

TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro Server SYS-5018D-FN8T

SKU SYS-5018D-FN8T

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-5018d-fn8t



01 Product overview

The Supermicro SYS-5018D-FN8T is a server built on Intel Xeon D with up to 128 GB of memory.

ServerInvest configures every SYS-5018D-FN8T 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

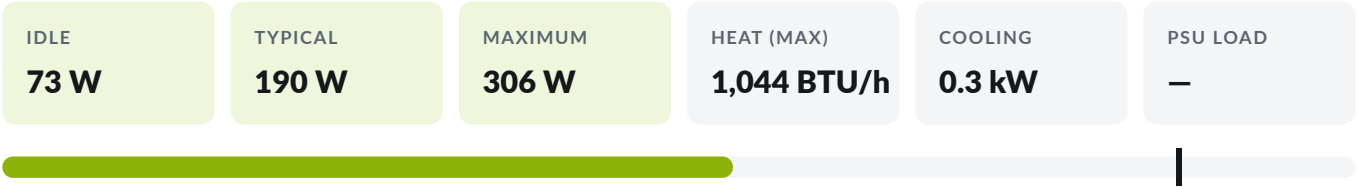
- Intel Xeon D
- Up to 128 GB memory
- 1x 3.5" or 4x 2.5" fixed drive bays with bracket
- Power: 100 - 240V, 50-60Hz, 2.6 Amp Max
- Networking: Dual 10G SFP+ from D-1500 SoC

KEY SPECIFICATIONS

Form factor	1U
Processor	Intel Xeon D
Memory	up to 128 GB
Drive bays	1
Typical power draw	450 W
Networking	Dual 10G SFP+ from D-1500 SoC
Dimensions (W×H×D)	437 × 44 mm

02 Power & thermal

Calculated for the base configuration



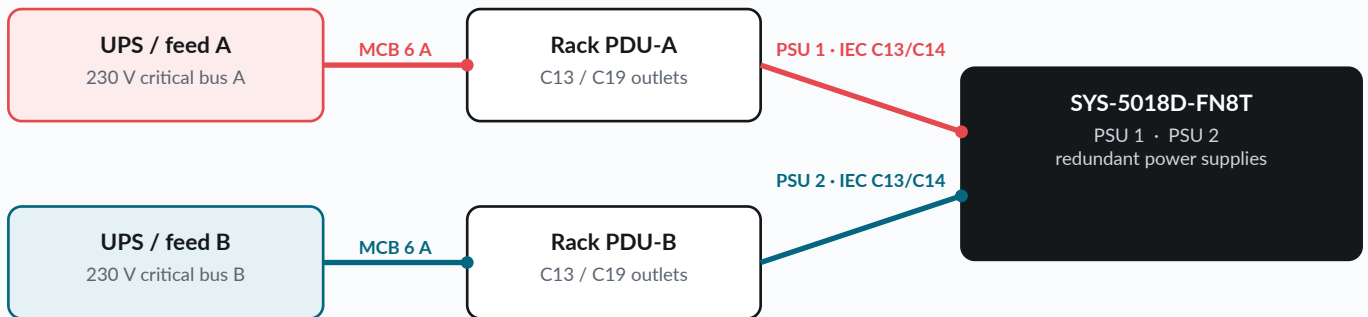
Annual IT energy (24/7)	1,357 kWh
Annual facility energy (PUE 1.5)	2,036 kWh
Annual energy cost	€271 IT · €407 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.53 t (grid factor 0.26 kg/kWh)
Power supplies	Redundant hot-swap PSUs — rating depends on the final configuration

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/CACHE

CPU Intel Xeon processor D-1518 ,
2.2GHz; CPU TDP support 35W
FCBGA 1667

Cores / Cache 4 Cores, 8 Threads / 6MB

SYSTEM MEMORY

Memory Capacity 4x DDR4 DIMM sockets
Supports up to 128GB DDR4 ECC RDIMM
Supports up to 64GB DDR4 ECC/non-ECC UDIMM

Memory Type 2133/1866/1600MHz ECC DDR4 ECC RDIMM and ECC/Non-ECC UDIMM

DIMM Sizes 32GB, 16GB, 8GB, 4GB

Memory Voltage 1.2 V

Error Detection Corrects single-bit errors
Detects double-bit errors
(using ECC memory)

ON-BOARD DEVICES

SATA SoC controller for SATA3 (6Gbps) ports

Network Controllers Dual 10G SFP+ from D-1500 SoC
Quad 1GbE with Intel I350-AM4
Dual 1GbE with Intel I210

IPMI IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Dedicated RJ45 IPMI LAN port

Graphics BMC integrated ASPEED AST2400

INPUT / OUTPUT

SATA	4x SATA3 (6Gbps) ports
LAN	2x 10G SFP+ ports 6x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port
USB	2x USB 3.0 ports (front)
DOM	1x SATA DOM (Disk on Module) power connector
VGA	1x VGA Port
Others	TPM 2.0 header

CHASSIS

Form Factor	1U Rackmount
Model	CSE-505-203B

DIMENSIONS AND WEIGHT

Height	1.7" (43mm)
Width	17.2" (437mm)
Depth	9.8" (249mm)
Weight	Net Weight: 8 lbs (3.63 kg) Gross Weight: 12 lbs (5.44 kg)
Available Colors	Black

FRONT PANEL

Buttons	Power On/Off button System Reset button
LEDs	Power LED Hard drive activity LED 2x Network activity LEDs System Overheat LED Information LED (temp., status)

EXPANSION SLOTS

PCI-E	1x PCIe 3.0 x8 slots M.2 PCIe 3.0 x4, M Key 2242/2280/22110 Mini-PCIe with mSATA support
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DRIVE BAYS

HDD	1x 3.5" or 4x 2.5" fixed drive bays with bracket
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SYSTEM COOLING

Fans	Passive Heatsink, 40mm chassis fan
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POWER SUPPLY

AC Voltage	100 - 240V, 50-60Hz, 2.6 Amp Max
+5V	8.0 Amp (max.)
+5V standby	2.0 Amp (max.)

+12V	16 Amp (max.)
-12V	0.5 Amp (max.)
+3.3V	8.0 Amp (max.)
Certification	Gold Certified

SYSTEM BIOS

BIOS Type	128Mb SPI Flash with AMI BIOS
BIOS Features	PCI 3.0 ACPI 5.0 USB Keyboard support Hardware BIOS Virus protection SMBIOS 2.8 UEFI 2.4 RTC (Real Time Clock) Wakeup

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.
office@serverinvest.com

