

TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro Server SYS-5019C-FL

SKU SYS-5019C-FL

1U

Supermicro

SuperServer SYS-5019C-FL

(Angled View – System)



© Super Micro Computer, Inc. Information in this document is subject to change without notice.

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-5019c-fl



01 Product overview

The Supermicro SYS-5019C-FL is a server built on Intel Core with up to 64 GB of memory in 2 DIMM slots.

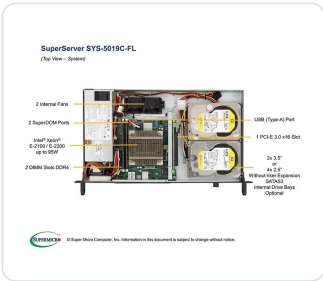
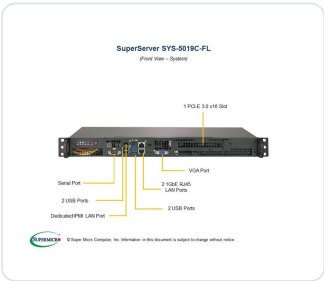
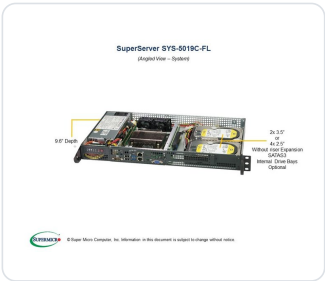
ServerInvest configures every SYS-5019C-FL to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- Intel Core
- Up to 64 GB memory · 2 DIMM slots
- 2 Fixed 3.5" drive bay or 4 Fixed 2.5" drive bays
- Power: 100 - 240V, 50-60Hz, 2.6 Amp Max
- Networking: Dual LAN with Intel I210-AT

KEY SPECIFICATIONS

Form factor	1U
Processor	Intel Core
Memory	2 DIMM slots, up to 64 GB
Drive bays	6
Typical power draw	450 W
Networking	Dual LAN with Intel I210-AT
Dimensions (W×H×D)	437 × 44 mm



02 Power & thermal

Calculated for the base configuration

IDLE 73 W	TYPICAL 190 W	MAXIMUM 306 W	HEAT (MAX) 1,044 BTU/h	COOLING 0.3 kW	PSU LOAD —
----------------------------	--------------------------------	--------------------------------	---	---------------------------------	-----------------------------



Typical 190 W · max 306 W

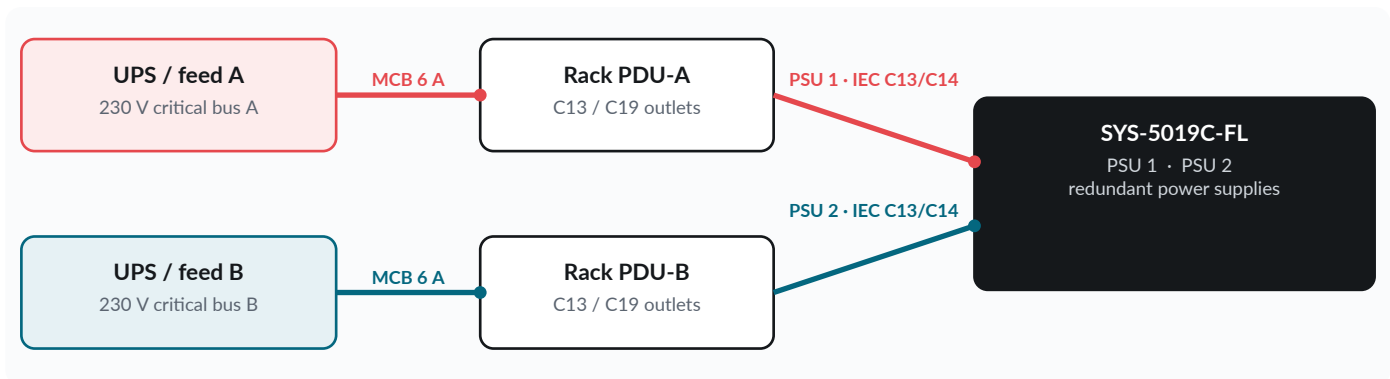
Annual IT energy (24/7)	1,357 kWh
Annual facility energy (PUE 1.5)	2,036 kWh
Annual energy cost	€271 IT · €407 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.53 t (grid factor 0.26 kg/kWh)
Power supplies	Redundant hot-swap PSUs — rating depends on the final configuration

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	Single Socket H4 (LGA 1151), CPU TDP support up to 95W Support Intel Xeon processor E-2100 / E-2200 series, 8th/9th Gen. Intel Core i3 / Pentium / Celeron Processors
Cores	6 cores, 12 threads
Note	BIOS 1.0b or above is required to support Intel Xeon processor E-2200 series

SYSTEM MEMORY

Memory Capacity	2 DIMM slots Up to 64GB Unbuffered ECC UDIMM Up to DDR4-2666MHz
Memory Type	2666/2400/2133MHz ECC DDR4 SDRAM
DIMM Sizes	32GB, 16GB, 8GB, 4GB
Note	64GB system memory capacity will be available in 2019 through a published BIOS update.

ON-BOARD DEVICES

Chipset	Intel C242 chipset
SATA	SATA3 (6Gbps) via Intel C242 controller RAID 0, 1, 5, 10 support
IPMI	ASPEED AST2500
Network Controllers	Dual LAN with Intel I210-AT
Video	ASPEED AST2500 BMC

INPUT / OUTPUT (FRONT IO)

SATA	4 SATA3 (6Gbps) ports
------	-----------------------

LAN	2 RJ45 Gigabit Ethernet LAN ports 1 RJ45 Dedicated IPMI LAN port
USB	2 USB 3.1 ports (front) 2 USB 2.0 ports (front)
Video	1 VGA port
Serial Port / Header	1 COM port (front), 1 COM (header)
TPM	1 TPM 2.0 Header

SYSTEM BIOS

BIOS Type	UEFI 256Mb
BIOS Features	ACPI 6.0 SMBIOS 2.7 Plug and Play (PnP) RTC (Real Time Clock) Wakeup UEFI 2.7 USB Keyboard support PCI 3.0

MANAGEMENT

Software	Intel Node Manager IPMI 2.0 NMI SSM , SPM , SUM Watch Dog SuperDoctor 5
----------	--

CHASSIS

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

DIMENSIONS AND WEIGHT

Height	1.7" (43mm)
Width	17.2" (437mm)
Depth	9.8" (249mm)
Package	6.1" (H) x 25.8" (W) x 18.3" (D)
Weight	Gross Weight: 12 lbs (5.44 kg) Net Weight: 8 lbs (3.63 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	1 PCI-E 3.0 x16 slot
M.2	M.2 Interface: 1 SATA/PCI-E 3.0 x4 M.2 Form Factor: 2280 M.2 Key: M-Key

DRIVE BAYS

Internal	2 Fixed 3.5" drive bay or 4 Fixed 2.5" drive bays
----------	---

SYSTEM COOLING

Fans	2x 4cm PWM fan
------	----------------

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

PC HEALTH MONITORING

CPU	Monitors for CPU Cores, +3.3V, +5V, +12V, +5V Standby, VBAT, HT, Memory, Chipset Voltages.
FAN	4x 4-pin fan headers (up to 4 fans), 4 fans with tachometer status monitoring, Fan speed control, Overheat LED indication, Thermal control tachometer fan connectors
Temperature	Monitoring for CPU and chassis environment, CPU thermal trip support, Thermal Monitor 2 (TM2) support, PECI

OPERATING ENVIRONMENT / COMPLIANCE

RoHS	RoHS Compliant
Environmental Spec.	Operating Temperature: 10°C to 35°C (50°F to 95°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

