

# ThinkStation P520c 30BX007KGE

**Product**

ThinkStation P520c

**Region**

WE

**Country/Region**

Germany

**Machine Type**

30BX

**TopSeller**

TopSeller

**Processor**

Intel Xeon W-2225 4C/8T/4.1GHz/8.25MB/105W/DDR4-2933

**Discrete Graphics**

NVIDIA Quadro P2200 5GB

**Monitor Cable**

None

**Chipset**

Intel C422

**Memory**

2x 8GB RDIMM DDR4-2933 ECC

**HDD Controller**

Onboard Intel RSTe SATA

**M.2 SSD RAID Controller**

RAID 0/1

**Internal Disk Drive**

None

**M.2 SSD Drive**

1x 512GB SSD M.2 PCIe NVMe Opal

**PCIe SSD Adapter**

None

**Optical**

1x HH DVD±RW

**Media Reader**

SD Reader

**Ethernet**

1x GbE RJ-45

**WLAN + Bluetooth**

None

**Optional Front Ports**

None

**Optional Rear Ports**

1x Serial

**Optional Internal Ports**

None

**Chassis Intrusion Switch**

Chassis Intrusion Switch

**Cover Lock**

None

**Keyboard**

USB Traditional Keyboard, Germany

**Mouse**

USB Calliope Mouse

**Power Supply**

500W Platinum Fixed

**Diagnostic**

None

**System Management**

Intel vPro with AMT 11

**Operating System**

Windows 10 Pro 64 for Workstations, German

**Bundled Software**

None

**Base Warranty**

3-year, Onsite

**Bundled Service**

None

**EAN / UPC**

0194778017213

**End of Support**

2026-02-16

**Announce Date**

2020-01-16

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**Recommended Services****Best**

3Y Premier Support Upgrade from 3Y Onsite (5WS0U26649)

**Better**

4Y Premier Support Upgrade from 3Y Onsite (5WS0T36122)

**Good**

5Y Premier Support Upgrade from 3Y Onsite (5WS0T36128)



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# ThinkStation P520c Platform Specifications

Product Specifications Reference (PSREF)

|                            |                                                            |                                                        |                        |                     |               |         |              |
|----------------------------|------------------------------------------------------------|--------------------------------------------------------|------------------------|---------------------|---------------|---------|--------------|
| Form factor                | 25L Tower                                                  |                                                        |                        |                     |               |         |              |
| Dimensions                 | 175mm/6.89" W x 426mm/16.77" D x 376mm/14.8" H (with feet) |                                                        |                        |                     |               |         |              |
| Weight                     | Maximum configuration: 31.97 lb (14.5kg)                   |                                                        |                        |                     |               |         |              |
| Processor Support          | Processor                                                  | # of Cores                                             | # of Threads           | Base Frequency      | Cache         | TDP     | Memory Types |
|                            | Xeon W-2245                                                | 8                                                      | 16                     | 3.9GHz              | 16.5MB        | 155W    | DDR4-2933    |
|                            | Xeon W-2235                                                | 6                                                      | 12                     | 3.8GHz              | 8.25MB        | 130W    | DDR4-2933    |
|                            | Xeon W-2225                                                | 4                                                      | 8                      | 4.1GHz              | 8.25MB        | 105W    | DDR4-2933    |
|                            | Xeon W-2223                                                | 4                                                      | 8                      | 3.6GHz              | 8.25MB        | 120W    | DDR4-2666    |
|                            | Xeon W-2195                                                | 18                                                     | 36                     | 2.3GHz              | 24.75MB       | 140W    | DDR4-2666    |
|                            | Xeon W-2175                                                | 14                                                     | 28                     | 2.5GHz              | 19MB          | 140W    | DDR4-2666    |
|                            | Xeon W-2155                                                | 10                                                     | 20                     | 3.3GHz              | 13.75MB       | 140W    | DDR4-2666    |
|                            | Xeon W-2145                                                | 8                                                      | 16                     | 3.7GHz              | 11MB          | 140W    | DDR4-2666    |
|                            | Xeon W-2135                                                | 6                                                      | 12                     | 3.7GHz              | 8.25MB        | 140W    | DDR4-2666    |
|                            | Xeon W-2133                                                | 6                                                      | 12                     | 3.6GHz              | 8.25MB        | 140W    | DDR4-2666    |
|                            | Xeon W-2125                                                | 4                                                      | 8                      | 4.0GHz              | 8.25MB        | 120W    | DDR4-2666    |
|                            | Xeon W-2123                                                | 4                                                      | 8                      | 3.6GHz              | 8.25MB        | 120W    | DDR4-2666    |
|                            | Xeon W-2104                                                | 4                                                      | 4                      | 3.2GHz              | 8.25MB        | 120W    | DDR4-2400    |
|                            | Xeon W-2102                                                | 4                                                      | 4                      | 2.9GHz              | 8.25MB        | 120W    | DDR4-2400    |
| Processor Sockets          | 1x FCLGA2066                                               |                                                        |                        |                     |               |         |              |
| Chipset                    | Intel C422 Chipset                                         |                                                        |                        |                     |               |         |              |
| Memory Sockets             | 4 DIMM sockets with 4 channels                             |                                                        |                        |                     |               |         |              |
| Memory Types               | DDR4-2666 RDIMM or DDR4-2933 RDIMM                         |                                                        |                        |                     |               |         |              |
| Memory Capacity            | 256GB with 4 x 64GB RDIMMs                                 |                                                        |                        |                     |               |         |              |
| Memory Protection          | ECC                                                        |                                                        |                        |                     |               |         |              |
| Expansion slots            | Slot 1 (CPU)                                               | PCIe 3.0 x16, full height, full length, 75W,           |                        |                     |               |         |              |
|                            | Slot 2 (CPU)                                               | PCIe 3.0 x8, full height, full length, 25W, open ended |                        |                     |               |         |              |
|                            | Slot 3 (CPU)                                               | PCIe 3.0 x16, full height, full length, 75W            |                        |                     |               |         |              |
|                            | Slot 4 (PCH)                                               | PCIe 3.0 x4, full height, half length, 25W, open ended |                        |                     |               |         |              |
| Discrete Graphics Offering | Graphics                                                   | Memory                                                 | Power                  | Connector           | SLI / NV-link | Max Qty |              |
|                            | NVS 810                                                    | 4GB DDR3                                               | 68W                    | 8xmini DP           |               | 1       |              |
|                            | Quadro P400                                                | 2GB GDDR5                                              | 30W                    | 3xminiDP            |               | 2       |              |
|                            | Quadro P600                                                | 2GB GDDR5                                              | 45W                    | 4xminiDP            |               | 2       |              |
|                            | Quadro P620                                                | 2GB GDDR5                                              | 40W                    | 4x miniDP           |               | 2       |              |
|                            | Quadro P1000                                               | 4GB GDDR5                                              | 50W                    | 4xminiDP            |               | 2       |              |
|                            | Quadro P2000                                               | 5GB GDDR5                                              | 75W                    | 4xDP                |               | 2       |              |
|                            | Quadro P4000                                               | 8GB GDDR5                                              | 120W                   | 4xDP                |               | 2       |              |
|                            | Quadro P5000                                               | 16GB GDDR5X                                            | 180W                   | DVI-D DL+4xDP       |               | 1       |              |
|                            | Quadro RTX 4000                                            | 8GB GDDR6                                              | 160W                   | 3xDP, 1xVirtualLink |               | 1       |              |
| Storage Controller         | Storage Controller                                         | Type                                                   | Interface              |                     | RAID          | Cache   |              |
|                            | Onboard Intel RSTe                                         | Std                                                    | SATA 6Gb/s             |                     | 0/1/10/5      | -       |              |
|                            | 9440-8i PCIe                                               | Opt                                                    | SAS 12Gb/s, SATA 6Gb/s |                     | 0/1/10/5      | -       |              |
|                            | NVMe Basic                                                 | Opt                                                    | PCIe NVMe              |                     | 0/1/10        | -       |              |
|                            | NVMe for Intel SSD                                         | Opt                                                    | PCIe NVMe              |                     | 0/1/10/5      | -       |              |
| Storage Support            | Disk Type                                                  | Interface                                              | RPM                    | Offering            |               | Max Qty |              |
|                            | 3.5" SATA HDD                                              | SATA 6Gb/s                                             | 7.2K                   | 1TB/2TB/4TB/6TB     |               | 4       |              |
|                            | 2.5" SATA HDD                                              | SATA 6Gb/s                                             | 7.2K                   | 500GB/500GB FIPS    |               | 4       |              |
|                            | 2.5" SATA SSD                                              | SATA 6Gb/s                                             |                        | 256GB/512GB/1TB/2TB |               | 4       |              |
|                            | M.2 PCIe SSD                                               | PCIe NVMe                                              |                        | 256GB/512GB/1TB/2TB |               | 5       |              |

|                              |                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Max Storage                  | Supports up to 5x M.2 SSD + 4x 3.5" HDD/4x 2.5" SSD/4x 2.5" HDD<br>All HDD: 24TB using 4x 3.5" HDD<br>All SSD: 18TB using 4x 2.5" SATA SSD and 5x M.2 SSD                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Power supply                 | One fixed 500W, autosensing, 92%, 80 PLUS Platinum qualified                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Media reader                 | SD USB 2.0 card reader on most models. Optional UHS-II 15-in-1 USB 3.1 Gen 1 reader on flex module                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Network interfaces           | Integrated one gigabit ethernet (Intel i219LM), supports Wake-on-LAN. Optional PCIe ethernet or wireless adapters are available                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| WLAN + Bluetooth             | Optional Intel Wireless-AC 8265, 2x2, 2.4GHz/5GHz, 802.11ac, Bluetooth 4.2, up to 867Mbps                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Security features            | Power-on and admin password. Trusted Platform Module, TCG 2.0 compliant, switch to 1.2 via UEFI setting. Optional access panel lock, Kensington lock, and pad lock                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Intel vPro                   | Intel vPro technology supported. vPro requires Wireless-AC 8265 if Wi-Fi is needed                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Intel AMT                    | Intel Active Management Technology 11                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Diagnostic                   | ThinkStation Diagnostics for Windows. Optional front 4-digit diagnostic display on flex module                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Base warranty                | 1 or 3-year limited onsite service with 9x5/NBD                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| HD Audio                     | Realtek ALC662 codec                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Front ports                  | 2x USB 3.1 Gen 1, microphone (3.5mm), headphone (3.5mm)                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Rear ports                   | 2x USB 2.0, 4x USB 3.1 Gen 1, 1x RJ-45, 3x analog audio ports (line-in, line-out, mic-in), 2x PS/2                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Optional ports               | Supports the following optional ports:<br>Front:<br>• 2x Thunderbolt ports (USB Type-C) on flex module, one of two ports supports video-out<br>• 1x eSATA on flex module<br>• 1x USB Type-C on flex module, USB 3.1 Gen 1<br>Rear:<br>• 1x COM port<br>• 2x USB Type-C ports via PCIe adapter, USB 3.1 gen 2. One 15W, one 5W<br>Internal:<br>• 1x internal USB 3.1 Gen 1 port |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                              |                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Environmental specification  | Temperature - operating                                                                                                                                                                                                                                                                                                                                                        | 50 °F to 95 °F (10 °C to 35 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                              | Temperature - storage (no pack-age)                                                                                                                                                                                                                                                                                                                                            | 14 °F to 140 °F (-10 °C to 60 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                              | Temperature - storage (with pack-age)                                                                                                                                                                                                                                                                                                                                          | -40 °F to 140 °F (-40 °C to 60 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                              | Altitude - operating                                                                                                                                                                                                                                                                                                                                                           | (Unpressurized): -50ft-10000ft (-15.2m-3048m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                              | Humidity - operating                                                                                                                                                                                                                                                                                                                                                           | 10%~80%, non-condensing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Environmental Certifications | RoHS-compliant. GREENGUARD. EPEAT Silver rating. ENERGY STAR 6.1 qualified on model 30BX0008US and 30BX0009US                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                              | Please visit <a href="http://www.thinkworkstations.com/iso-certifications/">www.thinkworkstations.com/iso-certifications/</a>                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Storage Bays                 | Bay Type                                                                                                                                                                                                                                                                                                                                                                       | Maximum Drives Qty                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                              | M.2 slot                                                                                                                                                                                                                                                                                                                                                                       | 5x M.2 SSD (2 onboard, 3 via PCIe to M.2 adapter)                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                              | Flex Bay                                                                                                                                                                                                                                                                                                                                                                       | 2 flex bays. Supports the following:<br>• 2x half-height optical drives<br>• 2x 5.25" 9.0mm optical drives<br>• 1x 5.25" 9.0mm optical drive + 2x 3.5"/2.5" SATA SSD/HDD<br>• 1x 3.5"/2.5" SATA SSD/HDD with Front Access Storage Enclosure<br>• 1x flex module for the following options:<br>Tray 1: 9.0mm optical<br>Tray 2: 15-in-1 USB 3.1 Gen 1 reader, 2x Thunderbolt, or 4-digit diagnostic display<br>Port 1 and 2: Front USB 3.1 Gen 1 Type-C or eSATA<br>• 2x M.2 SSD with 2x Front Removable Drive Enclosures |
|                              | Disk bay                                                                                                                                                                                                                                                                                                                                                                       | Up to 2x 3.5"/2.5" disks with 2 disk bays                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

Note:

1. Depending on many factors, actual data transfer speed mentioned on this page may be lower than theoretical speed.
2. Any questions or advice on ThinkStation PSREF, please contact [ThinkStation PSREF developer](#)

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