

PRECISION 5820 TOWER

Big power in an innovative compact design.





POWERFUL PERFORMANCE

The Dell Precision 5820 Tower delivers high performance for your most demanding applications with the latest Intel® Xeon® and Core® X Series processors and up to 512GB of fast 2666MHz memory. In addition, every Dell Precision comes with the exclusive Dell Precision Optimizer, which automatically tunes yourworkstation to run some of the most popular (ISV) applications at the fastest speeds possible. DPO Premium is a new Al-based version which optimizes your workstation, based upon how you use it, providing true customization.



INNOVATIVE DESIGN

The front FlexBay design supports a range of modules from scalable storage to security options, you can build the workstation designed for your creative expertise. Secure your data with the optional Smart Card (CAC/PIV) reader, hot swap NVMe SSDs and lockable hard drive carriers. The best-in-class smart design includes integrated front and rear handles for easy deployment and moves, and an externally accessible tool-less (lockable) power supply for superior serviceability.



LATEST TECHNOLOGY

Ready for complex projects, including artificial intelligence and virtual reality workflows, with next generation Radeon™ Pro and NVIDIA Quadro® professional graphics, with support for up to 600W of graphics power. Front access FlexBays provide outstanding storage expandability, up to 60TB with SATA, SAS and PCIe M.2/U.2 NVMe solid state drives, featuring hot-swap access, so you never have to stop creating.



OUTSTANDING RELIABILITY

The revolutionary multichannel thermal design delivers advanced cooling and acoustics so you can enjoy longer productivity under heavy workloads. Precision workstations are tested and are Independent Software Vendor certified to ensure the high-performance applications you rely on every day run smoothly.

Essential Accessories

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Dell Canvas

Bring your ideas to life with a 27-inch workspace that empowers natural digital creation. Featuring a precise EMR pen, totem, and touch surface.



Dell Wireless Premium Keyboard & Mouse Combo | KM717

Enhance productivity and enjoy its elegant design that will fit into virtually any workspace. For increased productivity you can simultaneously pair up to two compatible devices with Bluetooth LE.



Dell 27 UltraSharp Monitor with PremierColor | UP2716D

Expect vivid, accurate color precision, ultra- thin bezels and ideal color coverage to suit your professional needs with the Dell UltraSharp 27 Monitor.



Jabra Evolve 75

With the ambient noise cancellation feature of this wireless headset you can hear every word clearly on your next call. This easy to carry device is certified for Microsoft Skype for Business.



3Dconnexion SpaceMouse Wireless

SpaceMouse Pro Wireless handles 3D navigation for a revolutionary two-handed work style preferred by the world's top 3D professionals. Intuitively examine and analyze your designs from every angle.



X-Rite Colorimeter il Display Pro

The i1Display Pro ensures a perfectly calibrated and profiled display while delivering the speed, options and flexibility needed to maintain color accuracy.

Dell Technologies Unified Workspace

Dell Technologies Unified Workspace is the most comprehensive solution to deploy, secure, manage and support virtually all devices from the cloud. We designed this revolutionary solution with intelligence and automation providing you with visibility across the entire endpoint environment. We help you save time, improve user experience, optimize resources and strenthen security.



Our modern deployment solution, ProDeploy in the Unified Workspace allows you to revolutionize the way deployment gets done. By spending just one hour for set up, IT can then hand deployment to Dell and have preconfigured systems shipped directly to the end users--wherever they are.



Dell Endpoint Security for the Unified Workspace helps you manage growing cyber risks while embracing workforce transformation. With Dell SafeGuard and Response powered by Secureworks, you gain actionable insight to help you quickly and efficiently prevent, detect and respond to cyber-attacks - keeping your environment free from harm.



We integrated our hardware management solution Dell Client Command Suite with VMware Workspace ONE, allowing you to take advantage of unified endpoint management (UEM) and manage the firmware, operating system and applications for all devices from the Workspace ONE console. UEM simplifies the management of the entire environment saving IT time from having to work between separate consoles for PCs and phones.



ProSupport Plus continues to be the only predictive and proactive support in the market. When compared to key competitors, ProSupport Plus with SupportAssist reduced time to resolve a failed hard drive with up to 11x faster time to resolution*

Features & Technical Specifications

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Feature Precision 5820 Tower **Technical Specifications**

Processor Options

Intel® Xeon® Processor W-2000 Family and Core X Series CPUs with up to 18 cores and Intel Advanced Vector Extensions, Intel Trusted Execution Technology, Intel AES New instructions, Optimized Intel Turbo Boost and optional Intel vPro $^{\!\!\!\!\mathsf{TM}}$ technology (Xeon W CPUs only) (Important Note: Features and Supported Configurations will differ betveen 5820 TowerWorkstations with Intel® Xeon® W Processors and 5820 Tower Workstations with Intel® Core™ X Processors. Please see systems on Dell.com/ Precision for specific configuration details.)

Operating Windows 10 Pro for Workstations (up tc 4 Cores) System Windows 10 Pro for Workstations (4 Cores Plus) Options Windows 10 Pro-for Core X Series CP S

Red Hat Enterprise Linux 8.0

Ubuntu Linux 18.04

Suse Linux (SLES 12 SP2) supported* NeoKylin 6.0 SP5 (China only) *

Chipset Intel® C422 (Skylake/Cascade LakeW);

Intel X299 (Skylake/Cascade Lake X)

Memory Options1 Four channel memory up to 512GB2666 MHz and up to 256GB 2933MHz DDR4 (RDIMM) ECC memory. (Upto 256GB 2666MHz DDR4 (UDIMN) Non-ECC

memory) 8 DIMM slots.

Note: Memory speed is dependent on specific Intel

Xeon or Core X Processor installed.

Graphics Options1

Support for 2 PCI Express ° x 1 6 Gen 3 graphics cardup to 600W with maximum of up to 2 x 300W double

width graphics cards.

Not all graphics card offerings are availa ble with

Core X I9 and I7 Series CPUs

High end 3D cards: Radeon™ Pro WX 9100 Radeon™ Pro SSG NVIDIA Quadro GV100 NVIDIA Quadro P6000 NVIDIA Quadro P5000 Nvidia Quadro RTX 8000 Nvidia Quadro RTX 6000 Nvidia RTX 5000

Mid-range 3D cards: Radeon™ Pro WX 7100 Radeon™ Pro WX 5100 Radeon™ Pro WX 4100 NVIDIA Quadro P4000 NVIDIA Quadro P2000 NVIDIA Quadro P2200 NVIDIA Quadro RTX 4000

Entry 3D cards: Radeon™ Pro WX 3200 Radeon™ Pro WX 2100 NVIDIA Quadro P1000 NVIDIA Quadro P620 NVIDIA Quadro P400 Professional 2D cards: **NVIDIA NVS 310**

Precision 5820 Tower Feature

Technical Specifications

Storage Options² PCIe backplane chassis with integrated Intel controller and up to 4 with MegaRAID 9460* NVMe hardware RAID controller option - see controller section Note: Precision PCIe FlexBay backplane and single M.2 Module (incl. 1 M.2 PCIe/NVMe carrier) kits are available for customers to convert standard FlexBays* to supportIntel and MegaRAID NVMe controller options. (different kits) Only 1 front accessible M.2 NVMe PCIe SSD is supported, due to reduced PCIe lane support on Core X I9 and I7 Series CPUs NVMe RAID 0,1 option (Intel RSTe vROC).* Up to 4 x M.2 NVMe PCIe SSDs VIa 1 x Dell Ultra-Speed Drive Quad x16 card. NVMe RAID 0,1,10 option

(Intel RSTevROC).

M.2 NVMe PCIe SSDs

Up to 4 x 2TB drives on 1 Dell Precision Ultra-Speed

Drive Quad x16 card.

Front FlexBay M.2/U.2 NVMe PCIe SSDs

UP LU 4 X Z I D IVI.Z UIIVES Intel® Optane™905P SSDs Up to 4 x 960GB drives

2.5" SATASSD Up to 6 x 1.9TB drives 2.5" SATA 7200 RPM Up to 6 x 1TB drives

3.5" SATA 7200 RPM Hard Drives Up to 5 x 12TB Enterprise Drives

2.5" SAS SSD

Up to 6 x 800GB drives 3.5" SAS 7200 RPM 12Gb/s

Up to 5 x 4TB

2.5" SAS 10K RPM 12Gb/s

Up to 6 x 1.8TB

2.5" SAS 15K RPM 12Gb/s

Up to 6 x 600GB M.2 PCIe SED SSD 512GB and 1TB

Not all storage offerings (including SAS drives) are available with Core X Series CPUs

Storage Controller Integrated: Intel® chipset SATA controller (6Gb/s) with 6 SATA ports plus 2 dedicated ports for optical

drives. Intel RSTe software RAID 0,1,5,10*

Intel RSTe (vROC) software RAID 0,1,10 option (motherboard activation key) for M.2 NVMe PCIe SSDs on Dell Ultra-Speed Drive Quad card, Duo x8 card (RAID 0,1) and for 2 x front FlexBay M.2/U.2 NVMe PCIe SSDs* (RAID 0,1) or front FlexBay NVMe

PCIe SSDs (RAID0.1)

Customer kit available for Intel RSTe (vROC) motherboard activation key for NVMe RAID support. Optional: Broadcom MegaRAID® SAS 9440-8i 12Gb/s SAS (6Gb/s SATA) PCIe controller, 8 ports, Software

MegaRAID°SAS 9460-16i12Gb/sSAS (6Gb/sSATA) PCIe controller (4GB cache with Flash module/Super Cap backup) Hardware RAID 0.1.5.10.* MegaRAID 9460* controller NVMe option supports



5 x 3.5" U.2 NVMe enabled with Hardware RAID0,1,5,10

Storage

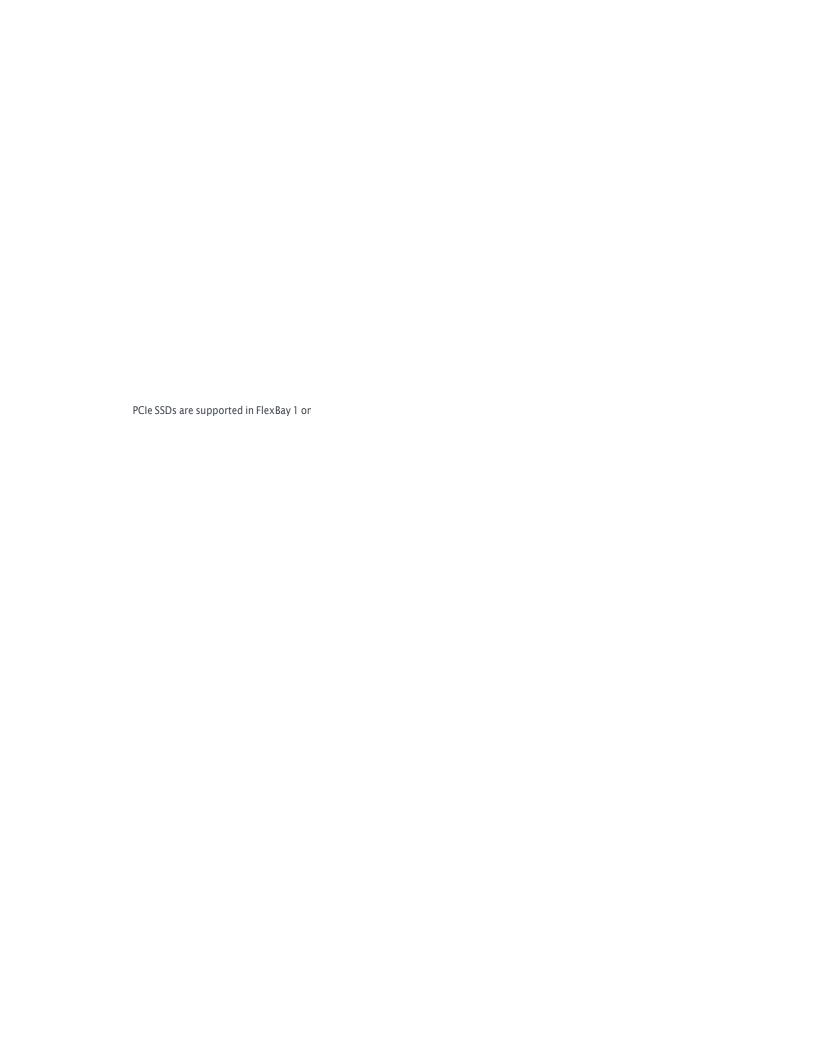
Front accessible Flex Bays support up to

Options²

SATAHDD/SSDs and up to 6×2.5 " and







Features & Technical Specifications

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Feature Precision 5820 Tower
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Communications Integrated: Intel® i219 Gigabit Ethernet controllers with Intel Remote Wake UP, PXE and Jumbo

frames support

Optional: Intel* $i210\,10/100/1000$ single port PCle (Gen $3\,x1$) gigabit network card, Intel* X550-T2 $1\,0$ GbE dual port PCle (Gen $3\,x4$) network card

Audio Controller Integrated Realtek ALC3234 High Definition Audio

Codec (2 Channel)

Speakers Internal Speaker; Optional Dell 2.0 stereo speaker

systems available and Dell sound bar for select

flat-panel displays

Add-in cards Optional: Dell Precision Ultra-Speed Drive Duo (HH/HL,x8) & Ultra-Speed drive Quad (FH/FL,x16)

(HH/HL,x8) & Ultra-Speed drive Quad (FH/FL,x16) with active cooling. Support for up to 2 and 4 M.2

PCIe NVMe SSDs respectively.
Optional USB 3.1 (Gen 2) 10Gb/s TypeC card (2

ports) 1 DP pass-through port

Optional dual & quad display Teradici PCoIP remote

workstation host PCIe cards

Optional Thunderbolt 3 PCIe Card (2 ports) 1 DP

pass-through port

Optional Serial Port PCIe Card

I/O Ports Front

2 - USB 3.1 Gen 1 Type A 2 - USB 3.1 Gen 1 Type C 1 - Universal Headphone Jack

Internal

1 - USB 2.0 Type A

1-2x5USB2.0header.(requires3rd partysplitter cable to support 2 x USB 2.0 Type A ports)
6 - SATA @6Gb/s plus 2 for optical

Rear

6 - USB 3.1 Gen 1 Type A (6th port supports Power Delivery)

1 - Serial 1-RJ45 Network 2 - PS2

1 – Audio Line out

1 - Audio Line in/Microphone

Chassis HxWxD: 16.45" (417.9 mm) | Width: 6.95"

(176.5 mm) | Depth: 20.4" (518.2 mm) | Starting atweight 34lb/15.4kg

Bays: (2) FlexBays can support up to 2x 3.25" or 2.5" drives each and (1) 5.25" HDD/SSD drives as

factory option or customer kit.

(1) Slimline optical bay; (1) SD slot UHS II Class 3 with read only support (SW enabled) Available PCIe backplane FlexBay chassis supporting 1-4 x M.2/U.2 PCIeNVMeSSDs. Slots: All slots PCIe Gen 3: (2) PCIe x 16, (1) PCIe x 16 wired as x 4, (1) PCIe

x16 wired as x1, 1 PCI 32/33

Power Supply: 425W* or 950W (input voltage 100VAC - 240VAC) -90% efficient (80PLUS Gold Certified) Externally accessible/removable/lockable

Storagedevices Slimline Bay Options: DVD-ROM; DVD+/-RW, CAC/

PIV card reader. 5.25" Bay

Options: BD, DVD+/-RW; Standard: SD slot UHS II

Class 3 with read only support

Feature Precision 5820 Tower Technical Specifications

Security Options (Check regional availability) Trusted Platform Module (TPM 2.0); Optional CAC/PIV card reader for slimline bay, chassis Intrusion switch; Setup/BIOS Password; I/O Interface Security; Kensington* lock slot, Padlock ring, lockable power supply; Optional hard drive locking sleds (key lock), Dell Data Guardian, Dell Endpoint Security Suite Enterprise, Lockable front bezel (covers FlexBays), Front FlexBay NVMe drives are removable (hot swap).

Manageability³ AMT or vPro with DASH support*

environment

Dell Command Suite

Dell vPro Enhancements (Grasslake)° SNMT/CIM vis OMCI

Regulatory and Environmental

Energy Star* configurations available* including 80 PLUS* registered Gold power supplies; EPEAT* registered (see epeat.net for specific registration rating/status by country); China CECP; GS Mark. For a complete listing of declarations & certifications, see Dell's regulatory & compliance homepage at dell.com/regulatory_compliance

Warranty & Support Services⁴

3-Year Limited Hardware Warranty and 3-year NBD On-Site Service after Remote Diagnosis Optional: Dell ProSupport is designed to rapidly respond to your business's needs, help protect your investment and sensitive data, and provide enhanced proactive support services to help reduce risk and complexity within your IT