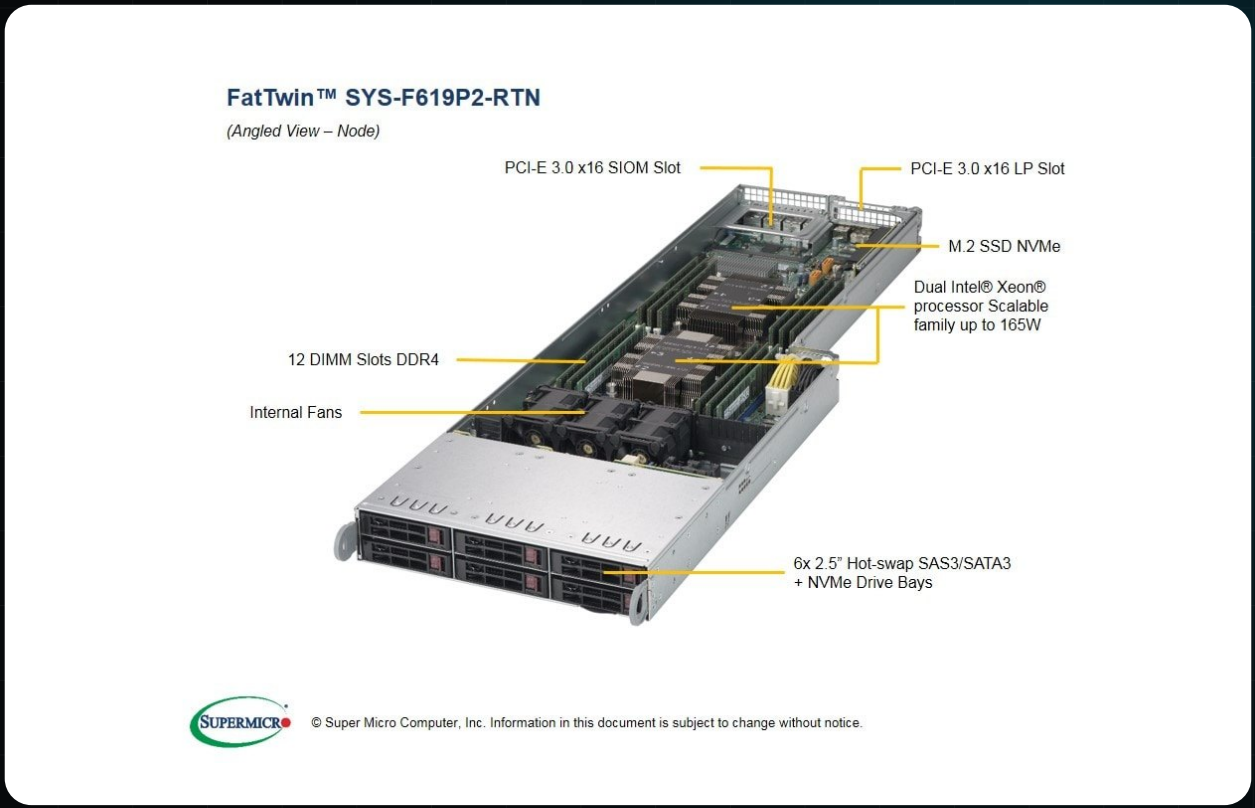
TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro Server SYS-F619P2-RTN

SKU SYS-F619P2-RTN | 4U | Supermicro



FORM FACTOR	MAX POWER (BASE)	HEAT OUTPUT	PRICE
4U	602 W	2,054 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-f619p2-rtn

01 Product overview

The Supermicro SYS-F619P2-RTN is a server built on dual Dual Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Process processors with up to 3 TB of memory in 12 DIMM slots.

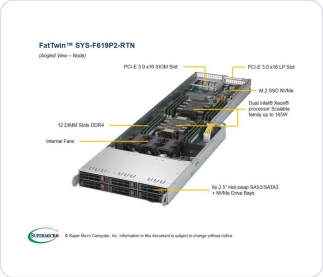
ServerInvest configures every SYS-F619P2-RTN to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

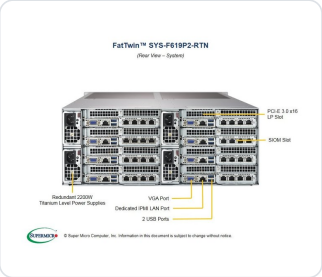
HIGHLIGHTS

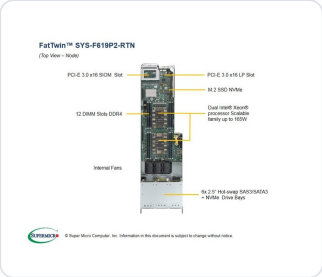
- Dual Dual Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Process
- Up to 3 TB memory · 12 DIMM slots
- 6 Hot-swap 2.5" SATA3 or 2 Hot-swap 2.5" SATA3 + 4 NVMe U.2
- Power: 1200W with Input 100-127Vac
- Networking: Flexible networking via

KEY SPECIFICATIONS

Form factor	**4U**
Processor	**2× Dual Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Process**
Memory	**12 DIMM slots, up to 3 TB**
Power supply	**1× 1200 W**
Typical power draw	**750 W**
Networking	**Flexible networking via**
Dimensions (W×H×D)	**437 × 178 mm**







02 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
143 W	**374 W**	**602 W**	**2,054 BTU/h**	**0.6 kW**	**50%**

Typical 374 W · max 602 W · single PSU rating 1200 W

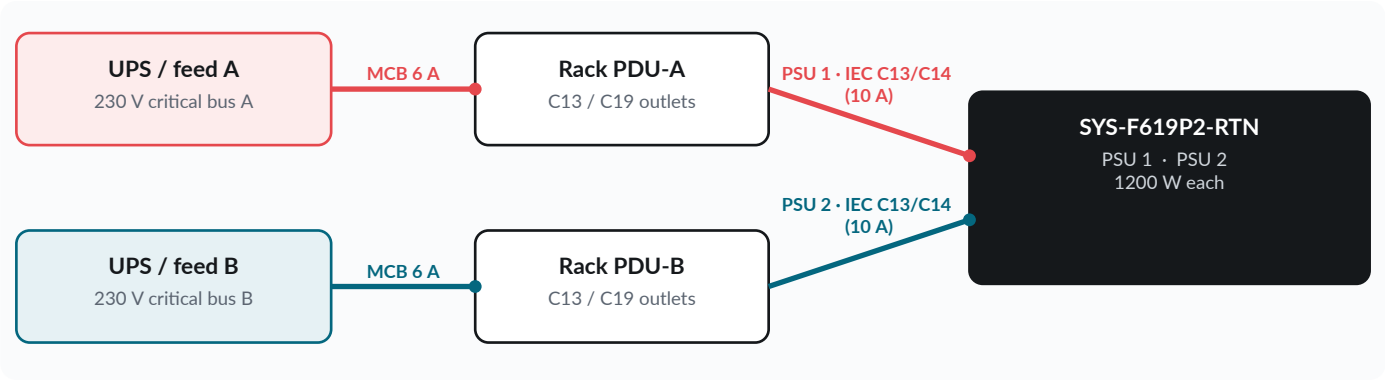
Annual IT energy (24/7)	2,669 kWh
Annual facility energy (PUE 1.5)	4,004 kWh
Annual energy cost	€534 IT · €801 incl. cooling (at 0.20 €/kWh)
CO_2 emissions / year	1.04 t (grid factor 0.26 kg/kWh)
Power supplies	1× 1200 W

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	72 W	112 W	**160 W**
2× CPU (base configuration)	50 W	220 W	**370 W**
4× Memory (base configuration)	12 W	20 W	**36 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 (10 A) power cords.
- Maximum current per feed: 2.8 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: 602 W = 2,054 BTU/h (0.6 kW).

04 Full specifications

PROCESSOR/CACHE (PER NODE)	
CPU	Dual Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Processors and Intel Xeon Scalable Processors ‡ , Dual UPI up to 10.4GT/s Support CPU TDP 70-165W with IVR
Cores	Up to 28 Cores
Note	‡ BIOS version 3.2 or above is required to support 2nd Gen Intel Xeon Scalable processors (codenamed Cascade Lake-R)

SYSTEM MEMORY (PER NODE)	
Memory Capacity	12 DIMM slots Up to 3TB 3DS ECC DDR4-2933MHz † RDIMM/LRDIMM Supports Intel Optane DCPMM ††
Memory Type	2933 † /2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM
Note	† 2933MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro †† Cascade Lake only. Contact your Supermicro sales rep for more info.

ON-BOARD DEVICES	
Chipset	Intel C621 chipset
SATA	SATA3 (6Gbps); RAID 0, 1, 5, 10
Network Controllers	Flexible networking via SIOM
IPMI	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Graphics	ASPEED AST2500 BMC

INPUT / OUTPUT (PER NODE)

NVMe	4 NVMe U.2 option
LAN	SIOM flexible Network card 1 RJ45 Dedicated IPMI LAN port
USB	2 USB 3.0 ports (rear)
VGA	1 VGA port

SYSTEM BIOS

BIOS Type	128Mb SPI Flash EEPROM with AMI BIOS

MANAGEMENT

Software	Intel Node Manager IPMI 2.0 KVM with dedicated LAN SuperDoctor 5 Watch Dog
Power Configurations	ACPI Power Management

PC HEALTH MONITORING

CPU	Monitors for CPU Cores, Chipset Voltages, Memory. 4+1 Phase-switching voltage regulator
FAN	Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors
Temperature	Monitoring for CPU and chassis environment Thermal Control for fan connectors

CHASSIS

Form Factor	4U Rackmount
Model	CSE-F418BC2-R2K20BP

DIMENSIONS AND WEIGHT

Width	17.63" (448mm)
Height	6.96" (177mm)
Depth	29" (737mm)
Package	28.3" (W) x 15.0" (H) x 42.4" (D)
Weight	Net Weight: 150 lbs (68.04 kg) Gross Weight: 200 lbs (90.71 kg)
Available Colors	Black

FRONT PANEL

Buttons	Power On/Off button UID button
LEDs	Power status LED Hard drive activity LED Network activity LEDs Information LED (UID, Fan failure, Overheat)

EXPANSION SLOTS (PER NODE)

PCI-Express	1 PCI-E 3.0 x16 (Low-profile) 1 PCI-E 3.0 x16 (SIOM)

DRIVE BAYS (PER NODE)

Hot-swap	6 Hot-swap 2.5" SATA3 or 2 Hot-swap 2.5" SATA3 + 4 NVMe U.2
M.2	M.2 Interface: PCI-E 3.0 x4 M.2 Form Factor: 2260, 2280, 22110 M.2 Key: M-Key

SYSTEM COOLING (PER NODE)

Fans	3x 4cm 20k RPM middle fans

POWER SUPPLY

Total Output Power and Input	1200W with Input 100-127Vac 1800W with Input 200-220Vac 1980W with Input 220-230Vac 2090W with Input 230-240Vac 2200W with Input 220-240Vac (for UL/cUL use only) 2090W with Input 230-240Vdc (for CCC only)
AC Input Frequency	50-60Hz
Dimension (W x H x L)	76 x 40 x 336 mm
+12V	Max: 100A / Min: 0A (100-127Vac) Max: 150A / Min: 0A (200-220Vac) Max: 165A / Min: 0A (220-230Vac) Max: 174.17A / Min: 0A (230-240Vac) Max: 183.3A / Min: 0A (220-240Vac)
5VSB	Max: 1A / Min: 0A
Output Type	Backplanes (gold finger)
Certification	Titanium Level [Test Report]

OPERATING ENVIRONMENT

RoHS	RoHS Compliant
Environmental Spec.	Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F) Non-operating Temperature: -40°C to 60°C (-40°F to 140°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.

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

Interested in this solution?
Request a quotation online or talk to a solutions engineer — we reply within one business day.
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