

TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro Server SSG-6119P-ACR12N4L

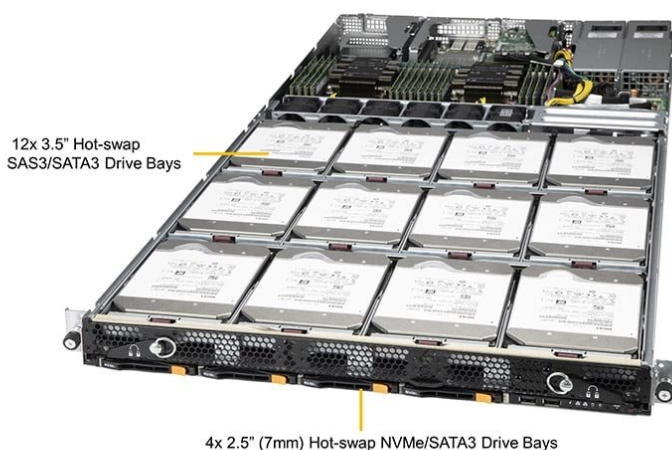
SKU SSG-6119P-ACR12N4L

1U

Supermicro

SSG-6119P-ACR12N4L

(Angled View – System)



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FORM FACTOR

1U

MAX POWER (BASE)

522 W

HEAT OUTPUT

1,781 BTU/h

PRICE

On request



REQUEST A QUOTATION ONLINE

serverinvest.com/product/ssg-6119p-acr12n4l



01 Product overview

The Supermicro SSG-6119P-ACR12N4L 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 16 DIMM slots.

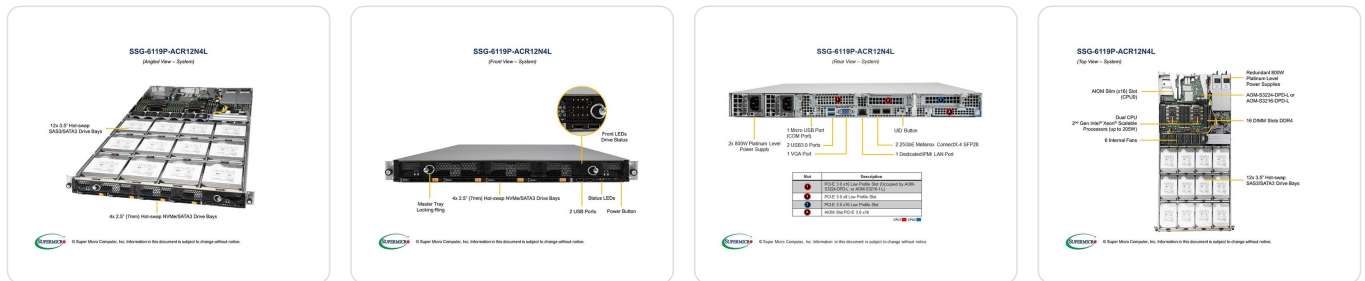
ServerInvest configures every SSG-6119P-ACR12N4L to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- Dual Dual Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Process
- Up to 3 TB memory · 16 DIMM slots
- 12 Hot-swap 3.5" SAS3/SATA3 HDD bays
- Networking: Mellanox CONNECTX-4 LX EN 25GbE

KEY SPECIFICATIONS

Form factor	1U
Processor	2× Dual Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Process
Memory	16 DIMM slots, up to 3 TB
Drive bays	16 (16 NVMe)
Typical power draw	750 W
Networking	Mellanox CONNECTX-4 LX EN 25GbE
Dimensions (W×H×D)	437 × 44 mm



02 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
106 W	318 W	522 W	1,781 BTU/h	0.5 kW	—

Typical 318 W · max 522 W

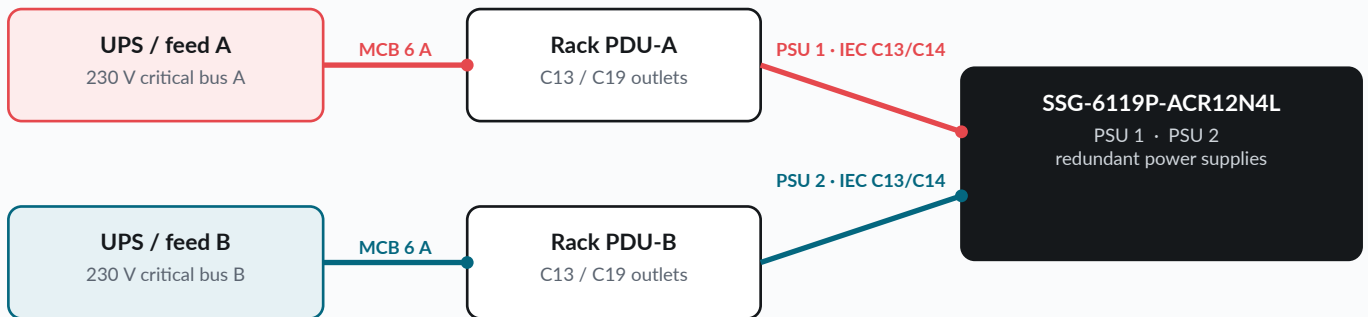
Annual IT energy (24/7)	2,229 kWh
Annual facility energy (PUE 1.5)	3,344 kWh
Annual energy cost	€446 IT · €669 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.87 t (grid factor 0.26 kg/kWh)
Power supplies	Redundant hot-swap PSUs — rating depends on the final configuration

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	38 W	59 W	85 W
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 power cords.
- Maximum current per feed: 2.4 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: 522 W = 1,781 BTU/h (0.5 kW).

04 Full specifications

PROCESSOR/CACHE

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 up to 205W *
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

Memory Capacity	16 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
SAS	Broadcom 3224/3216 SAS3 IT mode
Network Controllers	Mellanox CONNECTX-4 LX EN 25GbE
IPMI	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Video	ASPEED AST2500 BMC

INPUT / OUTPUT

SATA	6 SATA3 (6 Gbps) ports
LAN	2x 25G SFP28 LAN ports 1 RJ45 Dedicated IPMI LAN port
USB	2 USB 2.0 ports (front via header) 2 USB 3.0 ports (rear)
Video	1 VGA port
Others	TPM 2.0 Header, 1 Micro USB (COM Port)

SYSTEM BIOS

BIOS Type	AMI 32Mb SPI Flash ROM
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MANAGEMENT

Software	Intel Node Manager IPMI 2.0 KVM with dedicated LAN SSM , SPM , SUM SuperDoctor 5 Watch Dog
Power Configurations	ACPI / APM 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	1U Rackmount
Model	CSE-802TS-R804AMP

DIMENSIONS AND WEIGHT

Width	17.6" (447mm)
Height	1.7" (43mm)
Depth	37" (940mm)
Weight	Gross Weight: 57.5 lbs (26 kg) Net Weight: 39.5 lbs (18 kg)
Available Colors	Black

FRONT PANEL

Buttons	Power On/Off button UID button
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LEDs	Power status LED HDD activity LED Network activity LEDs Universal Information (UID) LED
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EXPANSION SLOTS

PCI-Express	1 PCI-E 3.0 x16 (HBA Add-on-Module) 1 PCI-E 3.0 x16 Left riser slot 1 PCI-E 3.0 x8 Right riser slot 1 PCI-E 3.0 x16 (AIOM)
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DRIVE BAYS

Hot-swap	12 Hot-swap 3.5" SAS3/SATA3 HDD bays 4 Hot-swap 2.5" 7mm NVMe/SATA drive bays
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SYSTEM COOLING

Fans	6x 40x40x56mm 20.5K-17.6K RPM Counter-rotating fans
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POWER SUPPLIES

Total Output Power	750W with Input 100 - 127Vac 800W with Input 200 - 240Vac 800W with Input 230 - 240Vdc
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Dimension (W x H x L)	54.5 x 40.25 x 220 mm
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Input	100 - 127Vac / 50-60Hz 200 - 240Vac / 50-60Hz 230 - 240Vdc / 50-60Hz
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+12V	Max: 62.5A & Min: 0.5A (100Vac-127Vac) Max: 66.6A & Min: 0.5A (200Vac-240Vac) Max: 66.6A & Min: 0.5A (230-240Vdc)
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+5V sb	Max: 4A / Min: 0A
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Output Type	Gold Finger Connector Mating with Molex 45984-4343
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Certification	Platinum Certified [Test Report]
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OPERATING ENVIRONMENT

RoHS	RoHS Compliant
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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)
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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

