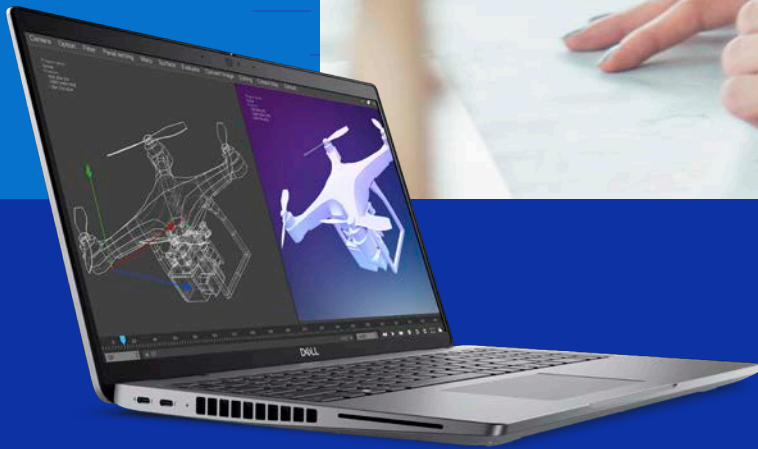


DELL Technologies



Create your next great project with outstanding performance in an entry level mobile workstation



Precision 3591

# Work anywhere with a light, powerful workstation.

An ultra-mobile device that is great for those wanting to take the next step in performance in an entry workstation.

## Intelligent performance

Intel Core Ultra processors, 45W (H Series), up to 16 cores with vPro Enterprise options

Up to NVIDIA RTX 2000 Ada graphics

Up to 64GB of 5600 MT/s DDR5 memory  
Up to 4TB Gen4 M.2 SSD

## Wide variety of ports and input connections:

(2) Thunderbolt 4 Type C  
(2) USB-A 3.2 Gen 1 (1x power enabled)  
HDMI 2.1  
RJ-45  
Universal Audio Jack  
Smart Card Reader (optional)  
MicroSD-card slot  
Nano-SIM card slot (optional)

## Spill-proof Pro2 keyboard with backlit option

## Advanced thermal management

Dual Opposing Output (DOO) fan and User Selectable Thermal Tables

## 4G LTE, 5G FirstNet Certified

WiFi 6E, 4G LTE, 5G LTE with FirstNet Certification, Bluetooth 5.3

## Industry's most secure commercial PC\*

Only Dell offers off-host BIOS verification and Indicators of Attack to reduce exposure to future threats.

Secured Component Verification, offered only by Dell, helps ensure PCs are secure from factory to first boot.

Dell and Intel reduce the attack surface. The latest Intel vPro-based PCs provide an estimated 70% attack surface reduction.\*\*

## Privacy Shutter, Fast Sign-in

Up to FHD HDR IR camera with AI-based proximity sensors, intelligent noise canceling microphone

## Reliability

ISV Certified  
MIL STD tested  
Long Lifecycle  
Battery options

Up to FHD, 100% sRGB, 400nits, PremierColor. Touch, ComfortView Plus, and Low-blue-light (LBL) panel options available

Optional Fingerprint Reader Integrated with power button Windows Hello capable

Titan gray



## Large glass-like, multi-touch clickpad

## Dell Optimizer for Precision

See Dell Optimizer page for more details

## Starting weight is 3.96 lbs / 1.79 kgs

Up to 130W Type-C adapter  
Up to 6-cell, 97Whr battery

## Simplified PC updates

Get the latest BIOS, drivers and firmware versions, validated and delivered seamlessly from Dell.

## Sustainability

EPEAT Gold Registered  
Recycled carbon fiber 100% recycled plastics & cardboard contained in packaging

[Click here](#) to see the 360 degree view of the Precision 3591

\*Not all features available with all PCs. Additional purchase required for some features.

\*\*Based on IOActive's "Intel vPro 13th Gen Attack Surface Study" published March 2023 (commissioned by Intel), which evaluates Intel vPro devices powered by 13th Gen Intel Core processors against four-year-old Intel-based PCs on Windows OS. Details at [www.intel.com/performance-vpro](http://www.intel.com/performance-vpro). Results may vary.



**Intelligent performance**

This thin and light, cost-effective workstation packs intelligent performance, based on the new Intel® Core™ Ultra processors that feature fast, integrated Intel® Arc graphics and AI Accelerators featuring NPU for Intel® AI Boost. There are also vPro options and Copilot in Windows 11; taking advantage of advancing AI technologies to improve user productivity across business and industry applications.



**Immersive productivity and design**

This 15" workstation delivers an exceptional user experience. Jumpstart your workflow with the **Copilot Hardware Key**, which provides quick access to the tools you need to start your workday. Revolutionize your meetings with **Windows Studio Effects**. Keep your audience engaged with **video auto-framing** and maintain eye contact effortlessly, even while referencing your notes, thanks to **AI-eye tracking technology**. Elevate your experience with AI-powered tools from Windows 11. Easily make use of the **Snipping Tool, voice access, and smart recommendations** within File Explorer and your Start menu.



**Mission critical reliability and Security**

All Dell Precision workstations are tested and certified by independent software vendors to ensure reliably performance. Secure your workstation in this data-driven world with the industry's most secure commercial PCs<sup>1</sup> with robust features from the most secure Windows ever. Plus, they are MIL STD tested. Be secure in the office or on the road with features like an optional Smart Card Reader, optional Fingerprint Reader, and HDR IR Camera with Windows Hello and proximity sensor. Layer on advanced threat protection with industry-leading partner software. Truly embrace hybrid work with secure and reliable 4G and 5G connectivity.



1 Based on Dell internal analysis, September 2023. Applicable to PCs on Intel processors. Not all features available with all PCs. Additional purchase required for some features.

# Dell Optimizer for Precision

Dell Optimizer is our AI-based optimization software that learns and responds to the way you work, designed to automatically improve application and device performance, PC and accessory battery run-time, audio/video settings and privacy – all in the background while you're working.



## Get up to 18% in power savings<sup>1</sup>

Save energy without sacrificing performance for ultimate efficiency with Power Optimization. Achieve power savings when you set your PC to Quiet Mode on your thermal management settings — giving you up to 2.4 watts of power savings compared to default mode.<sup>1</sup>

## Enhance application speed

Experience a boost in performance of your foreground application when running multiple programs simultaneously with Application Optimization.

## Experience 2x faster network performance<sup>2</sup>

Network Optimization provides the world's first simultaneous multi-network connection for faster data and video downloads<sup>3</sup>, and joins the best network<sup>4</sup> available.

## Up-level audio for a better collaboration experience

Intelligent Audio senses your surroundings and improves the conferencing experience by removing unwanted sounds, alerts you when your voice quality is poor, and provides a better collaboration experience for you and all call participants.

## Access personalized insights

Our Analytics feature monitors the utilization of your PC by analyzing your system's battery, storage, CPU and memory behavior to review your system's reliability and problem history, so you can identify bottlenecks quickly.

## An intelligent ecosystem

Enjoy easy pairing and management of your Dell monitors and accessories with the integration of Dell Display Manager and Dell Peripheral Manager.

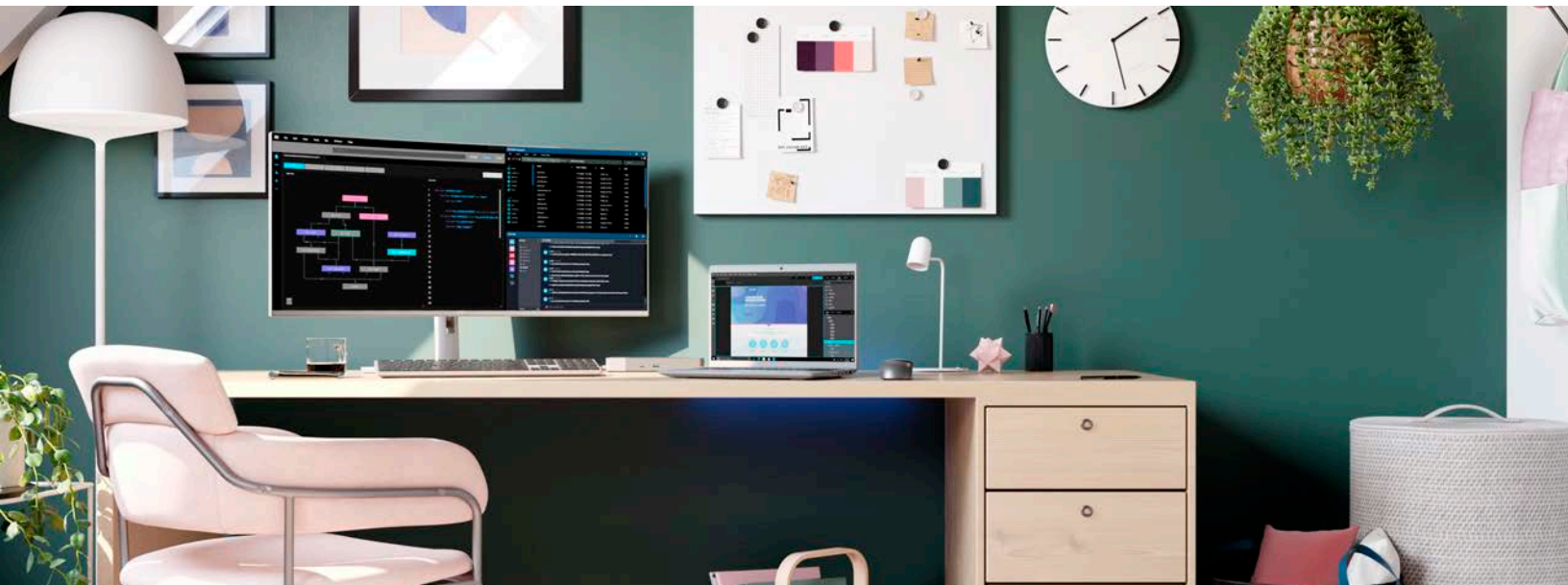
▶ [Click here to learn more about Dell Optimizer](#)

1. This is based on a Dell internal study, testing power and performance within our Dell Optimizer power module. White paper published November 2022 <https://www.delltechnologies.com/asset/en-us/solutions/business-solutions/industry-market/maximizing-power-efficiency-with-dell-optimizer-a-case-study.pdf>

2. Based on A Principled Technologies Report commissioned by Dell that ran PC performance benchmarks on Dell Latitude 9430 laptops and OptiPlex 7400 all-in-one desktop PCs: Improve PC app performance, battery charging, and end-user experiences with Dell Optimizer, June 2023

3. 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 wired or wireless connections. Based on Dell internal analysis

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



# Mobile Workstation Solution

Create your ideal workspace with these recommended accessories.



## Dell UltraSharp 34 Curved Thunderbolt™ Hub Monitor - U3425WE

A revolutionary 34-inch dual QHD curved monitor with ultra-wide views, multitasking features and seamless connectivity for an immersive work experience.



## Dell 24 Monitor - P2423D

Stay focused on a 23.8-inch QHD monitor optimized to deliver high performance details and clarity.



## Dell Thunderbolt™ 4 Dock - WD22TB4

Experience lightning fast charging and Thunderbolt™ 4 connectivity with this flexible and powerful modular dock.



## Dell Premier Wireless Keyboard and Mouse - KM7321W

Experience superior multitasking features with a stylish and comfortable premium keyboard and mouse combo. Complete your tasks powered by one of the industry's leading battery lives at up to 36 months.



## Dell EcoLoop Pro Backpack - CP5723

Designed for on-the-go productivity and protection, the Dell EcoLoop Pro Backpack 15 is made of eco-conscious material to complement busy lifestyles.



## Dell Wireless Headset - WL3024

Experience clear communication with this wireless AI-based noise cancellation headset, designed with a focus on productivity and comfort for all-day conferencing.

▶ [Learn more about our Workspace Solutions](#)



# Sustainability on Dell Precision 3591

Delivering innovative technology and solutions to collectively lower our environmental impact.

## Design Innovation

Your Precision workstation is crafted with a variety of sustainable materials including post-consumer recycled plastic, ocean-bound plastic, bio-based plastic and reclaimed carbon fiber.<sup>1</sup> This workstation also ships with an adapter designed with post-consumer recycled plastic and recycled copper.<sup>2</sup>

## Recycled plastic

Your Precision 3590 workstation ships in packaging made with 100% recycled or renewable content, that is also 100% recyclable.<sup>3</sup> This workstation is also eligible for multipack shipping which helps reduce packaging and transportation waste.<sup>4</sup>

## Low-impact Packaging

Your Precision 3591 workstation ships in packaging made with 100% recycled or renewable content, that is also 100% recyclable.<sup>3</sup> This workstation is also eligible for multipack shipping which helps reduce packaging and transportation waste.<sup>5</sup>

<sup>3</sup> Contains 39.5% recycled content and 60.5% renewable materials. Renewable materials in the form of sustainably forested fibers. Percentages may vary slightly by region. Excludes optional items added to order and included in box

## Environmental Certifications & Registrations

Meeting environmental standards demonstrates how our products adhere to energy-efficiency specifications and other extensive climate-related standards. This workstation is Certified ENERGY STAR<sup>®</sup> 8.0, TCO certified, generation 9 and EPEAT gold registered with Climate+ designation.<sup>4</sup>



See how we are reducing the impact of our products and solutions [Dell.com/Sustainable-Devices](https://Dell.com/Sustainable-Devices)

<sup>1</sup> Based on internal analysis, January 2024.

<sup>2</sup> Based on internal analysis, January 2024. 90% post-consumer recycled plastic in the adapter case and 50% recycled copper in the adapter cable

<sup>3</sup> Contains 39.5% recycled content and 60.5% renewable materials. Renewable materials in the form of sustainably forested fibers. Percentages may vary slightly by region. Excludes optional items added to order and included in box

<sup>4</sup> Based on internal analysis, January 2024. Based on EPEAT Climate+ Designations achieved in all applicable countries. EPEAT registered where applicable. EPEAT registration varies by country. See [www.epeat.net](https://www.epeat.net) for registration status and tier levels

<sup>5</sup> Based on internal analysis, January 2024

FEATURE	TECHNICAL SPECIFICATION	FEATURE	TECHNICAL SPECIFICATION
<b>MODEL NUMBER<sup>1</sup></b>	Precision 3591		
<b>PROCESSOR<sup>1</sup></b>	Intel® Core™ Ultra 5 135H vPro® Enterprise (18 MB cache, 14 cores, up to 4.60 GHz) Intel® Core™ Ultra 7 155H vPro® Essentials (24 MB cache, 16 cores, up to 4.80 GHz) Intel® Core™ Ultra 7 165H vPro® Enterprise (24 MB cache, 16 cores, up to 5 GHz) Intel® Core™ Ultra 9 185H vPro® Enterprise (24 MB cache, 16 cores, up to 5.10 GHz)	<b>WARRANTY<sup>3,10</sup></b>	1Y hardware warranty with on-site/in-home service after remote diagnosis 2Y hardware warranty with on-site/in-home service after remote diagnosis 3Y hardware warranty with on-site/in-home service after remote diagnosis 4Y hardware warranty with on-site/in-home service after remote diagnosis 5Y hardware warranty with on-site/in-home service after remote diagnosis 1Y ProSupport Suite 2Y ProSupport Suite 3Y ProSupport Suite 4Y ProSupport Suite 5Y ProSupport Suite 2Y Data and Protective Services Extended Battery Services (EBS) - FRU Batteries Only 3Y Data and Protective Services Extended Battery Services (EBS) - FRU Batteries Only
<b>OPERATING SYSTEM<sup>1</sup></b>	Windows 11 Home Windows 11 Pro Ubuntu® 22.04 LTS	<b>ACCIDENTAL DAMAGE SERVICES</b>	1-year Accidental Damage Service 2-year Accidental Damage Service 3-year Accidental Damage Service 4-year Accidental Damage Service 5-year Accidental Damage Service 1-year Accidental Damage with Theft Service 2-year Accidental Damage with Theft Service 3-year Accidental Damage with Theft Service 4-year Accidental Damage with Theft Service 5-year Accidental Damage with Theft Service 1-year Accidental Damage Protection 2-year Accidental Damage Protection 3-year Accidental Damage Protection 4-year Accidental Damage Protection 5-year Accidental Damage Protection
<b>MEMORY<sup>1,2,3</sup></b>	8 GB: 1 x 8 GB, DDR5, 5600 MT/s, single-channel 16 GB: 1 x 16 GB, DDR5, 5600 MT/s, single-channel 16 GB: 2 x 8 GB, DDR5, 5600 MT/s, dual-channel 32 GB: 1 x 32 GB, DDR5, 5600 MT/s, single-channel 32 GB: 2 x 16 GB, DDR5, 5600 MT/s, dual-channel 64 GB: 2 x 32 GB, DDR5, 5600 MT/s, dual-channel	<b>SYSTEMS MANAGEMENT</b>	Dell Client Command Suite: Streamline how you deploy drivers, configure BIOS, monitor devices and manage updates.  Dell Trusted Update Experience: Simplify how you update your endpoints with the latest BIOS, drivers and firmware versions.
<b>PRIMARY HARD DISK DRIVE<sup>1,5</sup></b>	256 GB, M.2 2230, Gen 4 PCIe NVMe, SSD, Class 35 512 GB, M.2 2230, Gen 4 PCIe NVMe, SSD, Class 35 512 GB, M.2 2230, Gen 4 PCIe NVMe, SED, Class 35 512 GB, M.2 2280, Gen 4 PCIe NVMe, SSD, Class 40 1 TB, M.2 2230, Gen 4 PCIe NVMe, SSD, Class 35 1 TB, M.2 2280, Gen 4 PCIe NVMe, SSD, Class 40 2 TB, M.2 2280, Gen 4 PCIe NVMe, SSD, Class 40	<b>TOUCHPAD</b>	Multi-touch gesture-enabled precision touchpad, seamless glass-integrated button
<b>VIDEO CARD</b>	<b>Integrated Graphics:</b> Intel® Arc™ Graphics (for Intel® Core™ H processors and requires 128-bit (dual-channel) memory with minimum of 16 GB memory) Intel® Graphics <b>Discrete Graphics:</b> NVIDIA® RTX™ 500 Ada Generation, 4 GB GDDR6 NVIDIA® RTX™ 1000 Ada Generation, 6 GB GDDR6 NVIDIA® RTX™ 2000 Ada Generation, 8 GB GDDR6	<b>PORTS</b>	2 Thunderbolt™ 4 (40 Gbps) with DisplayPort™ Alt Mode/USB Type-C/USB4/Power Delivery USB 3.2 Gen 1 port with PowerShare USB 3.2 Gen 1 port HDMI 2.1 port Universal audio port RJ45 Ethernet port
<b>DISPLAY</b>	15.6", FHD 1920x1080, 60Hz, IPS, Non-touch, Anti-Glare, 250 nit, 45% NTSC 15.6", FHD 1920x1080, 60Hz, IPS, Touch, Anti-Glare, 250 nit, 45% NTSC 15.6", FHD 1920x1080, 60Hz, IPS, Non-touch, Anti-Glare, 400 nit, 100% sRGB, Low Blue Light, super low power	<b>OPTICAL DRIVE</b>	No optical drive
<b>CASE COLOR</b>	Titan Gray	<b>SLOTS</b>	MicroSD-card slot Wedge-shaped lock slot Nano-SIM card slot (optional) Smart card reader slot (optional)
<b>PRIMARY BATTERY</b>	4-cell, 64 Whr, ExpressCharge™ 4-cell, 64 Whr, Long Life Cycle, ExpressCharge™, 3-year warranty 6-cell, 97 Whr, ExpressCharge™	<b>CAMERA</b>	1080p at 30 fps, FHD RGB HDR camera HDR, Dual-array microphones 1080p at 30 fps, FHD RGB-IR HDR camera camera, Dual-array microphones 1080p at 30 fps, FHD RGB-IR HDR camera, Dual-array microphones, Ambient light sensor, Express Sign-In™ with Presence Detection and Intelligent Privacy

FEATURE	TECHNICAL SPECIFICATION	FEATURE	TECHNICAL SPECIFICATION
<b>MODEL NUMBER<sup>1</sup></b>	Precision 3591		
<b>PRODUCTIVITY SW<sup>1</sup></b>	Dell Command   Update (DCU) Dell Digital Delivery - Cirrus Client Dell Optimizer Excalibur MS Office MS Office - single language MS Office Home Business Non-Premium (Japan) MS Office Personal Non-Premium (Japan) MS Office Pro Non-Premium (Japan) SupportAssist	<b>DIMENSIONS</b>	<b>US</b> Height (rear): 0.97 in. (24.70 mm) Height (front): 0.89 in. (22.70 mm) Width: 14.09 in. (357.80 mm) Depth: 9.19 in. (233.30 mm) Starting weight (minimum): 3.96 lb (1.79 kg)  <b>Rest of the world</b> Height (rear): 24.70 mm(0.97 in.) Height (front): 22.70 mm (0.89 in.) Width: 357.80 mm (14.09 in.) Depth: 233.30 mm (9.19 in.) Starting weight (minimum): 1.79 kg (3.96 lb)
<b>AUDIO SPEAKERS<sup>1</sup></b>	Stereo speakers with Realtek Waves MaxxAudio® 13.0, 2W x 2 = 4W total	<b>OPTICAL DRIVE OPTIONS</b>	External options only
<b>WIRELESS</b>	<b>WLAN:</b> Realtek Wi-Fi 6 RTL8852BE, 2x2, MIMO, 802.11ax, Bluetooth® 5.3 wireless card Intel®Wi-Fi 6E AX211, 2x2, MIMO, 802.11ax, Bluetooth® 5.3 wireless card <b>WWAN:</b> 4G CAT12 - Qualcomm® Snapdragon™ SDX12 Global LTE-Advanced (DW5825e), eSIM 5G - Qualcomm® Snapdragon™ X62 Global 5G (DW5932e), eSIM capable 5G - Qualcomm® Snapdragon™ X62 Global 5G (DW5932e), no eSIM	<b>KEYBOARD<sup>1</sup></b>	English US non-backlit keyboard with numeric keypad, 99-key English US backlit keyboard with numeric keypad, 99-key English International non-backlit keyboard with numeric keypad, 99-key English UK backlit keyboard with numeric keypad, 100-key Japanese backlit keyboard with numeric keypad, 103-key Canada (Bilingual) (MUI) backlit keyboard with numeric keypad, 99-key French (Canadian) non-backlit keyboard with numeric keypad, 100-key Spanish (Latin America) non-backlit keyboard with numeric keypad, 100-key Arabic backlit keyboard with numeric keypad, 99-key Chinese (Traditional) backlit keyboard with numeric keypad, 99-key English International backlit keyboard with numeric keypad, 99-key French (Canadian) backlit keyboard with numeric keypad, 99-key Greek backlit keyboard with numeric keypad, 99-key Hebrew backlit keyboard with numeric keypad, 99-key Korean backlit keyboard with numeric keypad, 99-key Russian backlit keyboard with numeric keypad, 99-key Thai backlit keyboard with numeric keypad, 99-key Ukrainian backlit keyboard with numeric keypad, 99-key Portuguese (Brazil) backlit keyboard with numeric keypad, 100-key Belgian backlit keyboard with numeric keypad, 100-key Bulgarian backlit keyboard with numeric keypad, 100-key Czech/Slovak (MUI) backlit keyboard with numeric keypad, 100-key Danish backlit keyboard with numeric keypad, 100-key Estonian backlit keyboard with numeric keypad, 100 key French (European) backlit keyboard with numeric keypad, 100-key German backlit keyboard with numeric keypad, 100-key Hungarian backlit keyboard with numeric keypad, 100-key Italian backlit keyboard with numeric keypad, 100-key Nordic (MUI) backlit keyboard with numeric keypad, 100-key Norwegian backlit keyboard with numeric keypad, 100-key Portuguese Iberian backlit keyboard with numeric keypad, 100-key Slovenian backlit keyboard with numeric keypad, 100-key Spanish (Castilian) backlit keyboard with numeric keypad, 100-key Spanish (Latin America) backlit keyboard with numeric keypad, 100-key Swedish/Finnish backlit keyboard with numeric keypad, 100-key Swiss/European (MUI) backlit keyboard with numeric keypad, 100-key Turkish backlit keyboard with numeric keypad, 100-key Turkish (F) backlit keyboard with numeric keypad, 100-key



FEATURE	TECHNICAL SPECIFICATION	FEATURE	TECHNICAL SPECIFICATION
MODEL NUMBER <sup>1</sup>	Precision 3591		
POWER	<b>Integrated Graphics only:</b> 100W AC adapter, USB Type-C, EPEAT, E5 <b>Integrated/Discrete Graphics:</b> 130W AC adapter, USB Type-C, EPEAT, E5	REGULATORY <sup>8,12</sup>	<a href="#">Product Safety, EMC and Environmental Datasheets</a> <a href="#">Dell Regulatory Compliance Home Page</a> <a href="#">Responsible Business Alliance policy</a>
INTEL RESPONSIVENESS TECHNOLOGIES	Intel® Rapid Storage Technology	CHIPSET	14th Generation Intel MTL-H
DOCKING	Dell Thunderbolt Dock – WD22TB4	INPUT	3Dconnexion SpaceMouse Pro Wireless - 3DX-700075 Dell Premier Multi Device Wireless Keyboard and Mouse KM7321W Dell Premier Rechargeable Wireless Mouse MS7421W Wacom Cintiq Pro 24 Creative Pen Display Touch - DTH-2420
MULTIMEDIA	Dell 24 Monitor - P2423D Dell EcoLoop Pro Backpack - CP5723 Dell Premier Multi Device Wireless Keyboard and Mouse KM7321W Dell Premier Rechargeable Wireless Mouse MS7421W Dell U3423WE Dell Webcam WB7022 Dell Webcam WB3023 Dell Wireless Headset - WL3024	SENSORS	Ambient Light Sensor Accelerometer in the base: ST Micro LIS2DW12TR Accelerometer in the hinge-up (Upsell config with Emza/ALS/IR camera): ST Micro LNG2DMTR

FEATURE	TECHNICAL SPECIFICATION	DESCRIPTION	
<b>MODEL NUMBER<sup>1</sup></b>	Precision 3591		
<b>HARDWARE &amp; FIRMWARE SECURITY (INCLUDED)</b>	Dell Trusted Device	Generates insights into the security state of a platform, monitoring changes to BIOS attributes, detecting possible tampering of BIOS firmware, and more.	
	Dell SafeBIOS	Verify the integrity of the BIOS with tamper detection and secure, off-host BIOS image capture.	
	Dell SafeBIOS Indicators of Attack	Scan for behavior-based threats for early detection by enabling telemetry integration with popular third-party security and endpoint management solutions. <i>Includes Microsoft Intune, Carbon Black Cloud, CrowdStrike, Splunk.</i>	
	Dell SafeBIOS Common Vulnerabilities & Exposures (CVE) Detection	Identify and address known BIOS vulnerabilities and patch devices swiftly. <i>*Available early 2024.</i>	
<b>HARDWARE &amp; FIRMWARE SECURITY (OPTIONAL)</b>	Dell SafeID	Secure end-user credentials. This unique hardware-based security solution provides a hardened and secure bank for storing and processing user credentials. Dependent on model. Credential security options may include: <ul style="list-style-type: none"> <li>Secure interaction with Imprivada for authenticating credentials on multi-user devices</li> <li>Finger Print Reader in Power Button tied to ControlVault 3</li> <li>ControlVault 3 Advanced Authentication with FIPS 140-2 Level 3 Certification</li> <li>Contacted Smart Card and ControlVault 3</li> <li>Contactless Smart Card, NFC, and ControlVault 3</li> <li>SED SSD NVMe, SSD and HDD (Opal and non-Opal) per SDL</li> <li>FIPS 201 Full Scan Finger Print Reader and ControlVault</li> <li>Trusted Platform Module (TPM) 2.0 discrete FIPS 140-2 certification for TPM</li> </ul>	
	Dell Secured Component Verification	Provides assurance that the device and its components remain secure from factory to first boot. On-device and cloud-based options available. Availability varies by region.	
	Detect tampering with this supply chain assurance offering. Availability varies by region.	Dell Secured Component Verification.	
	Tamper-evident packaging	Detect tampering with this supply chain assurance offering. Availability varies by region.	
	Hard drive wipes	Sanitize the hard drive in accordance with National Institute of Standards and Technology (NIST) guidelines with this supply chain assurance offering. Availability varies by region.	
	Dell SafeShutter	Ensure user privacy with webcam shutter.	
	Intel ME Verification	Verify the integrity of critical firmware using a secure off-host source. Requires Intel vPro.	
	Chassis intrusion switch	Remotely detects hardware tampering and is integrated with Dell SafeBIOS Indicators of Attack.	
	Kensington Security Slot™	Device locking option helps reduce the risk of a data breach. Standard slot that can be paired with a standard security cable lock. Spec varies by model: <ul style="list-style-type: none"> <li>Dell Fixed Workstations (Desktops): Kensington Security Slot™ (T-bar)</li> <li>Dell Laptops: Kensington Security Slot™ (Wedge)</li> </ul>	
	Fingerprint reader	Fingerprint reader in Power button tied to ControlVault 3+ secures end-user credentials.	
	OPAL drive / Self-encrypting drive (SED)	Hardware-based full disk encryption that protects user data without storing encryption keys in RAM where it can be accessed by malicious parties.	
	SPI Flash Tamper Detection Circuit	Detects and prevents tampering with BIOS SPI flash chips on the motherboard.	
	<b>SOFTWARE SECURITY (OPTIONAL)</b>	Dell SafeGuard & Response: CrowdStrike, Carbon Black, Secureworks	Threat detection and response/remediation.
		Dell SafeData: Absolute	Self-healing for applications and networks .
Dell SafeData: Netskope		Cloud and network data protection.	
McAfee Business Protection		Simple, automated, all-in-one security made for small businesses.	

**PRODUCT DISCLAIMERS:**

[1. Offering may vary by region. Some items may be available after product introduction. For complete details, refer to the Owner's Manual published on \[www.dell.com/support\]\(http://www.dell.com/support\).](#)

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. Please refer to [www.epeat.net](http://www.epeat.net) for specific country registration rating and participation.

8. 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).

9. 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.

10. Dell Services: Availability and terms of Dell Services vary by region. For more information, visit [www.dell.com/servicedescriptions](http://www.dell.com/servicedescriptions).

11. 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).