

TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro Server SYS-5018D-MHR7N4P

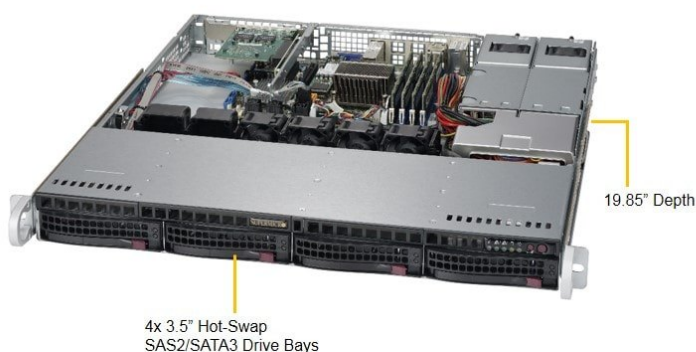
SKU SYS-5018D-MHR7N4P

1U

Supermicro

SuperServer SYS-5018D-MHR7N4P

(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-5018d-mhr7n4p



01 Product overview

The Supermicro SYS-5018D-MHR7N4P is a server built on Intel Xeon D with up to 128 GB of memory.

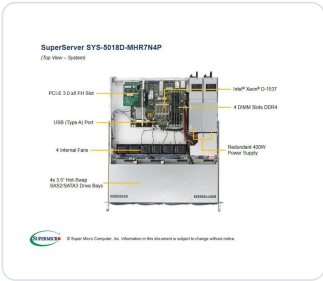
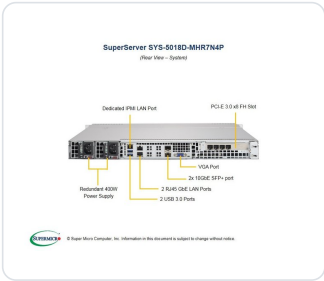
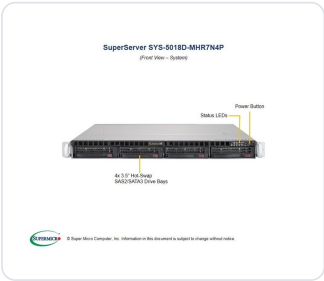
ServerInvest configures every SYS-5018D-MHR7N4P to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- Intel Xeon D
- Up to 128 GB memory
- 4 Hot-swap 3.5" SATA3/SAS2 drive bays (optional cable needed)
- Networking: Dual 10G SFP+ from D-1500 SoC

KEY SPECIFICATIONS

Form factor	1U
Processor	Intel Xeon D
Memory	up to 128 GB
Drive bays	4
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

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

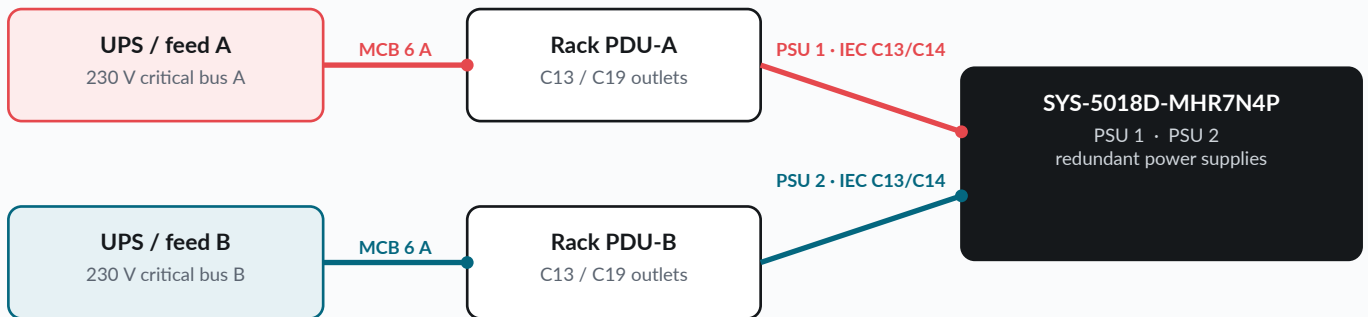
Annual IT energy (24/7)	1,357 kWh
Annual facility energy (PUE 1.5)	2,036 kWh
Annual energy cost	€271 IT · €407 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.53 t (grid factor 0.26 kg/kWh)
Power supplies	Redundant hot-swap PSUs — rating depends on the final configuration

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/CACHE

CPU Intel Xeon processor D-1537 ,
1.7GHz-2.3GHz; CPU TDP support 35W
FCBGA 1667

Cores / Cache 8 Cores, 16 Threads / 12MB

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

Chipset System on Chip

SATA/SAS SoC controller for 4 SATA3 (6Gbps) ports; RAID 0,1,5,10 RSTe
Broadcom 2116 (IT mode) SW controller for 16 SATA3 (6Gbps) ports; SAS2 and SATA3

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

IPMI Support for Intelligent Platform Management Interface v2.0
IPMI 2.0 with virtual media over LAN and KVM-over-LAN support

Video Aspeed AST2400

INPUT / OUTPUT

LAN	2x 10G SFP+ LAN ports 2x 1GbE LAN ports 1 Dedicated IPMI LAN port
USB	2 USB 3.0 ports (rear), 5 USB 2.0 (4 via headers and 1 Type A)
Video	1 VGA port
DOM	2 SuperDOM (Disk on Module) power connectors
TPM	TPM 2.0 header

CHASSIS

Form Factor	1U Rackmount
Model	CSE-813MFTQC-R407CB

DIMENSIONS AND WEIGHT

Height	1.7" (43mm)
Width	17.2" (437mm)
Depth	19.85" (503mm)
Gross Weight	Net Weight: 20 lbs (9.07kg) Gross Weight: 33 lbs (14.97kg)

FRONT PANEL

Buttons	Power On/Off button
LEDs	Network activity LEDs

EXPANSION SLOTS

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

Internal	4 Hot-swap 3.5" SATA3/SAS2 drive bays (optional cable needed)
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SYSTEM COOLING

Fans	4 fans (default), may install up to 6 fans
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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]

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

