENT

|          |                                                                            |
|----------|----------------------------------------------------------------------------|
| Software | Intel Node Manager<br>IPMI 2.0<br>NMI<br>SUM<br>Watch Dog<br>SuperDoctor 5 |
|----------|----------------------------------------------------------------------------|

## CHASSIS

|             |               |
|-------------|---------------|
| Form Factor | 1U Rackmount  |
| Model       | CSE-515M-R804 |

## DIMENSIONS AND WEIGHT

|                  |                                                                |
|------------------|----------------------------------------------------------------|
| Height           | 1.7" (43mm)                                                    |
| Width            | 17.2" (437mm)                                                  |
| Depth            | 15.7" (399mm)                                                  |
| Package          | 8" (H) x 27" (W) x 24" (D)                                     |
| Weight           | Gross Weight: 28 lbs (12.7 kg)<br>Net Weight: 18 lbs (8.16 kg) |
| Available Colors | Black                                                          |

## FRONT PANEL

|         |                                                                                         |
|---------|-----------------------------------------------------------------------------------------|
| Buttons | Power On/Off button<br>System Reset button                                              |
| LEDs    | Power LED<br>Hard drive activity LED<br>Network activity LEDs<br>System Information LED |

## EXPANSION SLOTS

|             |                                                                        |
|-------------|------------------------------------------------------------------------|
| PCI-Express | 2 PCI-E 3.0 x16 (FHFL) slots                                           |
| M.2         | 1 M.2 M-Key: 2280/22110<br>1 M.2 B-Key: 2242/3042<br>1 M.2 E-Key: 2230 |

## DRIVE BAYS

Internal 2 Internal 2.5" drive bays

## SYSTEM COOLING

Fans 5x 40x56mm Hot-swap Counter-rotation PWM Fans

## POWER SUPPLY

AC Voltage 100-240 V, 50-60 Hz

+5V N/A

+5V standby Max.: 4 Amp  
Min.: 0 Amp

+12V Max: 62.5A & Min: 0.5A (100Vac-127Vac)  
Max: 66.6A & Min: 0.5A (200Vac-240Vac)  
Max: 66.6A & Min: 0.5A (230-240Vdc)

-12V N/A

+3.3V N/A

Certification Platinum Level Certified  
[ Test Report ]

## OPERATING ENVIRONMENT / COMPLIANCE

RoHS RoHS Compliant

Environmental Spec. Operating Temperature:  
0°C to 45°C (32°F to 113°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.



## 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)

