



# Precision 7780



Power your passion with the performance of Precision.

# Power your passion with Precision

## Put max power behind your purpose with a scalable 17.3" mobile workstation.

FHD IR Camera, Windows Hello compliance, Integrated Camera Shutter, Proximity, Contextual Privacy and Ambient Light Sensors

Dual array mics with noise suppression technology

16:9 aspect ratio (up to HDR400 UHD), display with narrower bezel, 500nits, PremierColor, 99% DCI-P3, ComfortView Plus (LBL) options

Up to 16TB of storage, with 4 Gen 4 M.2 slots

Easy access storage with optional door on the bottom of the base

Pro keyboard

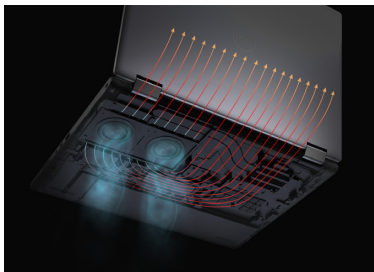
Optional Smart Card Reader

Large click pad with optional NFC reader

Chassis intrusion sensor

Up to WiFi 6E

Bluetooth 5.3



### Advanced Thermals

User Selectable Thermals Tables (USTT) Dual Opposing Output (DOO) fan with liquid polymer blades Dual intake venting Thermal insulated material, GORE™.



26.7 mm

Up to 240W adapter

Up to 93Whr battery

### Dell Optimizer for Precision

- ExpressSign-in
- ExpressConnect
- ExpressCharge
- ExpressDischarge
- ExpressResponse
- Intelligent Audio
- Reporting & Analytics

### Sustainability

EPEAT Gold Registered  
100% recycled plastics & cardboard contained in packaging.





**Intelligent performance**

Intel® Core™ i5-i9, 24 core (8P + 16E) (55W), up to 16GB NVIDIA RTX 5000 Ada Generation, (4) M.2 slots Gen 4 SSD (16TB)/RAID 10 support, up to 128GB of DDR5 memory, (2) Thunderbolt™ 4 / USB 4, (1) USB 3.2 Type A and (1) Type C



**Immersive productivity and design**

Pro keyboard, large click pad, camera shutter, proximity and ambient light sensors, chassis intrusion sensor

Up to UHD HDR400 120Hz display  
99% DCI-P3, 500nits, PremierColor, ComfortView Plus (Low Blue Light)

Intel WiFi 6E 6GHz/BT5.3/vPro, 5G LTE WWAN



**Mission critical reliability and security**

ISV Certifications

Long life battery option

MIL-STD tested

ECC and RMT Pro options  
Advanced thermals (vapor chambers, DOO fans, GORE™)



# 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<sup>1</sup>. 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 Express Response<sup>18</sup> 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 features<sup>13</sup>. 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.

### 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 ExpressSignin<sup>2</sup> – 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, ExpressConnect<sup>15</sup> provides the world's first simultaneous multi-network connection for faster data and video downloads<sup>4</sup>. It also enables joining the best network<sup>5</sup> available and prioritizes traffic for conferencing apps, wherever you work.

### Improved performance

ExpressResponse<sup>18</sup> analyzes how you use your preferred apps<sup>7</sup> 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.

### 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.



# Engineering with Performance Solution



**(2) Dell UltraSharp 27 4K Monitors - U2723QE**

Be your most productive on a 27 inch monitor with brilliant color and contrast that features the industry's first IPS Black technology and a connectivity hub.



**Dell Premier Collaboration Keyboard and Mouse – KM900**

World's first collaboration keyboard with dedicated hotkeys for effortless one-touch controls on Zoom and TEAMS calls.



**Dell Performance Dock - WD19DCS**

Dell's most powerful dock\* delivers the ultimate productivity experience. Charge your system faster, support up to three displays and connect to your peripherals via a single cable with dual USB-C connectors.



**Dell Premier Wireless ANC Headset - WL7022**

Collaborate with ease anywhere with this Teams certified wireless headset which offers active noise cancellation and smart sensors that automatically mute and unmute your call.



**Dell EcoLoop Pro Backpack - CP5723**

Designed for on-the-go productivity and protection, the Dell EcoLoop Pro Backpack is made of eco-conscious material to complement busy lifestyles.



**Dell UltraSharp Webcam – WB7022**

Elevate your video conferencing experience with the world's best image quality 4K webcam\* that optimizes your visuals with a large 4K Sony STARVIS™ CMOS sensor and AI Auto-Framing.



**3Dconnexion SpaceMouse Wireless - 3DX-7000762**

3Dconnexion's patented 6-Degrees-of-Freedom (6DoF) sensor is specifically designed to manipulate digital content or camera positions in industry-leading CAD applications. Simply push, pull, twist or tilt the 3Dconnexion controller cap to intuitively pan, zoom and rotate your 3D drawing.



**StarTech USB-C to DP Adapter**

This USB-C to DisplayPort adapter lets you connect your USB Type-C or Thunderbolt 3 device to a DisplayPort monitor or display, providing you with a convenient, high-performance solution.



**HTC VIVE Pro 2 - Virtual Reality Headset - MFG# : 99HASW001-00  
Dell Part# : AB645501**

Dive into virtual reality experiences with this HTC VIVE Pro 2 virtual reality headset. A simple design eliminates the need for a base station, while the flip-up display lets you quickly escape to answer calls and texts.

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





# 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 bioplastic<sup>9</sup>.

## Sustainable Materials

up to 61% Recycled plastic in fixed workstations and up to 21% in mobile workstations<sup>10</sup>. Oceanbound plastic is also used in the components of select Precisions<sup>11</sup>.

## Packaging Innovation

100% Precision mobile workstations ship in packaging made from 100% recycled or renewable materials and is 100% recyclable<sup>12</sup>.

## ECOLABELS

35+

EPEAT registered products<sup>13</sup>



8.0

ENERGY STAR<sup>®</sup> throughout the portfolio



FEATURE	TECHNICAL SPECIFICATION	FEATURE	TECHNICAL SPECIFICATION
<b>MODEL NUMBER</b>	Precision 7780		
<b>PROCESSOR OPTIONS<sup>1</sup></b>	13 <sup>th</sup> Generation Intel® Core™ i5-13600HX, 24 MB cache, 20 threads, 14 cores (6 P cores & 8 E cores), P cores 2.60 GHz to 4.80 GHz, E cores 1.90 GHz to 3.60 GHz, 55 W 13 <sup>th</sup> Generation Intel® Core™ i7-13850HX, 30 MB cache, 28 threads, 20 cores (8 P cores & 12 E cores), P cores 2.20 GHz to 5.30 GHz, E cores 1.50 GHz to 3.80 GHz, 55 W 13 <sup>th</sup> Generation Intel® Core™ i9-13950HX, 36 MB cache, 32 threads, 24 cores (8 P cores & 16 E cores), P cores 2.20 GHz to 5.50 GHz, E cores 1.60 GHz to 4.00 GHz, 55 W	<b>PRODUCTIVITY SOFTWARE<sup>14,21</sup></b>	Dell Support Assist DDRE (Dell Developed Recovery Environment) Dell Optimizer for Precision Dell Support Center Intel® WiFi Direct
<b>OPERATING SYSTEM<sup>1</sup></b>	Windows 10 Home with Windows 11 License, 64-bit Windows 10 Pro with Windows 11 License, 64-bit Windows 10 Enterprise with Windows 11 License, 64-bit Windows 10 Pro Education with Windows 11 License, 64-bit Windows 10 Pro China with Windows 11 License, 64-bit Windows 11 Pro, 64-bit Windows 11 Pro National Education, 64-bit Windows 11 Home, 64-bit Ubuntu® 22.04 LTS, 64-bit RedHat Enterprise Linux 9.2 (RHEL via downloadable image only)	<b>SECURITY SOFTWARE</b>	Dell Client Command Suite Optional Dell Data Security and Management Software
<b>MEMORY OPTIONS<sup>16</sup></b>	16 GB, 1 x 16 GB, DDR5, 4800 MT/s, non-ECC, CAMM module 32 GB, 1 x 32 GB, DDR5, 4800 MT/s for 13th Generation Intel® Core™ i5 processors, 5600 MT/s for 13th Generation Intel® Core™ i7/i9 processors, non-ECC, CAMM module 64 GB, 1 x 64 GB, DDR5, 4800 MT/s for 13th Generation Intel® Core™ i5 processors, 5200 MT/s for 13th Generation Intel® Core™ i7/i9 processors, non-ECC, CAMM module 128 GB, 1 x 128 GB, DDR5, 3600 MT/s, non-ECC, CAMM module* 8 GB, 1 x 8 GB, DDR5, 4800 MT/s for 13th Generation Intel® Core™ i5 processors, 5600 MT/s for 13th Generation Intel® Core™ i7/i9 processors, non-ECC, SODIMM 16 GB, 1 x 16 GB, DDR5, 4800 MT/s for 13th Generation Intel® Core™ i5 processors, 5600 MT/s for 13th Generation Intel® Core™ i7/i9 processors, non-ECC, SODIMM 32 GB, 2 x 16 GB, DDR5, 4800 MT/s for 13th Generation Intel® Core™ i5 processors, 5600 MT/s for 13th Generation Intel® Core™ i7/i9 processors, non-ECC, SODIMM, dual-channel 64 GB, 2 x 32 GB, DDR5, 4800 MT/s for 13th Generation Intel® Core™ i5 processors, 5200 MT/s for 13th Generation Intel® Core™ i7/i9 processors, non-ECC, SODIMM, dual-channel 16 GB, 1 x 16 GB, DDR5, 4800 MT/s for 13th Generation Intel® Core™ i5 processors, 5600 MT/s for 13th Generation Intel® Core™ i7/i9 processors, ECC, SODIMM 32 GB, 1 x 32 GB, DDR5, 4800 MT/s for 13th Generation Intel® Core™ i5 processors, 5200 MT/s for 13th Generation Intel® Core™ i7/i9 processors, ECC, SODIMM 64 GB, 2 x 32 GB, DDR5, 4800 MT/s for 13th Generation Intel® Core™ i5 processors, 5200 MT/s for 13th Generation Intel® Core™ i7/i9 processors, ECC, SODIMM, dual-channel  * Bus speed at 128GB capacity is constrained by DRAM loading. While parts may be 3600MT/s or 4800 MT/s, transfer speed is limited to 3600 MT/s.	<b>SOFTWARE</b>	Dell BIOS Verification Optional Dell Endpoint Security and Management Software VMware Carbon Black Endpoint Standard VMware Carbon Black Endpoint Standard + Secureworks Threat Detection and Response Dell Encryption Enterprise Dell Encryption Personal Carbonite VMware Workspace ONE Absolute® Endpoint Visibility and Control Netskope Dell Supply Chain Defense
<b>STORAGE<sup>17</sup></b>	256 GB, M.2 2230, PCIe NVMe Gen4 x4, Class 35 SSD 512 GB, M.2 2280, PCIe NVMe Gen4 x4, Class 40 SSD 1 TB, M.2 2280, PCIe NVMe Gen4 x4, Class 40 SSD 2 TB, M.2 2280, PCIe NVMe Gen4 x4, Class 40 SSD 4 TB, M.2 2280, PCIe NVMe Gen4 x4, Class 40 SSD 512 GB, M.2 2280, PCIe NVMe Gen4 x4, Class 40 SSD, self-encrypting drive 1 TB, M.2 2280, PCIe NVMe Gen4 x4, Class 40 SSD, self-encrypting drive Max 4 drives, RAID 0,1,5,10	<b>WARRANTY<sup>20,211</sup></b>	3-year hardware warranty with on-site/in-home service after remote diagnosis 4-year hardware warranty with on-site/in-home service after remote diagnosis 5-year hardware warranty with on-site/in-home service after remote diagnosis 3-year ProSupport with Next Business Day on-site service 4-year ProSupport with Next Business Day on-site service 5-year ProSupport with Next Business Day on-site service 3-year ProSupport Plus with Same Business Day on-site service 4-year ProSupport Plus with Same Business Day on-site service 5-year ProSupport Plus with Same Business Day on-site service
<b>GRAPHICS</b>	<b>Integrated:</b> Intel® UHD Graphics  <b>Discrete: (optional)</b> NVIDIA RTX™ A1000 laptop, 6 GB GDDR6 NVIDIA RTX™ 1000 Ada Generation, 6 GB GDDR6 NVIDIA RTX™ 2000 Ada Generation, 8 GB GDDR6 NVIDIA RTX™ 3500 Ada Generation, 12 GB GDDR6 NVIDIA RTX™ 4000 Ada Generation, 12 GB GDDR6 NVIDIA RTX™ 5000 Ada Generation, 16 GB GDDR6	<b>ACCIDENTAL DAMAGE SERVICES</b>	3-year Accidental Damage Service 4-year Accidental Damage Service 5-year Accidental Damage Service



FEATURE	TECHNICAL SPECIFICATION	FEATURE	TECHNICAL SPECIFICATION
<b>MODEL NUMBER</b>	Precision 7780		
<b>KEYBOARD<sup>14</sup></b>	English US and Canada, Standard, backlit keyboard with 10-key numeric keypad, 99 keys, spill resistant English UK, Standard, backlit keyboard with 10-key numeric keypad, 103 keys, spill resistant Additional languages available	<b>PORTS</b>	(2) ThunderBolt™ 4 / USB 4.0 Type-C ports USB 3.2 Gen 2 Type-C port with DisplayPort alt mode USB 3.2 Gen 1 port with PowerShare USB 3.2 Gen 1 port HDMI 2.0a port (UMA)/1 HDMI 2.1 port (DGPU) RJ45 Ethernet port Headset (headphone and microphone combo) port
<b>SLOTS</b>	SmartCard Reader Nano-SIM-card slot SD-card slot Wedge-shaped lock slot	<b>DIMENSIONS</b>	Height (peak): 1.13 in. (28.50 mm) Height (rear): 1.06 in. (26.70 mm) Height (front): 1.03 in. (25.95 mm) Width: 15.67 in. (398.00 mm) Depth: 10.44 in. (265.02 mm) Weight: Starting at 6.73 lb (3.05 kg)
<b>CAMERA</b>	1080p at 30fps, FHD, RGB, with Omni-directional digital Microphone 1080p at 30fps, FHD, IR, with Omni-directional digital Microphone + Proximity sensor	<b>AUDIO &amp; SPEAKERS</b>	Stereo speakers with Dialog, 2W x 4 = 8W total
<b>DISPLAY OPTIONS<sup>14</sup></b>	17.3-inch, FHD 1920 x 1080, 60 Hz, anti-glare, non-touch, 99% DCIP3, 500 nits, wide-viewing angle 17.3-inch, UHD 3840 x 2160, 120 Hz, anti-glare, non-touch, 99% DCIP3, 500 nits, wide-viewing angle, WLED	<b>WIRELESS</b>	<b>Wireless:</b> Intel® AX211, 2x2 MIMO, 2400 Mbps, 2.40 GHz/5 GHz/6 GHz, Wi-Fi 6E (Wi-Fi 802.11ax), Bluetooth® 5.3, socketed <b>Mobile broadband:</b> Qualcomm SDX55 5G, Up to 3 Gbps, 7x20 MHz
<b>CASE COLOR</b>	Aluminum Titan Grey	<b>PRIMARY BATTERY</b>	6-cell, 83 Wh, Lithium-ion, ExpressCharge™ 2.0 6-cell, 93 Wh, Lithium-ion, ExpressCharge™ and ExpressChargeBoost Long life-cycle batteries with up to 3 year warranty available
<b>POWER</b>	180 W AC adapter, 7.40 mm barrel 240 W AC adapter, 7.40 mm barrel	<b>REGULATORY<sup>22</sup></b>	<b>Product Safety, EMC and Environmental Datasheets:</b> <a href="https://www.dell.com/learn/sg/en/sghcorp1/product-info-datasheets-safety-emc-environmental">https://www.dell.com/learn/sg/en/sghcorp1/product-info-datasheets-safety-emc-environmental</a> <b>Dell Regulatory Compliance Home Page:</b> <a href="https://www.dell.com/learn/sg/en/sghcorp1/regulatory-compliance">https://www.dell.com/learn/sg/en/sghcorp1/regulatory-compliance</a> <b>Dell and the Environment:</b> <a href="https://www.dell.com/en-sg/dt/corporate/social-impact/advancing-sustainability/supply-chain/the-people-behind-our-products.htm#tab0=0">https://www.dell.com/en-sg/dt/corporate/social-impact/advancing-sustainability/supply-chain/the-people-behind-our-products.htm#tab0=0</a>
<b>CHIPSET</b>	Intel® RPL-BGA PCH	<b>INTEL RESPONSIVENESS TECHNOLOGIES</b>	Intel® Rapid Storage Technology
<b>HARDWARE SECURITY</b>	Trusted Platform Module (TPM 2.0 discrete) FIPS 140-2 certification for TPM TCG Certification for TPM (Trusted Computing Group) Contacted Smart Card and Control Vault 3 Contactless Smart Card, NFC, and ControlVault 3 SED SSD NVMe, SSD and HDD (Opal and non-Opal per SDL) Finger Print Reader in Power Button tied to Control vault 3 SED (Opal 2.0 only - PCIe Interface) Chassis Intrusion Detection Battery Removal Detection RPMC SPI flash SPI Flash Tamper Detection / Prevention Shunt Circuit	<b>SENSORS</b>	Ambient Light Sensor Windows Auto Brightness Accelerometer Adaptive Thermal Performance (Lap vs. Desk mode) requires Accelerometer (NOTE: This is for thermal only.) Hall Effect Sensor Sensor Hub Proximity for SAR compliance (for the WWAN module) Near Field Proximity Sensor
<b>SYSTEMS MANAGEMENT</b>	BIOS complies to Dell SMBIOS implementation spec (DSIS) SW and Drivers MUP/DUP compliant per spec Agile S01310 Dell Power Manager (DPM) Dell Command   Configure Version 4.0 Dell Command   Monitor 10.0 Dell Command   Update 3.0 Dell Command   Update Catalog (DCUC) Dell Command   Deploy (DCP) Dell Command   Integration Suite for System Center 5.0 (DCIS) with vPro® Dell Command   Intel® vPro™ Out of Band (DCIV) Dell Command   PowerShell Provider 2.0 Dell Command   Deploy Driver Pack Catalog 1.0		

**Product Disclosures:**

- 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 2022. 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.
- 9 Based on Dell analysis, Jan 2022. 21% bioplastics in LCD coverlid.
- 10 Based on internal analysis, April 2022.
- 11 Ocean-bound plastic used in the fan and fan housing (13%) on Precision 3260 CFF and the fan housing (28%) on Precision mobile workstations 3580 & 3581.
- 12 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.
- 13 EPEAT registered where applicable. EPEAT registration varies by country. See [www.epeat.net](http://www.epeat.net) for registration status by country.
- 14 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](http://www.dell.com/support).
- 15 System Memory and Graphics: Significant system memory may be used to support graphics, depending on system memory size and other factors.
- 16 4GB or Greater System Memory Capability: A 64-bit operating system is required to support 4GB or more of system memory.
- 17 Storage Option:GB means 1 billion bytes andTB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.
- 18 Computrace: Not a Dell offer. Certain conditions apply. For full details, see terms and conditions at [www.ljjackforlaptops.com](http://www.ljjackforlaptops.com).
- 19 Please refer to [www.epeat.net](http://www.epeat.net) for specific country registration rating and participation.
- 20 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](http://www.dell.com/warranty).
- 21 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](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.
- 22 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](http://www.dell.com/support/home/us/en/19).