

## TECHNICAL DATASHEET

SUPERMICRO · TOWER SERVERS &amp; WORKSTATIONS

# Supermicro Mid-Tower SuperWorkstation Server SYS-730A-I

DP mid-tower workstation for rendering, CAD and content creation

SKU SYS-730A-I

Tower

LGA4189

Supermicro



FORM FACTOR

**Tower**

MAX POWER (BASE)

**522 W**

HEAT OUTPUT

**1,781 BTU/h**

PRICE

**On request**

REQUEST A QUOTATION ONLINE

[serverinvest.com/product/sys-730a-i](https://serverinvest.com/product/sys-730a-i)

## 01 Product overview

The Supermicro SYS-730A-I is a Mid-Tower SuperWorkstation Server built on dual Intel Xeon Scalable 3rd Gen processors with up to 2 TB of memory in 16 DIMM slots.

DP mid-tower workstation for rendering, CAD and content creation.

The chassis accepts up to 2 GPU accelerators for AI, rendering and HPC workloads.

ServerInvest configures every SYS-730A-I 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 Scalable 3rd Gen
- Up to 2 TB memory · 16 DIMM slots
- Total 4 bays 4 internal fixed 3.5" NVMe\*/SATA drive bays
- Up to 2 GPUs
- Power: 1x 1200W
- Networking: 2 RJ45 1GbE

### KEY SPECIFICATIONS

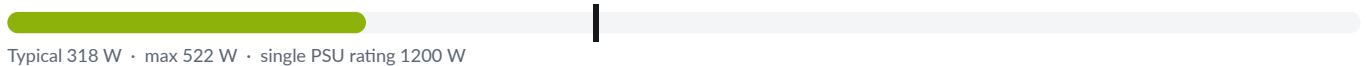
|                    |                                       |
|--------------------|---------------------------------------|
| Form factor        | <b>Tower</b>                          |
| Processor          | <b>2× Intel Xeon Scalable 3rd Gen</b> |
| Socket             | <b>LGA4189</b>                        |
| Memory             | <b>16 DIMM slots, up to 2 TB</b>      |
| Drive bays         | <b>4 (4 NVMe)</b>                     |
| GPU                | <b>Up to 2 GPUs</b>                   |
| Power supply       | <b>1× 1200 W</b>                      |
| Typical power draw | <b>1650 W</b>                         |
| Networking         | <b>2 RJ45 1GbE</b>                    |



## 02 Power & thermal

Calculated for the base configuration

|                             |                                |                                |                                         |                                 |                               |
|-----------------------------|--------------------------------|--------------------------------|-----------------------------------------|---------------------------------|-------------------------------|
| <b>IDLE</b><br><b>106 W</b> | <b>TYPICAL</b><br><b>318 W</b> | <b>MAXIMUM</b><br><b>522 W</b> | <b>HEAT (MAX)</b><br><b>1,781 BTU/h</b> | <b>COOLING</b><br><b>0.5 kW</b> | <b>PSU LOAD</b><br><b>44%</b> |
|-----------------------------|--------------------------------|--------------------------------|-----------------------------------------|---------------------------------|-------------------------------|



Typical 318 W · max 522 W · single PSU rating 1200 W

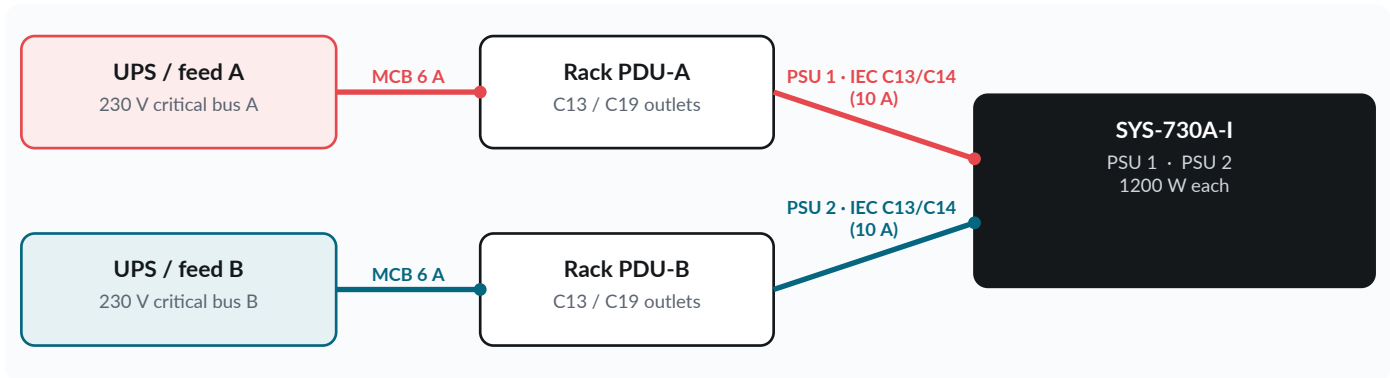
|                                  |                                              |
|----------------------------------|----------------------------------------------|
| Annual IT energy (24/7)          | 2,229 kWh                                    |
| Annual facility energy (PUE 1.5) | 3,344 kWh                                    |
| Annual energy cost               | €446 IT · €669 incl. cooling (at 0.20 €/kWh) |
| CO <sub>2</sub> emissions / year | 0.87 t (grid factor 0.26 kg/kWh)             |
| Power supplies                   | 1× 1200 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

#### MOTHERBOARD

Super X12DAI-N6

#### PROCESSOR

|            |                                                                     |
|------------|---------------------------------------------------------------------|
| CPU        | Dual Socket P+ (LGA-4189)<br>3rd Gen Intel Xeon Scalable processors |
| Core Count | Up to 40C/80T; Up to 60MB Cache per CPU                             |
| Note       | Supports up to 270W TDP CPUs (Air Cooled)                           |

#### GPU

|                      |                                                        |
|----------------------|--------------------------------------------------------|
| Max GPU Count        | Up to 2 double-width or 2 single-width GPUs            |
| Supported GPU        | NVIDIA PCIe: RTX 5000, RTX A4000, RTX A5000, RTX A6000 |
| CPU-GPU Interconnect | PCIe 4.0 x16 Switch Single-Root                        |

#### SYSTEM MEMORY

|                |                                                                                                                                                                       |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Memory         | Slot Count: 16 DIMM slots<br>Max Memory (2DPC): Up to 2TB 3200MT/s ECC DDR4 RDIMM/LRDIMM<br>Supports Intel Optane persistent memory 200 series<br>View Memory Options |
| Memory Voltage | 1.2V                                                                                                                                                                  |

#### ON-BOARD DEVICES

|                      |                                      |
|----------------------|--------------------------------------|
| SATA                 | SATA (6Gbps) ; RAID 0/1/5/10 support |
| Network Connectivity | 2 RJ45 1GbE<br>View AOC Options      |

## INPUT / OUTPUT

|       |                                                                                            |
|-------|--------------------------------------------------------------------------------------------|
| LAN   | 2 RJ45 1 GbE LAN ports (IPMI shared on LAN port 1)                                         |
| USB   | 4 USB 3.2 Gen1 ports (rear)<br>2 USB 3.2 Gen1 ports (front)<br>1 USB 3.2 Gen2 port (front) |
| Video | 1 VGA port                                                                                 |
| DOM   | 2 SATA DOM (Disk on Module) ports                                                          |
| Audio | 7.1 HD Audio<br>Rear Audio<br>Mic in                                                       |

## SYSTEM BIOS

|           |                        |
|-----------|------------------------|
| BIOS Type | AMI 32MB SPI FLASH ROM |
|-----------|------------------------|

## MANAGEMENT

|                      |                                                                                                                                                                                                                                                            |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Software             | SuperCloud Composer (SCC)<br>Supermicro Server Manager (SSM)<br>Supermicro Update Manager (SUM)<br>Supermicro SuperDoctor 5 (SD5)<br>Super Diagnostics Offline (SDO)<br>Supermicro Thin-Agent Service (TAS)<br>SuperServer Automation Assistant (SAA) New! |
| Power configurations | ACPI/APM Power Management                                                                                                                                                                                                                                  |

## SECURITY

|          |                                                                                                                               |
|----------|-------------------------------------------------------------------------------------------------------------------------------|
| Hardware | Trusted Platform Module (TPM) 2.0<br>Silicon Root of Trust (RoT) – NIST 800-193 Compliant                                     |
| Features | Cryptographically Signed Firmware<br>Secure Boot<br>Secure Firmware Updates<br>Automatic Firmware Recovery<br>System Lockdown |

## PC HEALTH MONITORING

|             |                                                                                  |
|-------------|----------------------------------------------------------------------------------|
| CPU         | Monitors for CPU Cores, Chipset Voltages, Memory.                                |
| Fan         | Pulse Width Modulated (PWM) fan connectors<br>Status monitor for speed control   |
| Temperature | Monitoring for CPU and chassis environment<br>Thermal Control for fan connectors |

## CERTIFICATIONS

|                   |                                                                                                                          |
|-------------------|--------------------------------------------------------------------------------------------------------------------------|
| Operating Systems | RHEL 8.2, Windows Server 2019, Windows Server 2022<br><a href="#">View all OS Compatibility and Certification Matrix</a> |
|-------------------|--------------------------------------------------------------------------------------------------------------------------|

## CHASSIS

|             |                 |
|-------------|-----------------|
| Form Factor | Mid-Tower       |
| Model       | CSE-735D4-1K26B |

## DIMENSIONS AND WEIGHT

|                 |                                                                  |
|-----------------|------------------------------------------------------------------|
| Height          | 16.7" (424 mm)                                                   |
| Width           | 7.6" (193 mm)                                                    |
| Depth           | 20.68" (525.3 mm)                                                |
| Package         | 21.38" (H) x 11.97" (W) x 25.28" (D)                             |
| Weight          | Gross Weight: 30 lbs (13.61 kg)<br>Net Weight: 27 lbs (12.25 kg) |
| Available Color | black                                                            |

## FRONT PANEL

|         |                     |
|---------|---------------------|
| Buttons | Power On/Off button |
| LED     | HDD activity LED    |

## EXPANSION SLOTS

|                                  |                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------|
| PCI-Express (PCIe) Configuration | Default<br>5 PCIe 4.0 x16 FHFL slots<br>1 PCIe 4.0 x8 FHHL slot<br><a href="#">View AOC Options</a> |
|----------------------------------|-----------------------------------------------------------------------------------------------------|

## DRIVE BAYS / STORAGE

|                          |                                                                                                                                                                                                                                                                         |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Drive Bays Configuration | Default: Total 4 bays 4 internal fixed 3.5" NVMe*/SATA drive bays<br>(*NVMe support may require additional storage controller and/or cables, please see the optional parts list for details)<br><a href="#">View NVMe Options</a><br><a href="#">View Drive Options</a> |
| M.2                      | 2 M.2 NVMe slots (M-key)<br><a href="#">View M.2 Options</a>                                                                                                                                                                                                            |
| Peripheral Bays          | 2 5.25" peripheral bays (optional)                                                                                                                                                                                                                                      |

## SYSTEM COOLING

|      |                      |
|------|----------------------|
| Fans | Up to 2x 12cm Fan(s) |
|------|----------------------|

## POWER SUPPLY

1x 1200W  
1x 1200W Platinum Level (94%) power supply  
Dimension (WxHxL)  
150 x 86 x 185 mm

## OPERATING ENVIRONMENT

|                     |                                                                                                                                                                                                                                           |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental Spec. | Operating Temperature: 10°C to 35°C (50°F to 95°F)<br>Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)<br>Operating Relative Humidity: 8% to 90% (non-condensing)<br>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](mailto:office@serverinvest.com)

Official manufacturer datasheet: [serverinvest.com/product/sys-730a-i/datasheet/manufacturerr](https://serverinvest.com/product/sys-730a-i/datasheet/manufacturerr)

