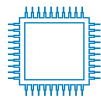# DELLTechnologies

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 2933MHz RDIMM memory. In addition, every Dell Precision comes with the exclusive Dell Optimizer for Precision software which automatically tunes your workstation to run applications at the fastest speeds possible. DO-P also optimizes things like WiFi connections, battery usage and charging, sign-in speeds and audio quality.

LATEST TECHNOLOGY

Ready for complex projects, including artificial intelligence and virtual reality workflows, with next generation Radeon™ Pro and Nvidia RTX professional graphics, 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.

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 informed 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.

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

PRECISION 5820 TOWER

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 i1Display Pro

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

Built for business

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.
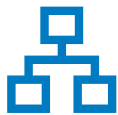
DEPLOY

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.

SECURE

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.

MANAGE

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.

SUPPORT

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*

*Based on a Principled Technologies test report, "Spend Less Time and Effort Troubleshooting Laptop Hardware Failures" dated April 2018. Testing ommissioned by Dell, conducted in the United States. Actual results will vary. Full report: http://facts.pt/L52XKM

Features & Technical Specifications

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™ technology (Xeon W CPUs only) (Important Note: Features and Supported Configurations will differ between 5820 Tower Workstations 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 System Options	Windows 11 Pro for Workstations Windows 10 Pro for Workstations (Windows 11 Pro license included) Red Hat Enterprise Linux 8.0 Ubuntu Linux 20.04 NeoKylin 6.0 SP5 (China only) *
Chipset	Intel® C422 (Skylake/Cascade Lake W) Intel X299 (Skylake/Cascade Lake X)
Memory Options[1]	Four channel memory up to 512GB 2993MHz DDR4 (RDIMM) ECC and up to 256GB 2933MHz DDR4 (UDIMM) non-ECC memory. 8 DIMM slots. Note: Memory speed is dependent on specific Intel Xeon or Core X Processor installed.
Graphics Options[1]	Support for 2 PCI Express x16 Gen 3/4 graphics cards up to 2 x 295W double width graphics cards. **High end 3D cards:** High end 3D cards: Radeon™ Pro W6800 Radeon™ Pro W5700 NVIDIA Quadro® GV100 NVIDIA RTX A6000 NVIDIA RTX A5000 NVIDIA RTX A5500 NVIDIA Quadro® RTX 5000 NVIDIA RTX A4500 **Mid-range 3D cards:** Radeon™ Pro W6600 NVIDIA RTX A4000 NVIDIA RTX A2000 12GB NVIDIA RTX A2000 **Entry 3D cards:** Radeon™ Pro W6400 (Coming Soon) Radeon™ Pro WX 3200 NVIDIA T1000 8GB NVIDIA T1000 NVIDIA T600 NVIDIA T400 4GB NVIDIA T400
Storage Options[2]	Front accessible FlexBays support up to 4 x 2.5"/3.5" SATA HDD/SSDs and up to 6 x 2.5" and 5 x 3.5" drives with 5.25" bay populated. Up to 2 front accessible (informed hot plug) M.2/U.2 NVMe PCIe SSDs are supported in FlexBay 1 on

Feature	Precision 5820 Tower Technical Specifications
Storage Options[2]	PCIe backplane chassis with integrated Intel controller and up to 4 with MegaRAID 9460-16i 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 support Intel and MegaRAID 9460-16i NVMe controller options. (different kits) Go to this link for details including video instructions. Upgrading Storage in the Dell Precision 5820 | 7820 | 7920 Tower Workstations In addition, Customer kits to add M.2 NVMe drives (without converting the FlexBay to PCIe) are available for the Dell Ultra-Speed Duo and Quad PCIe cards. Up to 4 x M.2 NVMe PCIe SSDs via 1 x Dell Ultra-Speed Drive Quad x16 card. **M.2 NVMe PCIe SSDs** Up to 4 x 4TB drives on 1 Dell Precision Ultra-Speed Drive Quad x16 card. **Front FlexBay M.2/U.2 NVMe PCIe SSDs** Up to 4 x 4TB drives on enabled PCIe backplane FlexBay systems. **2.5" SATA SSD** Up to 6 x 1.92TB Enterprise drives **2.5" SATA 7200 RPM** Up to 6 x 512GB drives **3.5" Enterprise SATA 7200 RPM Hard Drives** Up to 6 x 12TB drives **3.5" SAS 7200 RPM 12Gb/s** Up to 5 x 4TB **2.5" SAS 10K RPM 12Gb/s** Up to 6 x 2.4TB **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 vROC software RAID 0,1,5,10* Intel 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) Customer kit available for Intel vROC motherboard activation key for NVMe RAID support. **Optional:** Broadcom MegaRAID® SAS 9440-8i 12Gb/s SAS (6Gb/s SATA) PCIe controller, Software RAID 0,1,5,10.* MegaRAID® SAS 9460-16i 12Gb/s SAS (6Gb/s SATA) PCIe controller (4GB cache with Flash module/Super Cap backup) Hardware RAID 0,1,5,10.* MegaRAID 9460-16i controller NVMe option up to 4 front FlexBay M.2/U.2 NVMe PCIe SSDs with Hardware RAID 0,1,5,10

Feature	Precision 5820 Tower Technical Specifications
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 PCIe (Gen 3 x1) gigabit network card, Intel® X550-T2 10GbE dual port PCIe (Gen 3 x4) network card Intel Dual Band Wireless AC 8265 (802.11ac) 2x2 + Bluetooth module,
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) with active cooling. Support for up to 2 and 4 M.2 PCIe NVMe SSDs respectively. Optional USB 3.1 (Gen 2) 10Gb/s Type C 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 3.2 Gen 1 Type A ports 1 - USB 3.2 Gen 1 Type C port (DP/PowerDelivery) 1 - USB 3.2 Gen 1 Type C port 1 - Universal Audio Jack **Internal** 1 – USB 2.0 Type A 1 – 2 x 5 USB 2.0 header. (requires 3rd party splitter cable to support 2 x USB 2.0 Type A ports) 6 – SATA @6Gb/s plus 2 for optical **Rear** 5 - USB 3.2 Gen 1 Type A Ports 1 USB 3.2 Gen 1 Type A Port (DP/PowerDelivery) 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 at weight 34lb/15.4kg **Bays:** (2) FlexBays support M.2/U.2 PCIe NVMe SSDs - up to 2 drives standard and optionally up to 4 with MegaRAID NVMe controller. (2) FlexBays also support 2.5/3.5" SATA HDD/SSDs - up to 2 drives standard and optionally up to 5x 3.5" or 6x 2.5" drives with Dell Ultra Speed Drive as boot device. 3rd FlexBay can support 5.25" HH Optical drive or 2x 2.5" or 1x 3.5" HDD/SSD Optional configs are supported ex factory and via customer kits. (1) Slimline optical bay; (1) SD slot UHS II Class 3 with read only support (SW enabled)

Feature	Precision 5820 Tower Technical Specifications
Chassis	**Slots:** All slots PCIe Gen 3: (2) PCIe x16, (1) PCIe x16 wired as x8, (1) PCIe x16 wired as x4, (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
Storage devices	Slimline Bay Options: DVD-ROM; DVD+/-RW, 5.25" Bay Options: DVD+/-RW; Standard: SD slot UHS II Class 3 with read only support
Security Options (Check regional availability)	Trusted Platform Module (TPM 2.0); 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 SATA/SAS FlexBays), Front FlexBay NVMe drives are removable (informed hot swap).
Manageability[3]	AMT or vPro with DASH support* Dell vPro Enhancements (Grasslake)* SNMT/CIM vis OMCI Dell Command Suite
Regulatory and Environmental	Energy Star® configurations available* including 80 PLUS® registered Gold power supplies; "EPEAT® Gold 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 Services[4]	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 environment

DELL Technologies

PRECISION 5820 TOWER

Create without limits