PRECISION
7670
Power your creative zone.

Dell Technologies
**PRECISION 7670**

**Flexible chassis design**

Power your purpose with a scalable 16” mobile workstation that is available in a thin or performance chassis.

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

**16:10 aspect ratio (up to HDR500 OLED), display with narrower bezel, 500nits, PremierColor, 100% DCI-P3, Touch and ComfortView Plus (LBL) options**

**Pro 2.5 keyboard**

**Optional Smart Card Reader**

**Large click pad with optional NFC reader**

**Flexible design**

Two chassis size available, determine by performance requirement

- **Up to 180W/240W adapter**
- **Up to 93Whr battery**

**Up to 12TB of storage, with 3 Gen 4 M.2 slots**

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

**Chassis intrusion sensor**

**WiFi 6E**

**Bluetooth 5.2**

**Optional 5G Mobile Broadband**

**Dell Optimizer for Precision**

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

**Advanced Thermals**

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

**Sustainability**

- EPEAT Gold Registered
- 100% recycled plastics & cardboard contained in packaging
Intelligent performance

Intel® Core™ i5-i9, up to 16 core (8P + 8E) (55W), up to next gen 16GB NVIDIA RTX A5500, (3) M.2 slots PCIe Gen 4 SSD (12TB)/RAID 5 support, up to 128GB of 4800MHz via CAMM, (2) Thunderbolt™ 4, (2) USB 3.2 Type A and (1) Type C Display Port

Dell Optimizer for Precision

Immersive productivity and design

Pro 2.5 keyboard, large click pad, camera shutter, proximity and ambient light sensors, chassis intrusion sensor

Up to 16:10, 4K (HDR500) OLED display with narrower bezel, 500nits, PremierColor, 100% DCI-P3, Touch and ComfortView Plus (LBL) options

Intel WiFi 6E 6GHz/BT5.2/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*. 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 ExpressResponse™ 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 features³. 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 ExpressSign-in² – the proximity sensor detects your presence to wake on approach before Windows Hello logs you in via facial recognition.

**Improved performance**

ExpressResponse™ analyzes how you use your preferred apps⁷ to boost performance.

**Unmatched connectivity**

Optimized for the best connectivity, ExpressConnect™ 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.

**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.
Experience clarity, productivity and connectivity on this 37.5” ultrawide WQHD+ curved hub monitor with 95% DCI-P3 color and integrated speakers. Multi-task seamlessly across 3 devices with this premium full-size keyboard and sculpted mouse combo featuring programmable shortcuts and 36 months battery life. Create phenomenal 4K HDR content on the world’s first professional monitor with 2K mini-LED direct backlit dimming zones.* 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. Protect your laptop from impact with this earth friendly backpack that is lined with EVA foam cushioning. Easily convert from backpack to briefcase mode and travel with ease. 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 UltraSharp 38 Curved USB-C Hub Monitor - U3821DW Dell UltraSharp 32 HDR PremierColor Monitor - UP3221Q Dell Premier Multi-Device Wireless Keyboard and Mouse - KM7321W Dell Performance Dock - WD19DCS Dell Premier Wireless ANC Headset - WL7022 Dell Pro Hybrid Briefcase Backpack 15 - PO1521HB Dell Mobile Adapter Speakerphone - MH3021P HTC VIVE Cosmos 3D VR Headset - MFG 99HARL000-00 Dell part AA809644 Dell USB-C Mobile Adapter - DA310 Wacom Cintiq Pro 24 Creative Pen Display. Touch - DTH-2420 3Dconnexion SpaceMouse Wireless - 3DX-700076 RECOMMENDED ACCESSORIES

*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.

**Sustainable Materials**

up to 61%
Recycled plastic in fixed workstations and up to 21% in mobile workstations. Oceanbound plastic is also used in the components of select Precisions.

**Packaging Innovation**

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

**ECOLABELS**

35+
EPEAT registered products

8.0
ENERGY STAR® throughout the portfolio

[1] EPEAT registered products
[2] ENERGY STAR®
**FEATURE**

**TECHNICAL SPECIFICATION**

**MODEL NUMBER**

Precision 7670

**PROCESSOR OPTIONS**

- 12th Generation Intel® Core™ i5-12600HX vPro®, 8MB cache, 16 threads, 12 cores (4 P cores & 8 E cores) P cores 2.50GHz to 4.60GHz, E cores 1300GHz to 3.30GHz, 55W
- 12th Generation Intel® Core™ i7-12800HX vPro®, 25MB cache, 24 threads, 16 cores (8 P cores & 8 E cores) P cores 2.10GHz to 4.80GHz, E cores 1500GHz to 3.40GHz, 55W
- 12th Generation Intel® Core™ i9-12900HX vPro®, 30MB cache, 24 threads, 18 cores (8 P cores & 8 E cores) P cores 2.30GHz to 5.00GHz, E cores 1.70GHz to 3.80GHz, 55W

**OPERATING SYSTEM**

- Windows 10 Home, 64-bit
- Windows 10 Professional, 64-bit
- Windows 10 Enterprise, 64-bit
- Windows 10 Pro Education, 64-bit
- Windows 10 Pro China, 64-bit
- Windows 11 Pro, 64-bit with DGR
- Windows 11 Pro National Education, 64-bit
- Windows 11 Home, 64-bit with DGR
- Red Hat Enterprise Linux 8.6

**MEMORY OPTIONS**

- 16GB, 1 x 16GB, DDR5, 4800MHz, non-ECC, CAMM module
- 32GB, 1 x 32GB, DDR5, 4800MHz, non-ECC, CAMM module
- 64GB, 1 x 64GB, DDR5, 4800MHz, non-ECC, CAMM module
- 128GB, 1 x 128GB, DDR5, 4800MHz, non-ECC, CAMM module
- 8GB, 1 x 8GB, DDR5, 4800MHz, non-ECC, SODIMM
- 16GB, 1 x 16GB, DDR5, 4800MHz, ECC, SODIMM
- 16GB, 2 x 8GB, DDR5, 4800MHz, non-ECC, SODIMM, dual-channel
- 32GB, 2 x 16GB, DDR5, 4800MHz, ECC, SODIMM, dual-channel
- 32GB, 2 x 16GB, DDR5, 4800MHz, non-ECC, SODIMM, dual-channel
- 64GB, 2 x 32GB, DDR5, 4800MHz, non-ECC, SODIMM, dual-channel

**Note:** CAMM memory meets the standard of dual channel, even exceeds it, even though it is not in a standard 2x memory chip/slot/module format. DDR4 has two 64-bit channels (dual channel) but CAMM with DDR5 has four 32-bit channels (quad channel).

**PRIMARY HARD DRIVE**

- M.2 2230, 256GB, PCIe NVMe Gen4 x4, Class 35 SSD
- M.2 2280, 1GB, PCIe NVMe Gen4 x4, Class 35 SSD
- M.2 2280, 1TB, PCIe NVMe Gen4 x4, Class 40 SSD
- M.2 2280, 2TB, PCIe NVMe Gen4 x4, Class 40 SSD
- M.2 2280, 4TB, PCIe NVMe Gen4 x4, Class 40 SSD
- M.2 2280, 512GB, PCIe NVMe Gen4 x4, Class 40 SSD
- M.2 2280, 1TB, PCIe NVMe Gen4 x4, Class 40 SSD, self-encrypting drive
- M.2 2280, 1TB, PCIe NVMe Gen4 x4, Class 40 SSD, self-encrypting drive
- M.2 2280, 1TB, PCIe NVMe Gen4 x4, Class 40 SSD, self-encrypting drive
- M.2 2280, 1TB, PCIe NVMe Gen4 x4, Class 40 SSD, self-encrypting drive

**GRAPHICS**

- Integrated: Intel® UHD Graphics
- Discrete: (optional)
  - NVIDIA® RTX A4000, 4GB, GDDR6 (thin chassis)
  - NVIDIA® RTX A2000, 8GB, GDDR6 (thin chassis)
  - NVIDIA® RTX A4500, 16GB, GDDR6 (performance chassis)
  - NVIDIA® RTX A6500, 16GB, GDDR6 (performance chassis)
  - NVIDIA® RTX 6000, 32GB, GDDR6 (performance chassis)

**DISPLAY OPTIONS**

- 16-inch, FHD+ 1920 x 1200, 60Hz, anti-glare, non-touch, 99% DCIP3, 500 nits, wide-viewing angle, LBL, WLED
- 16-inch, UHD+ 3840 x 2400, 60Hz, anti-glare, touch, 100% DCIP3, 400 nits, wide-viewing angle, LBL, OLED
- Aluminum Titan Grey

**CASE COLOR**

- Dell Support Assist
- DDD: (Dell Developed Recovery Environment)
- Dell Optimizer for Precision
- Dell Support Center
- Intel® WNS Direct

**SECURITY SOFTWARE**

- Dell Client Command Suite
- Optional Dell Data Security and Management Software
- 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

**FEATURE**

**TECHNICAL SPECIFICATION**

**WARRANTY**

- 3-year hardware service with on-site/in-home service after remote diagnosis
- 4-year hardware service with on-site/in-home service after remote diagnosis
- 5-year hardware service 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 Next Business Day on-site service
- 4-year ProSupport Plus with Next Business Day on-site service
- 5-year ProSupport Plus with Next Business Day on-site service

**ACCIDENTAL DAMAGE SERVICES**

- 3-year Accidental Damage Service
- 4-year Accidental Damage Service
- 5-year Accidental Damage Service

**KEYBOARD**

- English US and Canada, Standard, backlit keyboard with 10-key numeric keypad, 99 keys
- English UK, Standard, backlit keyboard with 10-key numeric keypad, 103 keys
- Japan, Standard, backlit keyboard with 10-key numeric keypad, 106 keys

**PORTS**

- (2) Thunderbolt™ 4 ports with (USB Type-C™)
- USB 3.2 Gen 2 Type-C port with DP-alt mode
- USB 3.2 Gen 1 port
- HDMI 2.0a port (UMA)/1 HDMI 2.1 port (DGPU)
- RJ-45 Ethernet port
- Headset (headphone and microphone combo) port
- SmartCard Reader
- MicroSIM-card slot
- SD-card slot
- Wedge-shaped lock slot

**DIMENSIONS**

- Thin:
  - Height: 0.98in. (24.70mm)
  - Height (rear): 0.92in. (23.30mm)
  - Height (front): 0.88in. (22.30mm)
  - Width: 14.02in. (356.00mm)
  - Depth: 10.18in. (258.34mm)
  - Weight: 6.76lbs (2.53kg)

**WEIGHT:**

- 5.90lb (2.67kg)

**BATTERY**

- 6-cell, 93WHr, Lithium-ion, ExpressCharge™ and ExpressChargeBoost

**SLOTS**

- ExpressChargeBoost
- RJ-45 Ethernet port
- HDMI 2.0a port (UMA)/1 HDMI 2.1 port (DGPU)

**SLOTS**

- (2) Thunderbolt™ 4 ports with (USB Type-C™)
- USB 3.2 Gen 2 Type-C port with DP-alt mode
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- HDMI 2.0a port (UMA)/1 HDMI 2.1 port (DGPU)
- RJ-45 Ethernet port
- Headset (headphone and microphone combo) port
- SmartCard Reader
- MicroSIM-card slot
- SD-card slot
- Wedge-shaped lock slot

**CAMERA**

- 1080p at 30fps, FHD, RGB, with Omni-directional digital Microphone
- 1080i at 30fps, FHD, IR, with Omni-directional digital Microphone + Proximity sensor

**AUDIO & SPEAKERS**

- Stereo speakers with Dialog, 2W x 4 = 8W total

**WIRELESS**

- Wireless: Intel® AX211, 2x2 MIMO, 2400Mbps, 2.4GHz/5GHz/6GHz, Wi-Fi 6E (Wi-Fi 802.11ax), Bluetooth® 5.2
- Mobile broadband: Qualcomm 5G X55, Up to 3Gbps, 7x20MHz

**BATTERY**

- 6-cell, 83Whr, Lithium-ion, ExpressCharge™ 2.0
- 6-cell, 95Whr, Lithium-ion, ExpressCharge™ and ExpressChargeBoost

**POWER OPTIONS**

- SFF 180W, 7.40mm
- SFF 240W, 7.40mm
## PRECISION 7670

### FEATURE TECHNICAL SPECIFICATION

#### REGULATORY
- **Product Safety, EMC and Environmental Datasheets:**
- **Dell Regulatory Compliance Home Page:**
- **Dell and the Environment:**

#### CHIPSET
- Intel® WM690

#### INTEL RESPONSIVENESS TECHNOLOGIES
- Intel® Rapid Storage Technology

#### HARDWARE SECURITY
- 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 HHD (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

#### DOCKING
- (SOLD SEPARATELY)
  - Dell Performance Dock - WD19DCS

#### MULTIMEDIA
- (SOLD SEPARATELY)
  - Dell Premier Wireless ANC Headset - WL7022
  - Dell Mobile Adapter Speakerphone - MA921P
  - HTC Vive Cosmos 3D VR Headset - MFG 99MARL000-00 Dell part AA809644

#### RECOMMENDED ACCESSORIES
- (SOLD SEPARATELY)
  - Dell Premier Multi-Device Wireless Keyboard and Mouse - KM7321W
  - Dell 7-in-1 USB-C Multiport Adapter - DA390
  - Dell Pro Hybrid Briefcase Backpack 15 - PO1521HP
  - Dell UltraSharp 38 Curved USB-C HUB Monitor - US821D
  - 3Dconnexion SpaceMouse Wireless - 3DX-700066
  - Wacom Cintiq Pro 24 Creative Pen Display Touch - DTH-2420
  - Optional 10-Finger Touch Display
  - Large Clickpad - no buttons
  - Spill Resistant Non-Backlit Keyboard
  - Spill Resistant Backlit Keyboard

#### INPUT
- 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

#### SYSTEMS MANAGEMENT
- 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 | Display (DCP)
- Dell Command | Integration Suite for System Center 5.0 (DCIS) with vPro®
- Dell Command | Intel® vPro™ Out of Band (DCV)
- Dell Command | PowerShell Provider 2.0
- Dell Command | Display Driver Pack Catalog 1.0