

DELL Technologies

PRECISION

7960 RACK

Be more productive,
as you power your purpose.



7960 RACK

An ultra scalable 2U rack workstation

Be productive from almost anywhere with a powerful, secured access rack based solution that keeps your intellectual property safely in the data center.

Slide rail mounting holes

Removeable cover



ISV Certifications

TPM 2.0, lockable chassis with intrusion detection, self encrypting drives

Secure remote access with Teradici PCoIP dual and quad display remote workstation cards and Amulet Hotkey dual and quad display Zero Clients

VGA port



Exhaust fans

Power connector

(2) RJ-45

System ID button

(2) USB 3.2 Gen1 Type A

RJ-45

Redundant power supplies

7960 RACK



Intelligent performance

Up to (2) Intel® Xeon® 350W, 56 cores processors, (2) AMD or NVIDIA 300W graphics, 128TB storage (8) M.2, (7) PCIe Gen 4/5 slots, up to 8TB of 4800MHz (DDR5) memory ...
Dell Optimizer for Precision



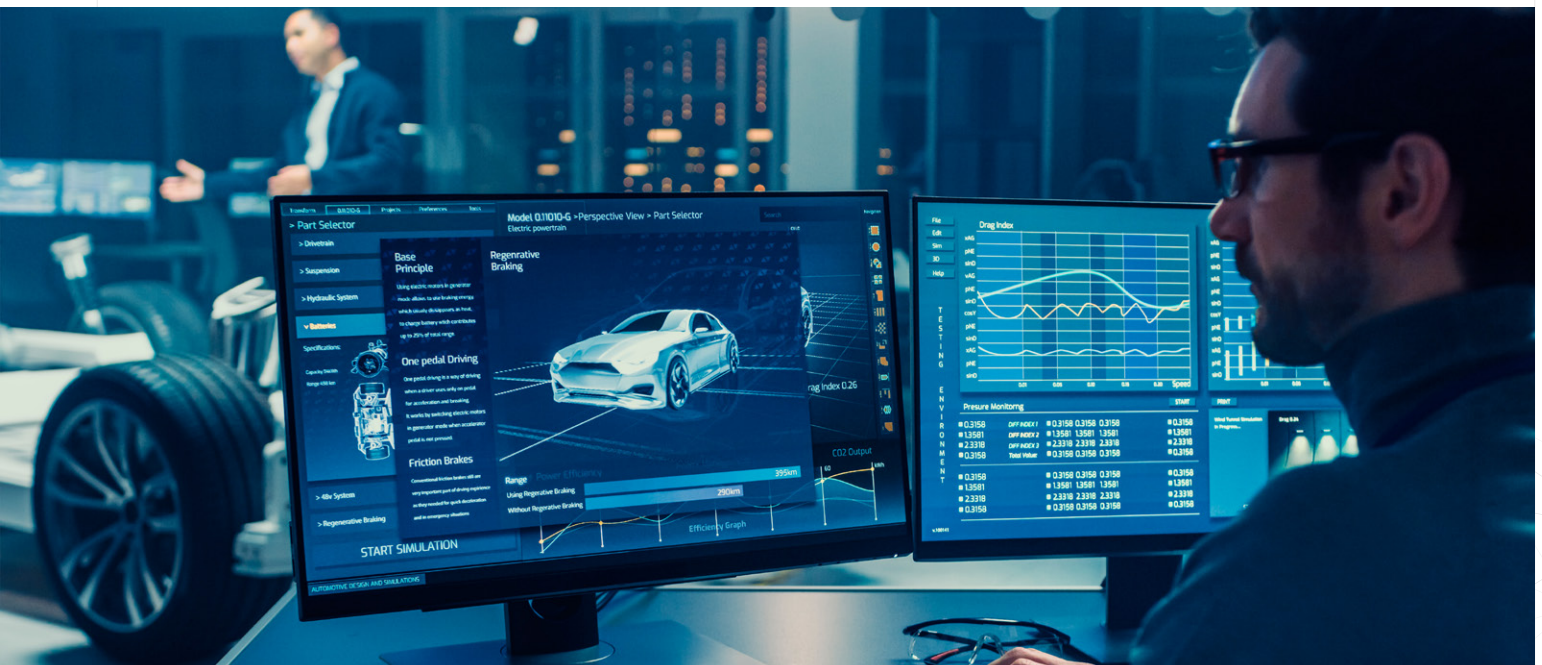
User experience

Front accessible and lockable storage ...
Optical Disk Drive(s) optional ...
Fast network speeds (1G, 10G, 25G) ...
USB 3.2 Type A ports



Mission critical reliability and security

ISV Certifications ...
ECC memory ...
Advanced thermals ...
TPM 2.0, lockable chassis with intrusion detection, self encrypting drives



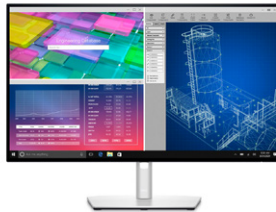


RECOMMENDED ACCESSORIES



Dell UltraSharp 32 HDR PremierColor Monitor - UP3221Q

Create phenomenal 4K HDR content on the world's first professional monitor with 2K mini-LED direct backlit dimming zones.*



Dell Ultrasharp 27 Monitor - U2722D (x2)

Elevate your productivity on this innovative 27-inch QHD Hub monitor with a wide color coverage including DCI-P3. Features ComfortView Plus an always-on built-in low blue light screen, USB-C with up to 90W power delivery, and RJ45 connectivity.



Dell Premier Multi-Device Wireless Keyboard and Mouse - KM7321W

Multi-task seamlessly across 3 devices with this premium full-size keyboard and sculpted mouse combo featuring programmable shortcuts and 36 months battery life.



Dell Speakerphone - SP3022

Experience rich, clear sound with the world's most intelligent Microsoft Teams-certified speakerphone.**



3Dconnexion SpaceMouse Pro Wireless - 3DX-700075

SpaceMouse® Pro Wireless offers professional 3D navigation, advanced ergonomic design, reliable connectivity with a high performance Universal Receiver and much more with up to two months of battery life.

*Based on Dell analysis of publicly available data, July 2020.

**Based on Dell analysis comparing against competitive personal conferencing speakerphones, September 2021.

Dell Optimizer for Precision We make it intelligent. You make it yours.

Dell Optimizer revolutionizes the way you work by fueling the world's most intelligent PCs*.

It is the only AI-based optimization software that learns and responds to the way you work and designed to automatically improve application performance, battery run-time, audio settings and privacy – all in the background while you're working.

Personalized performance
made for hybrid work



Power to the creators

Dell Optimizer for Precision empowers high-end users with ExpressResponse⁶ for performance optimization of storage heavy apps. If you're a Precision user, you also have an exclusive Analytics feature for workload and system insights that help create personalized performance. You can also generate reports within Analytics to get system diagnostics and productivity gains.



Intelligent privacy anywhere

Privacy and security are a major concern – help keep sensitive data private with the world's most comprehensive suite of Intelligent Privacy features¹. Onlooker detection lets you texturize or turn on Safe Screen when an intruder is detected and Look Away Detect darkens the PC screen based on user behavior.



Extended power

ExpressCharge analyzes your power usage habits to improve PC battery utilization. It extends run times and charges your system faster when you need a boost in power.



Enhanced audio

Intelligent Audio delivers audio and mic enhancements and reduces background noise so you can fully engage in meetings with confidence, wherever you collaborate. Neural noise cancellation enables advanced artificial intelligent techniques to distinguish human speech from any unwanted noise.



Faster sign-in

Get to work faster with ExpressSign-in² – the proximity sensor detects your presence to wake on approach before Windows Hello logs you in via facial recognition.



Unmatched connectivity

Optimized for the best connectivity, ExpressConnect³ provides the world's first simultaneous multi-network connection for faster data and video downloads⁴. It also enables joining the best network⁵ available and prioritizes traffic for conferencing apps, wherever you work.



Improved performance

ExpressResponse⁶ analyzes how you use your preferred apps⁷ to boost performance.



Simplified manageability

Elevate work experience with an easy-to-manage application that provides a seamless experience for both end-users and IT decision makers. Set up individual features and modules from Dell Optimizer that fit your work environment with the modular installation feature. Deployment updates and optimization of multiple PCs remotely can be done simultaneously via centralized management.

Precision workstations

Dell Precision fixed and mobile workstations are designed with the environment in mind, using sustainable materials in our products and packaging wherever possible.



Design

1st

Workstations made with reclaimed carbon fiber and renewable bioplastic¹².

Sustainable Materials

up to 61%

Recycled plastic in fixed workstations and up to 21% in mobile workstations¹³. Oceanbound plastic is also used in the components of select Precisions¹⁴.

Packaging Innovation

100%

Precision mobile workstations ship in packaging made from 100% recycled or renewable materials and is 100% recyclable¹⁵.

ECOLABELS

35+

EPEAT registered products¹⁶



8.0

ENERGY STAR[®] throughout the portfolio



PRECISION

7960 RACK

FEATURE TECHNICAL SPECIFICATION

MODEL NUMBER	Precision 7960 Rack
CHIPSET	Intel W790
PROCESSOR OPTIONS¹	<p>Intel® Xeon® Silver 4410Y, 23MB cache, 12 cores, 24 threads, 2.0GHz to 3.9GHz Turbo, 150W</p> <p>Intel® Xeon® Gold 5415+, 15MB cache, 8 cores, 16 threads, 2.9GHz to 4.1GHz Turbo, 150W</p> <p>Intel® Xeon® Silver 4416+, 38MB cache, 20 cores, 40 threads, 2.0GHz to 3.9GHz Turbo, 165W</p> <p>Intel® Xeon® Gold 5418Y, 45MB Cache, 24 cores, 48 threads, 2.0GHz to 3.8GHz Turbo, 185W</p> <p>Intel® Xeon® Gold 5420, 53MB cache, 28 cores, 56 threads, 2.0GHz to 4.1GHz Turbo, 205W</p> <p>Intel® Xeon® Gold 6430, 60MB cache, 32 cores, 64 threads, 2.1GHz to 3.4GHz Turbo, 270W</p> <p>Intel® Xeon® Gold 6434, 15MB cache, 8 cores, 16 threads, 3.7 GHz to 4.1GHz Turbo, 195W</p> <p>Intel® Xeon® Gold 6426Y, 30MB cache, 16 cores, 32 threads, 2.6GHz to 4.0GHz Turbo, 225W</p> <p>Intel® Xeon® Gold 6442Y, 45MB cache, 24 cores, 48 threads, 2.5GHz to 4.1GHz Turbo, 185W</p> <p>Intel® Xeon® Gold 6448Y, 60MB cache, 32 cores, 64 threads, 2.1GHz to 4.1GHz Turbo, 225W</p> <p>Intel® Xeon® Gold 6444Y, 30MB cache, 16 cores, 32 threads, 3.6GHz to 4.0GHz Turbo, 270W</p> <p>Intel® Xeon® Platinum 8452Y, 68MB cache, 36 cores, 72 threads, 2.0GHz to 3.2GHz Turbo, 300W</p> <p>Intel® Xeon® Platinum 8460Y, 75MB cache, 40 cores, 80 threads, 2.0GHz to 3.7GHz Turbo, 300W</p> <p>Intel® Xeon® Platinum 8462Y, 60MB cache, 32 cores, 64 threads, 2.8GHz to 4.1GHz Turbo, 300W</p> <p>Intel® Xeon® Platinum 8468, 90MB cache, 48 cores, 96 threads, 2.1GHz to 3.8GHz Turbo, 300W</p> <p>Intel® Xeon® Platinum 8470, 98MB cache, 52 cores, 104 threads, 2.0GHz to 3.8GHz Turbo, 350W</p> <p>Intel® Xeon® Platinum 8480+, 105MB cache, 56 cores, 112 threads, 2.0GHz to 3.8GHz Turbo, 350W</p>

OPERATING SYSTEM¹	<p>Windows 11</p> <p>Windows 11 Downgrade to Windows 10 22H2</p> <p>Ubuntu® 22.04, 64-bit</p> <p>Red Hat® Linux® 8.6 Enterprise WS</p>
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MEMORY OPTIONS^{1,2,3}	<p>16GB, 1 x 16GB, DDR5, 4800MHz ECC</p> <p>32GB, 1 x 32GB, DDR5, 4800MHz ECC</p> <p>32GB, 2 x 16GB, DDR5, 4800MHz ECC</p> <p>64GB, 1 x 64GB, DDR5, 4800MHz ECC</p> <p>64GB, 2 x 32GB, DDR5, 4800MHz ECC</p> <p>64GB, 4 x 16GB, DDR5, 4800MHz ECC</p> <p>96GB, 6 x 16GB, DDR5, 4800MHz ECC</p> <p>128GB, 2 x 64GB, DDR5, 4800MHz ECC</p> <p>128GB, 4 x 32GB, DDR5, 4800MHz ECC</p> <p>128GB, 8 x 16GB, DDR5, 4800MHz ECC</p> <p>192GB, 6 x 32GB, DDR5, 4800MHz ECC</p> <p>192GB, 12 x 16GB, DDR5, 4800MHz ECC</p> <p>256GB, 4 x 64GB, DDR5, 4800MHz ECC</p> <p>256GB, 8 x 32GB, DDR5, 4800MHz ECC</p> <p>256GB, 16 x 16GB, DDR5, 4800MHz ECC</p> <p>384GB, 6 x 64GB, DDR5, 4800MHz ECC</p> <p>384GB, 12 x 32GB, DDR5, 4800MHz ECC</p> <p>384GB, 24 x 16GB, DDR5, 4800MHz ECC</p> <p>512GB, 8 x 64GB, DDR5, 4800MHz ECC</p> <p>512GB, 16 x 32GB, DDR5, 4800MHz ECC</p> <p>512GB, 32 x 16GB, DDR5, 4800MHz ECC</p> <p>768GB, 12 x 64GB, DDR5, 4800MHz ECC</p> <p>768GB, 24 x 32GB, DDR5, 4800MHz ECC</p> <p>1TB, 16 x 64GB, DDR5, 4800MHz ECC</p> <p>1TB, 32 x 32GB, DDR5, 4800MHz ECC</p> <p>1.5TB, 24 x 64GB, DDR5, 4800MHz ECC</p> <p>2TB, 32 x 64GB, DDR5, 4800MHz ECC</p>
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GRAPHICS	Up to 2x Double wide graphics cards in PCIe Gen 5 slots – requires dual CPU system
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NVIDIA:

NVIDIA® RTX™ A6000, 48GB GDDR6

NVIDIA® RTX™ A5500, 24GB GDDR6

NVIDIA® RTX™ A4500, 20GB GDDR6

NVIDIA® RTX™ A4000, 16GB GDDR6

NVIDIA® RTX™ A2000, 12GB GDDR6

NVIDIA® T1000 LP/FH, 8GB GDDR6

NVIDIA® T400 LP/FH, 4GB GDDR6

AMD:

AMD Radeon™ W6800, 32GB GDDR6

AMD Radeon™ W6600, 8GB GDDR6

AMD Radeon™ W6400 LP/FH, 4GB GDDR6

AMD Radeon™ W6300 LP/FH, 2GB GDDR6

FEATURE TECHNICAL SPECIFICATION

STORAGE OPTIONS^{1,5}	<p>Support for up to (8) 2.5" or 3.5" SATA/SAS drives, up to 8* x M.2 NVMe PCIe SSDs</p> <p>PERC H755 motherboard PCIe HW RAID controller required for SAS drive support</p> <p>M.2 NVMe PCIe SSDs</p> <p>Up to 8x 4TB drives on 2x Dell Precision Ultra-Speed Drive Quad x16 PCIe cards.</p> <p><i>*Requires dual CPU config and graphics card in low profile riser slot</i></p>
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BOOT DRIVES^{1,5}	<p>Boot from Dell Ultra Speed Drive Quad or Duo PCIe card</p> <p>M.2 2280, 512GB, PCIe NVMe Gen4 x4, SSD, Class 40</p> <p>M.2 2280, 1TB, PCIe NVMe Gen4 x4, SSD, Class 40</p> <p>M.2 2280, 2TB, PCIe NVMe Gen4 x4, SSD, Class 40</p> <p>M.2 2280, 4TB, PCIe NVMe Gen4 x4, SSD, Class 40</p>
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DATA DRIVES^{1,5}	<p>2.5-inch, 600GB, 15,000RPM, SAS, Enterprise HDD</p> <p>2.5-inch, 1.2TB, 10,000RPM, SAS, Enterprise HDD</p> <p>2.5-inch, 2.4TB, 10,000RPM, SAS, Enterprise HDD</p> <p>3.5-inch, 2TB, 7200RPM, SATA, Enterprise HDD</p> <p>3.5-inch, 4TB, 7200RPM, SATA, Enterprise HDD</p> <p>3.5-inch, 8TB, 7200RPM, SATA, Enterprise HDD</p> <p>3.5-inch, 12TB, 7200RPM, SATA, Enterprise HDD</p> <p>2.5-inch, 1.92TB, MU, SATA, Enterprise SSD</p>
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STORAGE CONTROLLERS	<p>Integrated: 2x Intel chipset 6Gb/s SATA controllers with 4 ports each (total 8) for SATA HDD/SSD. 1 port for optical drive</p> <p>Intel vROC SW SATA RAID 0,1,5,10 supported across 4 SATA ports on 1st controller only. (Maximum 4 drives in RAIDset)</p> <p>Optional Intel vROC Standard SW NVMe RAID 0,1,10 option (motherboard activation key) for M.2 NVMe PCIe SSDs on 1st Dell Ultra-Speed Drive Quad x16 or Duo x8 card (0,1).</p> <p>Optional Intel vROC Premium SW NVMe RAID 0,1,5,10 option (motherboard activation key) for M.2 NVMe PCIe SSDs on 1st Dell Ultra-Speed Drive Quad x16 or Duo x8 card (0,1).</p> <p>Optional PERC H755P SATA/SAS Motherboard Hardware RAID PCIe controller with 8GB cache (battery backup), RAID 0/1/5/10 (no JBOD with SATA drives)</p>
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PRODUCTIVITY SOFTWARE¹	<p>Microsoft Office Home and Business Commercial</p> <p>Microsoft Office 2021 Professional Commercial</p> <p>Dell Optimizer for Precision</p>
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SECURITY SOFTWARE	<p>McAfee® Small Business Security 30-day free trial</p> <p>McAfee® Small Business Security 12-month subscription</p> <p>McAfee® Small Business Security 36-month subscription</p> <p>Dell Encryption Personal</p> <p>Dell Encryption Enterprise</p>
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ADD-IN CARDS	<p>Dell Precision Ultra-Speed Drive Quad (x16) and Duo (x8) low profile PCIe cards support M.2 NVMe drives with active cooling up to 2 and 4 NVMe drives respectively Dell Encryption Personal</p> <p>Dual display (full height and low profile) PCoIP remote workstation PCIe cards</p> <p>Quad display (full height) PCoIP remote workstation PCIe cards</p> <p>Serial port (full height, low profile) PCIe card - single port</p>
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SECURITY OPTIONS	<p>Trusted Platform Module (TPM 2.0); Setup/BIOS Password, I/O Interface Security, lockable top cover and lockable front bezel,</p>
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Dell Encryption Enterprise

WARRANTY^{9,10}	<p>3-year Basic warranty with hardware service with on-site/in-home service after remote diagnosis</p> <p>4-year Basic warranty with hardware service with on-site/in-home service after remote diagnosis</p> <p>5-year Basic warranty with hardware service with on-site/in-home service after remote diagnosis</p> <p>3-year ProSupport with Next Business Day on-site service</p> <p>4-year ProSupport with Next Business Day on-site service</p> <p>5-year ProSupport with Next Business Day on-site service</p> <p>3-year ProSupport Plus for Client with Next Business Day on-site service</p> <p>4-year ProSupport Plus for Client with Next Business Day on-site service</p> <p>5-year ProSupport Plus for Client with Next Business Day on-site service</p>
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ACCIDENTAL DAMAGE SERVICES	<p>3-year Accidental Damage Service</p> <p>4-year Accidental Damage Service</p> <p>5-year Accidental Damage Service</p>
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PRECISION

7960 RACK

FEATURE TECHNICAL SPECIFICATION

PORTS SLOTS AND CHASSIS

Front Ports:
iDRAC Direct port (1x Micro USB 2.0)
USB 2.0 port
VGA Port intended for iDRAC use

Rear Ports:
USB 2.0 port
USB 3.0 Gen1 port
iDRAC Enterprise Dedicated Network connector
VGA port intended for iDRAC use
(2) RJ45 Ethernet ports, 1GbE
(4) RJ45 Ethernet ports attached to one of three OCP3 NIC options, GBE (OCP3 card option)
(4) RJ45 Ethernet ports, 10GbE (OCP3 card option)
(4) SFP28 Ethernet ports, 25GbE (OCP3 card option)

Slots:
7 Slots in riser cards with Dual CPUs
Single CPU has 1x Gen 4 x16 (FH/FL) slot, 1x Gen 5 x16 (FH/FL) slot, 1x Gen 4 x16 low profile (FL) slot
Dual CPU has above slots plus 1x Gen 5 x16 double width slot, 2x Gen 4 x8 FH/HL slots, 1 Gen 4 x16 low profile (FL) slot
Up to (2) double width x16 cards supported with dual CPUs. All slots x16 mechanically.

OPTICAL DRIVE 8x DVD-ROM 9.5mm optical drive
8x DVD+/-RW 9.5mm optical drive

CHASSIS

US
Height (rear): 17.08in. (434.00mm)
Height (front): 18.97in. (482.00mm)
Width: 28.93in. (735.00mm)
Depth: 3.41in. (86.80mm)

Weight:
Maximum: 65.36lbs. (29.64kg)
Minimum: 46.25lbs. (20.98kg)

Rest of the world
Height (rear): 434.00mm (17.08in.)
Height (front): 482.00mm (18.97in.)
Width: 735.00mm (28.93in.)
Depth: 86.80mm (3.41in.)

Weight:
Maximum: 29.64kg (65.36lbs.)
Minimum: 20.98kg (46.25lbs.)

POWER SUPPLIES Power Supply: One or two redundant hot pluggable 800W (Platinum), 1100W (Titanium) and 2400W (Platinum) power supplies. 1100W and 2400W (@ 110V or 220V) PSUs in non-redundant mode are required for certain configurations. The 2400W PSU is rated @1400W @115V and has C19 Power cord which requires 20A Circuit @115V.

NETWORK CARDS Entry: Broadcom 5720 Dual Port 2x 1GbE LOM
OCP 3.0 NIC Options – consume OCP 3.0 NIC slot:
Intel i350 Quad Port 1GbE BASE-T, OCP NIC 3.0
Intel X710-T4L Quad Port 10GbE BASE-T, OCP NIC 3.0
Intel E810-XXVDA4 Quad Port 10/25GbE SFP28 Adapter, OCP NIC 3.0
Dedicated Broadcom® BCM54210 Ethernet LAN 10/100/1000 for iDRAC9 controller use with System Management tool suite

REGULATORY^{8,32}

Product Safety, EMC and Environmental Datasheets:
<https://www.dell.com/learn/sg/en/sgcorp1/product-info-datasheets-safety-emc-environmental>
Dell Regulatory Compliance Home Page:
<https://www.dell.com/learn/sg/en/sgcorp1/regulatory-compliance>
Dell and the Environment:
<https://www.dell.com/en-sg/dt/corporate/social-impact/advancing-sustainability/sustainable-supply-chain/environment.htm>

Product Disclosures: pages 2-6:

* Based on internal analysis, April 2021. Dell Optimizer available in 2020 devices, not available in OptiPlex 3000 series, Latitude 3310 2-in-1 and Latitude Chromebook Enterprise. Feature availability and functionality varies by model.

1 Based on Dell internal analysis of competitive PC performance software and applications. September 2021. Intelligent Privacy is available on select Dell systems and devices.

2 Available on Latitude 9000 and select 7000 series; Precision mobile workstations 7000 and select 5000 series. See product details for availability.

3 ExpressConnect available with Dell Optimizer software version 2.0 and onwards. Download the latest at <https://www.dell.com/support/home>.

4 Disclaimer: Simultaneous multi-network connection (or Connection based teaming) is a new connectivity feature under ExpressConnect. It simultaneously sends and receives data and video traffic using two or more wired or wireless connections. Based on Dell internal analysis.

5 Best network selection based on signal strength, channel congestion, router type and others. Network suggestions based on user credentials.

6 ExpressResponse must be enabled in the Applications feature. DO learns how user uses the selected application(s) over several hours. Based on Dell testing using Sysmark 2018 benchmark on a Latitude system running productivity applications; and using performance evaluation benchmarks on Precision mobile workstations running ISV applications, March 2020. Improvement will vary based on product configuration, use, application and other factors

7 User must input preferred apps first in order for them to be analyzed.

12 Based on Dell analysis, Jan 2021. 21% bioplastics in LCD coverlid.

13 Based on internal analysis, April 2022.

14 Ocean-bound plastic used in the fan and fan housing (13%) on Precision 3260 CFF and the fan housing (28%) on Precision mobile workstations 3570 & 3571.

15 New packaging is made with up to 95% recycled content and up to 22% renewable content in the form of FSC paper fibers. Material make up varies by product and size. Excludes optional items added to order and included in box. Paper packaging materials can be recycled via municipal recycling, where available. System bag is made from recycled plastic and can be recycled along with other thin plastics.

16 EPEAT registered where applicable. EPEAT registration varies by country. See www.epeat.net for registration status by country.

Product Disclosures: pages 7-8:

1. Offering may vary by region. Some items may be available after product introduction. For complete details, refer to the Technical Guidebook published on www.dell.com/support.

2. System Memory and Graphics: Significant system memory may be used to support graphics, depending on system memory size and other factors.

3. 4GB or Greater System Memory Capability: A 64-bit operating system is required to support 4GB or more of system memory.

4. Particular versions of Microsoft Windows may not support the full Bluetooth 4.2 functionality

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

6. TPM is available in selected regions.

7. Absolute: Not a Dell offer. Certain conditions apply. For full details, see terms and conditions at www.lockforlaptops.com.

8. Please refer to www.epeat.net for specific country registration rating and participation.

9. Limited Hardware Warranty: For copy of Ltd Hardware Warranty, write Dell USA LP, Attn: Warranties, One Dell Way, Round Rock, TX 78682 or see www.dell.com/warranty.

10. on-site 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) 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.

11. Dell Services: Availability and terms of Dell Services vary by region. For more information, visit www.dell.com/service-descriptions.

12. For complete listing of declarations and certifications, refer to the Dell Regulatory and Environmental Datasheet found in the Manuals section of Product Support information www.dell.com/support/home/us/en/19.