

## Lenovo System x3500 M5 server (5464K4G)

Intel Xeon E5-2620 v3 (15M Cache, 2.4GHz), 16GB DDR4 1866MHz, 8x2.5"HS, Matrox G200eR2 16MB, RAID M5210 (0/1/10), 4xGigabit Ethernet, 550W, Tower



### Price details:

Price excl. VAT: 2,336.68 €

Eco fees: 0.08 €

VAT 21 %: 490.72 €

### Product details:

Product code: 5464K4G

EAN: 0889488411146

Manufacturer: Lenovo

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**2,827.48 €**

\* VAT included

### Computing For Optimal Performance

Big performance & storage flexibility in a small footprint.

- Greater performance, twice the memory
- Flexible storage-based configurations
- Smart energy-efficient features
- Safeguards enterprise data
- Maximizes uptime and minimizes costs

### Highlights

Optimize your workloads with choice of flexible storage-based configurations, designed for - infrastructure basics to business-critical applications

- Maximize uptime and minimize costs with industry-leading reliability features and tools.
- Safeguard enterprise data with built-in System x® Trusted Platform Assurance, an exclusive set of security features and practices, plus optional self-encrypting drives and IBM Security Key Lifecycle Manager or MegaRAID SafeStore encryption services, which is part of any M5200 Series RAID-5 upgrade.
- Achieve superior performance with Intel® Xeon® processors E5-2600 v3 series (up to 36 cores per server), end-to-end 12 Gbps RAID support for both devices and infrastructure
- Accelerate your graphics applications with up to two 300 W GPUs
- Run up to 131 percent greater java workload performance, up to 61 percent greater virtualization performance, and up to 59 percent greater database performance per system than the previous generation
- Leverage tiered storage by using both high-performance 2.5-inch solid-state drives (SSDs) and large-capacity, less-frequently-accessed 3.5-inch hard disk drive (HDD) storage in the same server
- Reduce data center costs with smart energy-efficient features, including extended operating temperature, Titanium power supplies (up to 96 percent efficiency), active/standby power supply modes, and TruDDR4 Memory (with up to 45 percent improved energy use compared to DDR3)
- Run more virtual machines and workloads with up to 50 percent more cores and cache and 2x more memory capacity than previous generation

### Big Performance

The new Lenovo® System x3500 M5 delivers big performance and storage flexibility in a small footprint. Choose from models with up to 32 2.5-inch or 12 3.5-inch drives. Leverage tiered storage with a combination of fast-access 2.5-inch and low-cost-per-terabyte 3.5-inch drives in the same server.

Deploy up to two Intel® Xeon® processors E5-2600 v3 series for up to 36 cores per server. Accelerate your graphics applications with up to two optional GPUs. With twice the memory, up to 131 percent greater performance, and 50 percent more cores and cache than the previous generation, the x3500 M5 lets your workloads fly.

### Security, Reliability

The x3500 M5 integrates industry-leading security and reliability. System x® Trusted Platform Assurance establishes a solid security foundation for your workloads-from infrastructure to analytics. You can also deploy self-encrypting drives with optional key management software.

System x servers achieved the highest reliability of any x86 server. Diagnostic tools such as Predictive Failure Analysis

proactively monitor server sub-components to help reduce downtime and costs.

### Simplify Provisioning and Systems Management

Simplify, automate, and modernize Day 1 provisioning and ongoing administrative tasks over the server lifecycle with Lenovo XClarity.

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#### Main specifications:

##### Processor

|   |                       |
|---|-----------------------|
| Processor frequency:                            | 2.4 GHz               |
| Processor family:                               | Intel Xeon E5 v3      |
| Processor model:                                | E5-2620V3             |
| Processor cores:                                | 6                     |
| Number of processors installed:                 | 1                     |
| Processor cache type:                           | Smart Cache           |
| Processor cache:                                | 15 MB                 |
| System bus rate:                                | 8 GT/s                |
| Processor socket:                               | LGA 2011-v3           |
| Motherboard chipset:                            | Intel C612            |
| Processor boost frequency:                      | 3.2 GHz               |
| Processor lithography:                          | 22 nm                 |
| Processor threads:                              | 12                    |
| Processor operating modes:                      | 64-bit                |
| Stepping:                                       | R2                    |
| Bus type:                                       | QPI                   |
| Number of QPI links:                            | 2                     |
| Processor codename:                             | Haswell               |
| Tcase:  | 72.6 °C               |
| Maximum internal memory supported by processor: | 768 GB                |
| Memory types supported by processor:            | DDR4-SDRAM            |
| Memory clock speeds supported by processor:     | 1600,1866 MHz         |
| Memory bandwidth supported by processor (max):  | 59 GB/s               |
| Memory channels supported by processor:         | Quad                  |
| ECC supported by processor:                     | Y                     |
| Execute Disable Bit:                            | Y                     |
| Idle States:                                    | Y                     |
| Thermal Monitoring Technologies:                | Y                     |
| Maximum number of PCI Express lanes:            | 40                    |
| Processor package size:                         | 52.5 mm               |
| Supported instruction sets:                     | AVX                   |
| Processor code:                                 | SR207                 |
| Scalability:                                    | 2S                    |
| Physical Address Extension (PAE):               | Y                     |
| Physical Address Extension (PAE):               | 46 bit                |
| Embedded options available:                     | Y                     |
| Thermal Design Power (TDP):                     | 85 W                  |
| Processor series:                               | Intel Xeon E5-2600 v3 |
| Conflict Free processor:                        | N                     |

##### Memory

|                               |           |
|-------------------------------|-----------|
| Internal memory:              | 16 GB     |
| Maximum internal memory:      | 768 GB    |
| Memory slots:                 | 24        |
| Memory clock speed:           | 1600 MHz  |
| ECC:                          | Y         |
| Memory layout (slots x size): | 1 x 16 GB |

##### Storage

|                                     |                |
|-------------------------------------|----------------|
| RAID support:                       | Y              |
| RAID levels:                        | 0,1,10         |
| Supported RAID controllers:         | M5210          |
| Number of hard drives supported:    | 8              |
| Supported hard disk drive sizes:    | 2.5 "          |
| Hot-swap:                           | Y              |
| Supported storage drive interfaces: | SAS,Serial ATA |

##### Graphics

|   |   |
|---|---|
| Maximum graphics adapter memory:                          | 16 MB   |
| On-board graphics adapter:                                | Y   |
| On-board graphics adapter model:                          | Matrox G200eR2  |
| <b>Networking</b>   |   |
| Ethernet LAN:   | Y   |
| Cabling technology:                                       | 10/100/1000Base-T(X)  |
| Ethernet interface type:                                  | Gigabit Ethernet  |
| <b>Ports &amp; interfaces</b>                             |   |
| USB 2.0 ports quantity:                                   | 4   |
| Ethernet LAN (RJ-45) ports:                               | 4   |
| USB 3.0 (3.1 Gen 1) Type-A ports quantity:                | 2   |
| <b>Expansion slots</b>                                    |   |
| PCI Express x8 (Gen 3.x) slots:                           | 3   |
| PCI Express x16 (Gen 3.x) slots:                          | 4   |
| PCI Express slots version:                                | 3.0   |
| <b>Design</b>   |   |
| Chassis type:   | Tower   |
| Optical drive type:                                       | N   |
| <b>Performance</b>  |   |
| Compatible operating systems:                             | Microsoft Windows Server 2016, 2012 R2, 2012, 2008 R2 Red Hat Enterprise Linux 6 7SUSE Linux Enterprise Server 11, 12VMware vSphere (ESXi) 5.1, 5.5, 6.0, 6.5 |
| Trusted Platform Module (TPM):                            | Y   |
| <b>Processor special features</b>                         |   |
| CPU configuration (max):                                  | 2   |
| Enhanced Intel SpeedStep Technology:                      | Y   |
| Intel® Identity Protection Technology (Intel® IPT):       | Y   |
| Intel Virtualization Technology for Directed I/O (VT-d):  | Y   |
| Intel® Hyper Threading Technology (Intel® HT Technology): | Y   |
| Intel® Turbo Boost Technology:                            | 2.0   |
| Intel Flex Memory Access:                                 | N   |
| Intel® Smart Cache:                                       | Y   |
| Intel® AES New Instructions (Intel® AES-NI):              | Y   |
| Intel Trusted Execution Technology:                       | Y   |
| Intel Enhanced Halt State:                                | Y   |
| Intel VT-x with Extended Page Tables (EPT):               | Y   |
| Intel Demand Based Switching:                             | Y   |
| Intel® Secure Key:  | Y   |
| Intel TSX-NI:   | N   |
| Intel® OS Guard:  | Y   |
| Intel 64:   | Y   |
| Intel Identity Protection Technology version:             | 0.00  |
| Intel Secure Key Technology version:                      | 1.00  |
| Intel Virtualization Technology (VT-x):                   | Y   |
| Intel TSX-NI version:                                     | 0.00  |
| Processor ARK ID:   | 83352   |
| <b>Power</b>  |   |
| Redundant power supply (RPS) support:                     | Y   |
| Power supply:   | 550 W   |
| Number of main power supplies:                            | 1   |
| <b>Certificates</b>                                       |   |
| Energy Star certified:                                    | Y   |
| <b>Weight &amp; dimensions</b>                            |   |
| Width:  | 218 mm  |
| Depth:  | 720 mm  |
| Height:   | 440 mm  |
| Weight:   | 30800 g   |

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