

TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro Server SYS-1019D-16C-RDN13TP

SKU SYS-1019D-16C-RDN13TP

1U

Supermicro

SuperServer SYS-1019D-16C-RDN13TP+

(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-16c-rdn13tp](https://serverinvest.com/product/sys-1019d-16c-rdn13tp)



01 Product overview

The Supermicro SYS-1019D-16C-RDN13TP is a server built on Intel Xeon D with up to 512 GB of memory in 4 DIMM slots.

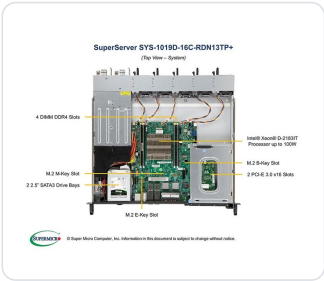
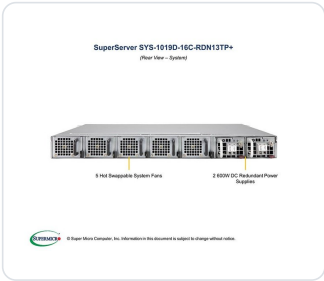
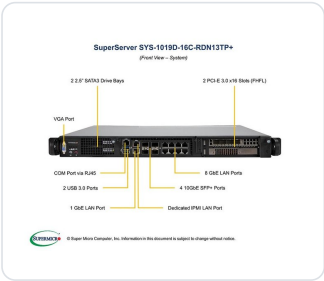
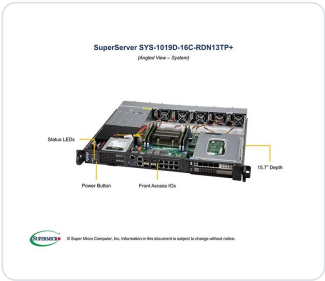
ServerInvest configures every SYS-1019D-16C-RDN13TP to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- Intel Xeon D
- Up to 512 GB memory · 4 DIMM slots
- 2 Internal 2.5" drive bays
- 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

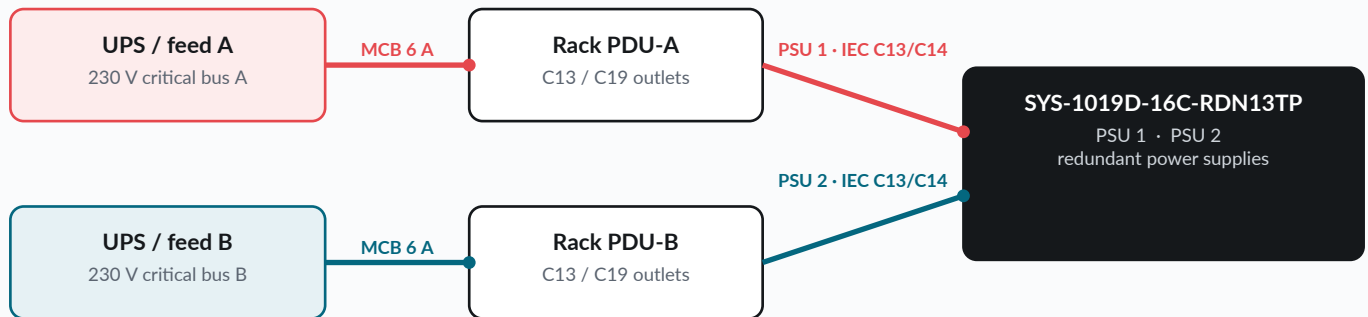
Annual IT energy (24/7)	1,357 kWh
Annual facility energy (PUE 1.5)	2,036 kWh
Annual energy cost	€271 IT · €407 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.53 t (grid factor 0.26 kg/kWh)
Power supplies	Redundant hot-swap PSUs — rating depends on the final configuration

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-2183IT Single Socket FCBGA-2518 supported, CPU TDP supports Up to 100W TDP
Cores / Cache	16 Cores, 32 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 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 8x 1GbE with Intel I350-AM4 Single 1GbE with Intel I210
IPMI	ASPEED AST2500 Support for Intelligent Platform Management Interface v.2.0
Video	VGA via Aspeed AST2500 BMC

INPUT / OUTPUT

SATA	2 SATA3 (6Gbps) ports
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LAN	9 RJ45 Gigabit Ethernet LAN ports 4 10G SFP+ LAN ports 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
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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-515M-R601

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) Net Weight: 18 lbs (8.16 kg)
Available Colors	Black

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	2 PCI-E 3.0 x16 (FHFL) slots
M.2	1 M.2 M-Key: 2280/22110 1 M.2 B-Key: 2242/3042 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

600W -48V DC INPUT REDUNDANT POWER SUPPLIES

Total Output Power	600W: -44Vdc to -65Vdc
Dimension (W x H x L)	54.5 x 40 x 220 mm
DC Input	-44Vdc to -65Vdc / 18 - 10A
+12V	Max: 50A / Min: 0A
+5V sb	Max: 3A / Min: 0A
Output Type	Gold Finger Connector Mating with Molex 45984-4343
DC option for: (AC Counter- part)	PWS-406P-1R, PWS-407P-1R, PWS-606P-1R, PWS-608P-1R, PWS-804P-1R

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

