

TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro Server SYS-1019D-FRN8TP

SKU SYS-1019D-FRN8TP

1U

Supermicro



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-frn8tp

01 Product overview

The Supermicro SYS-1019D-FRN8TP is a server built on Intel Xeon D with up to 512 GB of memory in 4 DIMM slots.

ServerInvest configures every SYS-1019D-FRN8TP 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
- Up to 4x 2.5" drive bays
- Networking: Quad LAN with Intel Ethernet Controller I350-AM4

KEY SPECIFICATIONS

Form factor	1U
Processor	Intel Xeon D
Memory	4 DIMM slots, up to 512 GB
Drive bays	4
Typical power draw	450 W
Networking	Quad LAN with Intel Ethernet Controller I350-AM4
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

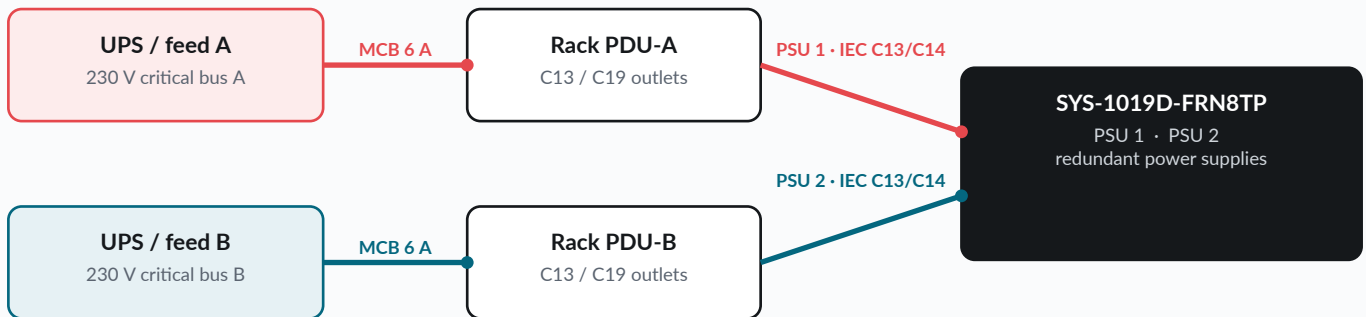
Annual IT energy (24/7)	1,357 kWh
Annual facility energy (PUE 1.5)	2,036 kWh
Annual energy cost	€271 IT · €407 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.53 t (grid factor 0.26 kg/kWh)
Power supplies	Redundant hot-swap PSUs — rating depends on the final configuration

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-2146NT , CPU TDP support 80W
Cores / Cache	8 Cores, 16 Threads

SYSTEM MEMORY

Memory Capacity	Up to 512GB DDR4 ECC LRDIMM Up to 256GB DDR4 ECC RDIMM 4 DIMM slots
Memory Type	2666/2400/2133MHz ECC DDR4 L/RDIMM Operating speed up to 2133MHz
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 LAN with Intel Ethernet Controller I350-AM4 Dual LAN with 10G SFP+ LAN via SoC Dual LAN with 10Gbase-T
IPMI	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Video	VGA via Aspeed AST2500 BMC

INPUT / OUTPUT

SATA	12 SATA3 (6Gbps) ports, RAID 0, 1, 5, 10
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LAN	4 RJ45 1GbE LAN ports (front) 2 RJ45 10GBase-T LAN ports (front) 2 10G SFP+ LAN ports (front) 1 RJ45 Dedicated IPMI LAN port (front)
USB	2 USB 3.0 ports (front)
Video	1 VGA port (front)

SYSTEM BIOS

BIOS Type	128Mb SPI Flash with AMI BIOS
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MANAGEMENT

Software	Intel Node Manager IPMI 2.0 NMI SUM Watch Dog SuperDoctor 5
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CHASSIS

Form Factor	1U Rackmount
Model	CSE-515-R407

DIMENSIONS AND WEIGHT

Height	1.7" (43mm)
Width	17.2" (437mm)
Depth	16.9" (429mm)
Package	8" (H) x 27" (W) x 24" (D)
Weight	Gross Weight: 12 lbs (5.44 kg) Net Weight: 8 lbs (3.63 kg)
Available Colors	Silver

FRONT PANEL

Buttons	Power On/Off button System Reset button
LEDs	Power LED Hard drive activity LED Network activity LEDs System Information LED

EXPANSION SLOTS

PCI-Express	1 PCI-E 3.0 x16 slot 1 Mini PCI-E x1 slot
M.2	1 M.2 M-Key for storage: 2242/2280 1 M.2 B-Key for SSD & WAN: 2242

DRIVE BAYS

Internal	Up to 4x 2.5" drive bays
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SYSTEM COOLING

Fans 4x 40mmx56mm cooling fan

AC/DC240V INPUT REDUNDANT POWER SUPPLIES

Total Output Power	400W
Dimension (W x H x L)	54.5 x 40 x 220 mm
Input	100 - 240Vac / 6.0 - 3.0A / 50-60Hz 200 - 240Vdc / 3.4 - 3.2A (CCC Only)
+12V	Max: 33A / Min: 0.5A
+5V sb	Max: 3A / Min: 0A
Output Type	Gold Finger Connector Mating with Molex 45984-4343
Certification	Platinum Level Certified [Test Report]

OPERATING ENVIRONMENT / COMPLIANCE

RoHS	RoHS Compliant
Environmental Spec.	Operating Temperature: 10°C to 40°C (50°F to 104°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.
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