TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro Server SYS-1018D-FRN8T

SKU SYS-1018D-FRN8T | 1U | Supermicro

FORM FACTOR	MAX POWER (BASE)	HEAT OUTPUT	PRICE
1U	306 W	1,044 BTU/h	On request

ISO 9001 · ISO 14001 · ISO 27001 · cisco · tp-link · Omada by tp-link

REQUEST A QUOTATION ONLINE

serverinvest.com/product/sys-1018d-frn8t

01 Product overview

The Supermicro SYS-1018D-FRN8T is a server built on Intel Xeon D with up to 128 GB of memory.

ServerInvest configures every SYS-1018D-FRN8T 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
- 4x 2.5" fixed drive bays
- 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

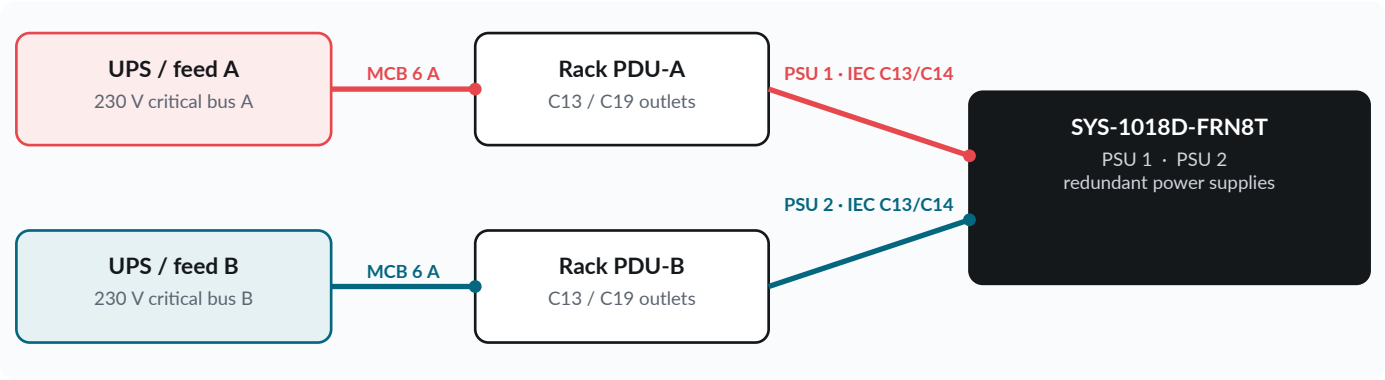
Annual IT energy (24/7)	1,357 kWh
Annual facility energy (PUE 1.5)	2,036 kWh
Annual energy cost	€271 IT · €407 incl. cooling (at 0.20 €/kWh)
CO_2 emissions / year	0.53 t (grid factor 0.26 kg/kWh)
Power supplies	Redundant hot-swap PSUs — rating depends on the final configuration

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-1587 , 1.7GHz-2.3GHz, CPU TDP support 65W FCBGA 1667
Cores / Cache	16 Cores, 32 Threads / 24MB

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 (rear)
DOM	1x SATA DOM (Disk on Module) power connector
VGA	1x VGA Port
Others	TPM 1.2 header

CHASSIS

Form Factor	1U Rackmount
Model	CSE-515-R407

DIMENSIONS AND WEIGHT

Height	1.7" (43mm)
Width	17.2" (437mm)
Depth	16.9" (429mm)
Weight	Net Weight: 8 lbs (3.63 kg) Gross Weight: 12 lbs (5.44 kg)
Available Colors	Silver

FRONT PANEL

Buttons	Power On/Off button System Reset button
LEDs	Power LED Hard drive activity LED 2x Network activity LEDs System Information 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

DRIVE BAYS

HDD	4x 2.5" fixed drive bays

SYSTEM COOLING

Fans	Passive Heatsink, 40mm chassis 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]

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: 0°C to 40°C (32°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.

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Interested in this solution?

Request a quotation online or talk to a solutions engineer — we reply within one business day.
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