



## PRECISION 3431 TOWER

# Unmatched performance & affordability in a small form factor.



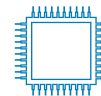
### SPACE-SAVING DESIGN

The small form factor is ideal for space-constrained workspaces that need workstation-class performance and reliability. Optional WiFi capabilities and a range of accessible ports keep you connected to everything you need.



### LATEST TECHNOLOGY

Power through intensive tasks easily with 8<sup>th</sup> Generation Intel® Core™ and Xeon® processors and faster memory speeds of up to 2666MHz, 64GB. Run applications at top speeds with next generation AMD Radeon™ Pro or NVIDIA Quadro® professional graphics with up to 55W of graphics support. Scalable storage with SATA or PCIe NVMe SSD options, up to 6TB deliver plenty of room for every project.



### INTELLIGENT PERFORMANCE

Dell Precision Optimizer software comes on every Precision workstations and will tune your workstation to provide the best performance for your applications you use most.

Optional Dell Precision Optimizer Premium is the only AI-based performance optimizer software in the industry to automatically adjust your workstation settings not only for the applications you use, but how you use them - truly customizing your system's performance for you.



### MISSION CRITICAL RELIABILITY

Independent Software Vendor (ISV) certified to ensure the high-performance applications you rely on every day run smoothly. Also, with Xeon processors you can get Error Correcting Code (ECC) memory which identifies and corrects single bit memory errors. Our exclusive Reliable Memory Pro software works on top of ECC memory to identify and map out bad memory sectors and will alert you when the memory is at a critical level and needs replaced - providing layers of protection against memory related errors.

# Recommended Accessories

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## DELL PREMIER WIRELESS KEYBOARD AND MOUSE | 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



## DELL SMALL FORM FACTOR ALL-IN-ONE STAND (OSS17)

Free up desk space by securely mounting your Precision small form factor desktop and Dell monitor on the compact stand.



## PRECISION SMALL FORM FACTOR DUST FILTER

Custom built for your Precision, the external dust filter is easy to install and rinse clean while keeping your internal components clean and running smoothly.



## DELL CANVAS

Bring your ideas to life with the groundbreaking new workspace tool that uses an intuitive touch screen, pen and totem to enable natural digital creation.



## DELL ULTRASHARP 25 MONITOR | U2518D

This 25" Ultrasharp monitor with InfinityEdge features stunning colors and spectacular clarity on a QHD display. Discover ultimate efficiency with incredibly thin bezels, deal for a multiple monitor setup.



## DELL 24 MONITOR | P2418D

See vividly clear visuals and get up to 18% more done with dual monitors by taking advantage of the 3 sided ultrathin bezel which is perfect for dual monitor setup.

# 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 strengthen security.



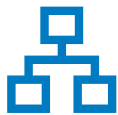
### DEPLOY

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 omitted by Dell, conducted in the United States. Actual results will vary. Full report: <http://facts.pt/L52XKM>

# Features & Technical Specifications

## PRECISION 3431 TOWER

<b>Feature</b>	<b>Precision 3431 Tower Technical Specifications</b>	<b>Storage Options<sup>4</sup></b>	Encrypting Opal 2.0 2.5", 2 TB, 5400, SATA, HDD 2.5", 256 GB/512 GB/1 TB, SATA 20, SSD 2.5", 512 GB/1 TB, SATA, SSD SED 3.5", 500 GB/1 TB/2 TB/4 TB/8TB, 7200, SATA, HDD 3.5", 4 TB, 5400, SATA, HDD M.2 2280, 256 GB/512 GB/1 TB/2 TB PCIe 40, SSD M.2 2280, 512 GB/1 TB PCIe 50, SSD M.2 2280, 512 PCIe 40, SSD SED (Opal 2.0)
<b>Processor Options<sup>1</sup></b>	9 <sup>th</sup> generation Intel® Core™ i9, i7, i5, i3, and Pentium; Intel® Xeon® E Processors; Intel® Pentium® Gold G5420, 2 Core, 4MB Cache, 3.8 Ghz w/UHD Graphics 630 Intel® Core™ i3-9100, 4 Core, 6MB Cache, 3.6Ghz, 4.2 Ghz Turbo w/UHD Graphics 630 Intel® Core™ i5-9500, 6 Core, 9MB Cache, 3.0Ghz, 4.4 Ghz Turbo w/UHD Graphics 630 Intel® Core™ i5-9600, 6 Core, 9MB Cache, 3.1Ghz, 4.6 Ghz Turbo w/UHD Graphics 630 Intel® Core™ i7-8700 (6 Core, 12MB Cache, 3.20GHz, 4.6Ghz Turbo w/ HD Graphics 630) Intel® Core™ i7-9700, 8 Core, 12MB Cache, 3.0Ghz, 4.8 Ghz Turbo w/UHD Graphics 630 Intel® Core™ i9-9900, 8 Core, 16MB Cache, 3.1Ghz, 4.9 Ghz Turbo w/UHD Graphics 630 Intel® Xeon® E-2224, 4 Core, 8MB Cache, 3.4Ghz, 4.6Ghz Turbo Intel® Xeon® E Processor E-2174G (4 Core HT, 8MB Cache, 3.8Ghz, 4.7GHz Turbo) Intel® Xeon® E-2236, 6 Core, 8MB Cache, 3.4Ghz, 4.8Ghz Turbo Intel® Xeon® E-2246G, 6 Core, 8MB Cache, 3.6Ghz, 4.8Ghz Turbo w/UHD Graphics 630 Intel® Xeon® E-2224G, 4 Core, 8MB Cache, 3.5Ghz, 4.7Ghz Turbo w/UHD Graphics 630	<b>Storage Controller</b>	Integrated: Intel Rapid storage Controller 12.0 supporting SATA 6Gb/s and host based RAID 0/1
<b>Operating System Options<sup>2</sup></b>	Windows® 10 Professional (64 bit) Windows® 10 Pro for Workstations (64 bit) w/ Intel Xeon processors Windows® 10 Home (64 bit) Red Hat® Enterprise Linux® 7.5 (coming soon) Red Hat 8.0 (coming soon) Ubuntu Linux 16.04 Ubuntu Linux 18.04 NeoKylin 6.0 SP3 (China only)	<b>Communications</b>	Integrated: Intel Ethernet Connection I219-LM 10/100/1000 Optional: Intel 10/100/1000 PCIe Gigabit Networking card Aquantia® AQtion™ AQN-108 5/2.5 GbE NIC Adapter Optional: Wireless / Bluetooth w/ vPro support
<b>Chipset</b>	Intel® C246 Chipset	<b>Audio Controller</b>	Integrated Realtek ALC3234 High Definition Audio Codec (2 Channel)
<b>Memory Options<sup>3</sup></b>	4 Dimm Slots; Up to 64GB 2666Mhz Non-ECC & ECC DDR4 Memory	<b>Speakers</b>	Internal Speaker; Optional Dell 2.0 stereo speaker systems available and Dell sound bar for select flat-panel displays
<b>Graphics Options<sup>3</sup></b>	One PCI Express® x16 Gen 3 Graphics card up to 55W Entry 3D cards: AMD Radeon Pro WX 4100 AMD Radeon Pro WX 3100 AMD Radeon Pro WX 3200 (coming soon) AMD Radeon Pro WX 2100 NVIDIA Quadro P1000 NVIDIA Quadro P620 NVIDIA Quadro P400 Professional 2D cards: Intel HD Graphics 630	<b>Add-in cards</b>	Thunderbolt 3 PCIe Card Support for up to (1) additional PCIe SSD on Dell Precision Ultra-Speed drive (x8) with active cooling Serial Port PCIe Card Parallel Port PCIe Card Smart Card Reader (CAC/PIV) Remote Access Host Card, Tera2 USB Type-C 3.1 Gen 2 PCIe Card
<b>Storage Options<sup>4</sup></b>	Support for up to (1) M.2 PCIe SSD on motherboard slot and Up to (1) 3.5" SATA or (2) 2.5" SATA. Support for Intel Ready Mode technology Support for up to (1) additional PCIe SSD on Dell Precision Ultra-Speed drive (x8) with active cooling 2.5", 500 GB/1 TB, 7200, SATA, HDD 2.5", 500 GB, 7200, SATA, HDD FIPS Self	<b>I/O Ports</b>	Front 2 - USB 2.0 Type A 1 - USB 3.1 Type A (5Gb) 1 - USB 3.1 Type C (10Gb), data only 1 - Universal Audio Jack 1 - Internal SD Card reader (Optional) Internal 3 - SATA 6Gb/s Rear 2 - USB 2.0 Type A (with SmartPower) 4 - USB 3.1 Type A (5Gb) 2 - PS2 2 - Display Port 1 - Optional Port (VGA, HDMI 2.0, DP++ 1.2, Type C w/DP-Alt mode) 1 - RJ45 Network Connector 1 - Serial 1 - Audio Line out 2 - SMA
		<b>Chassis</b>	HxWxD: 11.42" x 3.65" x 11.5" (29cm x 9.26cm x 29.2cm), Min weight: 5.117kg Bays: (1) internal 3.5" bay - supports (1) 3.5" or (2) 2.5" drives; (1) external slimline optical bay Slots: (1) half height PCIe x16 Gen3; (1) half height PCIe x4 Gen 3; (1) M.2 (22x80mm) Power Supply: 260W 92% efficient PSU (80PLUS Platinum Certified) Energy Star Compliant; 200W 85% efficient PSU (80PLUS Bronze Certified) Energy Star Compliant 200W 85% efficient PSU (80PLUS Gold Certified) Energy Star Compliant

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<b>Feature</b>	<b>Precision 3431 Tower Technical Specifications</b>
<b>Storage devices</b>	Optional: 1 optical drive: DVD-ROM; DVD+/-RW, Blu Ray Writer (Note: optical drive not available with Smart Card Reader (CAC/PIV)) SD Card Reader
<b>Security Options<sup>5</sup></b>	Trusted Platform Module TPM 2.0, Dell Data Guardian, Dell Endpoint Security Suite Enterprise, Dell HW Crypto Accelerator, Microsoft Windows Bitlocker, Local HDD data wipe via BIOS ("Secure Erase"), Encryption - SED HDD (Opal FIPS), Chassis lock slot support, Chassis Intrusion Switch, D-Pedigree (Secure Supply Chain Functionality), Setup/BIOS Password, Optional Smart Card keyboards, Optional Smart Card Reader, Intel® Trusted Execution Technology, Intel® Identity Protection Technology, Dell Secure Works, BIOS support optional Computrace, Intel Software Guard extensions
<b>Systems Management<sup>6</sup></b>	Dell Client Command Suite; via vPro (coming soon)
<b>Regulatory &amp; Environmental</b>	ENERGY STAR® configurations available including 80 PLUS® Bronze and Platinum power supplies; EPEAT® registered (see <a href="http://epeat.net">epeat.net</a> 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 <a href="http://dell.com/regulatory_compliance">dell.com/regulatory_compliance</a>
<b>Warranty &amp; Support Services<sup>7</sup></b>	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



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Some options available only in select regions; ISV certification applies to select configurations:

1 Intel Turbo Boost mode only available on Xeon, Core i7 and Core i5 processors. Intel Integrated HD graphics only available with select processors.

2 A 64-bit operating system is required to support 4GB or more of system memory.

3 GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

4 GB means 1 billion bytes and TB equals 1 trillion bytes; significant system memory may be used to support graphics, depending on system memory size and other factors.

5 Computrace is not a Dell offer. Certain conditions apply. For full details, see terms and conditions at [www.absolute.com/en/about/legal/agreements](http://www.absolute.com/en/about/legal/agreements).

6 Systems Management Options: Intel® vPro Technology - Fully vPro-capable at point of purchase; the vPro systems management option requires vPro processors. Includes support for Intel Advanced Management Technology (AMT) 9.x. Intel® Standard Manageability - Fully enabled at point of purchase, the Intel Standard Management option is a subset of the AMT features. ISM is not upgradeable to vPro technology post-purchase. No Out-of-Band Systems Management - This option entirely removes Intel out of band systems (OOB) management features. The system can still support in band management. OOB management support through AMT cannot be upgraded post-purchase.

7 Availability and terms of Dell Services vary by region. For more information, visit [Dell.com/servicecontracts/global](http://Dell.com/servicecontracts/global); Limited Hardware Warranty available by writing Dell USA LP, Attn: Warranties, One Dell Way, Round Rock, TX 78682 or see [www.dell.com/warranty](http://www.dell.com/warranty); Onsite Service after Remote Diagnosis: Remote Diagnosis is determination by online/phone technician of cause of issue; may involve customer access to inside of system and multiple or extended sessions. If issue is covered by Limited Hardware Warranty ([www.dell.com/warranty](http://www.dell.com/warranty)) and not resolved remotely, technician and/or part will be dispatched, usually within 1 business day following completion of Remote Diagnosis. Availability varies. Other conditions apply.

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