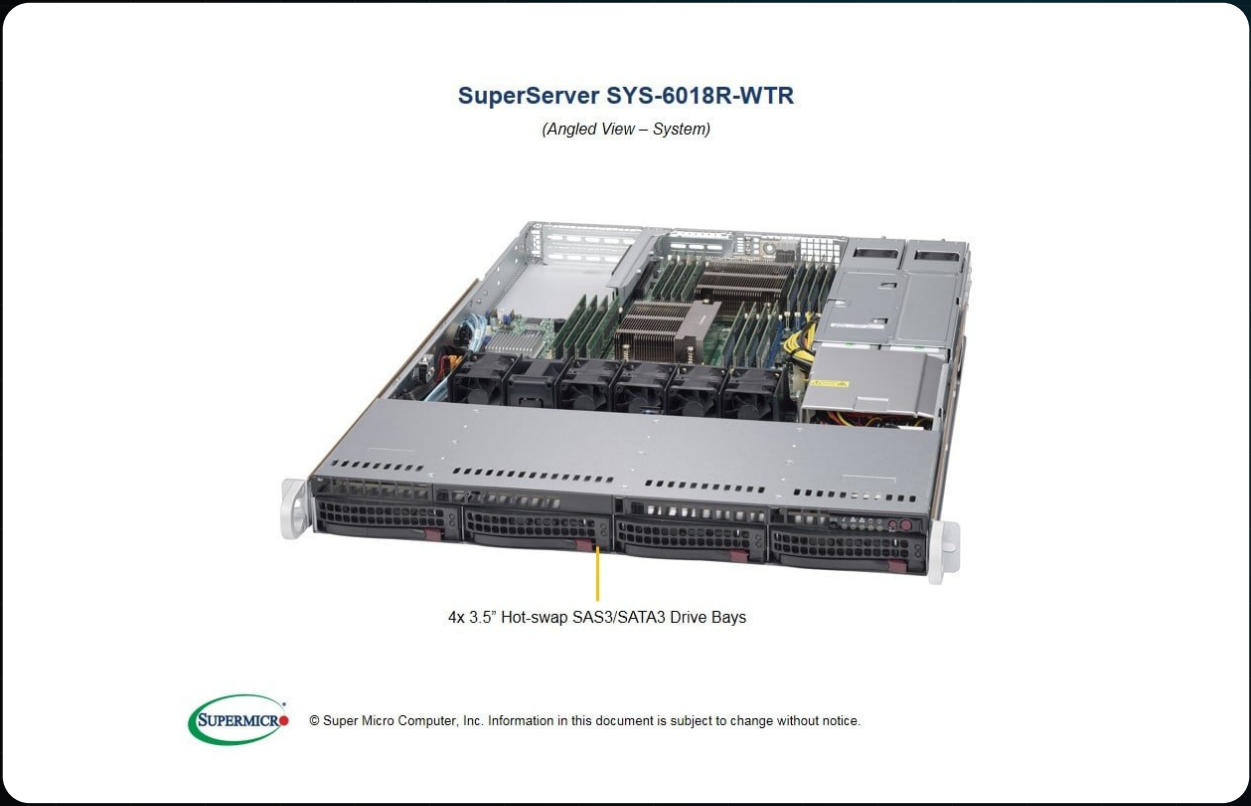
TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro Server SYS-6018R-WTRT

SKU SYS-6018R-WTRT | 1U | Supermicro



FORM FACTOR	MAX POWER (BASE)	HEAT OUTPUT	PRICE
1U	522 W	1,781 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-6018r-wtrt

01 Product overview

The Supermicro SYS-6018R-WTRT is a server built on dual Intel Xeon processor E5-2600 v4 † / v3 family (up to 145W TD processors with up to 2 TB of memory in 4 DIMM slots.

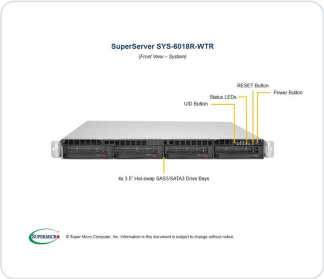
ServerInvest configures every SYS-6018R-WTRT to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

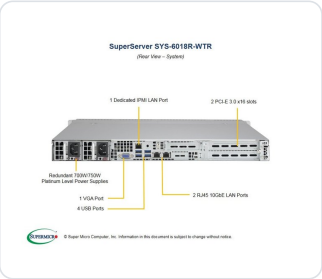
HIGHLIGHTS

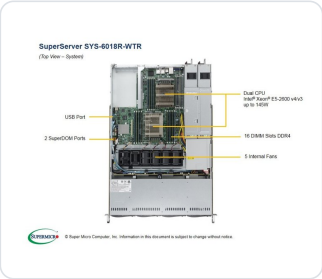
- Dual Intel Xeon processor E5-2600 v4 † / v3 family (up to 145W TD
- Up to 2 TB memory · 4 DIMM slots
- 4x 3.5" Hot-swap SAS / SATA HDD trays (ready for PCI-E storage controller card)
- Power: 700W/750W
- Networking: Intel X540 Dual Port 10GBase-T

KEY SPECIFICATIONS

Form factor	**1U**
Processor	**2× Intel Xeon processor E5-2600 v4 † / v3 family (up to 145W TD**
Memory	**4 DIMM slots, up to 2 TB**
Power supply	**1× 700 W**
Typical power draw	**750 W**
Networking	**Intel X540 Dual Port 10GBase-T**
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**	**75%**

Typical 318 W · max 522 W · single PSU rating 700 W

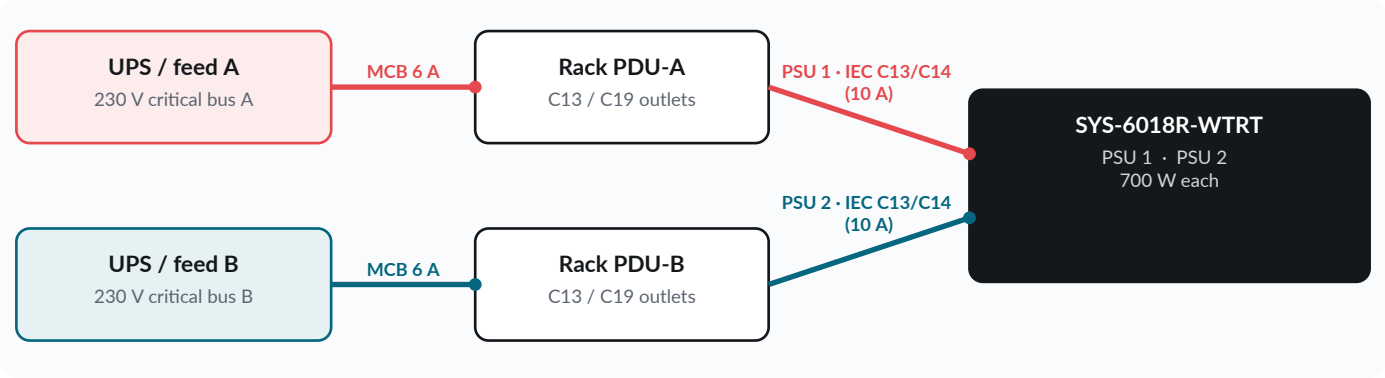
Annual IT energy (24/7)	2,229 kWh
Annual facility energy (PUE 1.5)	3,344 kWh
Annual energy cost	€446 IT · €669 incl. cooling (at 0.20 €/kWh)
CO_2 emissions / year	0.87 t (grid factor 0.26 kg/kWh)
Power supplies	1× 700 W

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 (10 A) 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	Intel Xeon processor E5-2600 v4 † / v3 family (up to 145W TDP) * Dual Socket R3 (LGA 2011)
Cores / Cache	Up to 22 Cores † / Up to 55MB † Cache
System Bus	QPI up to 9.6 GT/s
Note	† BIOS version 2.0 or above is required
Note	* Please contact Supermicro Technical Support for additional information about frequency optimized CPUs and specialized system optimization.

SYSTEM MEMORY	
Memory Capacity	16x 288-pin DDR4 DIMM slots Up to 2TB † ECC 3DS LRDIMM/RDIMM
Memory Type	2400 † /2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	RDIMM: 32GB, 16GB, 8GB, 4GB LRDIMM: 64GB, 32GB 3DS LRDIMM: 128GB
Memory Voltage	1.2 V
Error Detection	Corrects single-bit errors

ON-BOARD DEVICES	
Chipset	Intel C612 chipset
SATA	SATA3 via Intel C612; RAID 0, 1, 5, 10

IPMI	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support ASPEED AST2400 BMC
Network Controllers	Intel X540 Dual Port 10GBase-T Virtual Machine Device Queues reduce I/O overhead Supports 10GBASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output 1x Realtek RTL8211E PHY (dedicated IPMI)
Graphics	ASPEED AST2400 BMC

INPUT / OUTPUT

SATA/SAS	10x SATA3 (6Gbps) ports
LAN	2x RJ45 10GBase-T ports 1x RJ45 Dedicated IPMI LAN port
USB	6x USB 3.0 ports (4 rear + 2 via header)
Video	1x VGA port
Serial Port / Header	1x Header
DOM	2x Super DOM (Disk on Module) ports

MANAGEMENT

Software	SuperDoctor 5 Watch Dog NMI IPMI 2.0 Intel Node Manager
Power Configurations	ACPI / APM Power Management Power-on mode for AC power recovery

CHASSIS

Form Factor	1U Rackmount
Model	CSE-815TQ-R706WB

DIMENSIONS AND WEIGHT

Width	17.2" (437mm)
Height	1.7" (43mm)
Depth	25.6" (650mm)
Weight	Net Weight: 25.5 lbs (11.6 kg) Gross Weight: 39 lbs (17.7 kg)
Available Colors	Black

FRONT PANEL

Buttons	Power On/Off button System Reset button UID button
LEDs	Power status LED HDD activity LED 2x Network activity LEDs Universal Information (UID) LED

EXPANSION SLOTS

PCI-Express	2x PCI-E 3.0 x16 (Full-height, Half-length) 1x PCI-E 3.0 x8 Mezzanine for HBA cards UIO AOC Compatibility Matrix (Both CPUs need to be installed for full access to PCI-E slots and onboard controllers. See manual block diagram and AOC Support for details.)

DRIVE BAYS

Hot-swap	4x 3.5" Hot-swap SAS / SATA HDD trays (ready for PCI-E storage controller card)

PERIPHERAL DRIVES

DVD-ROM	Slim DVD-ROM drive (optional)

SYSTEM COOLING

Fans	5x 4cm Counter-rotating PWM fans

AC/DC240V INPUT REDUNDANT POWER SUPPLY

Total Output Power	700W/750W
Dimension (W x H x L)	54.5 x 40.25 x 320 mm
Input	100 - 140Vac / 8 - 6A / 50-60Hz 200 - 240Vac / 4.5 - 3.8A / 50-60Hz 200 - 240Vdc / 4.5 - 3.8A (CCC Only)
+12V	Max: 58A / Min: 0.5A (100 - 140Vac) Max: 62A / Min: 0.5A (200 - 240Vac) Max: 62A / Min: 0.5A (200 - 240Vdc) (CB/CCC Only)
+5V sb	Max: 3A / Min: 0A
Output Type	Gold Finger Connector Mating with Molex 45984-4343
Certification	Platinum Certified [Test Report]

SYSTEM BIOS

BIOS Type	128Mb SPI Flash EEPROM with AMI BIOS
BIOS Features	Plug and Play (PnP) APM 1.2 PCI 2.2 ACPI 1.0 / 2.0 / 3.0 / 4.0 BIOS resuce hot keys USB Keyboard support SMBIOS 2.3 UEFI

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.

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