Co-engineered with NVIDIA



Built around NVIDIA RTX Spark™

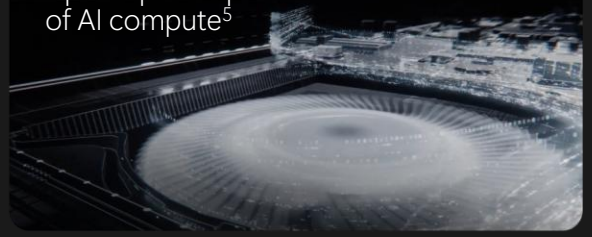
15-inch PixelSense™ Ultra touchscreen display[1,2]



Up to 2000 nits of peak HDR brightness[3]

High performance, plugged in or on battery[4]

Up to 1 petaflop of AI compute[5]

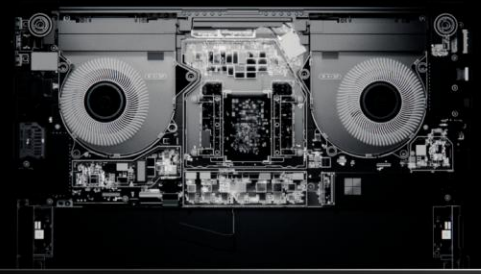


Microsoft Surface

SURFACE LAPTOP ULTRA



Run larger models that don't fit in traditional VRAM[6]



Up to 128GB unified memory and CUDA™ support[6]

All-day battery, under 4.5 lbs and 18mm thin[7,8]



The ports makers need



Uncompromising craft meets raw power



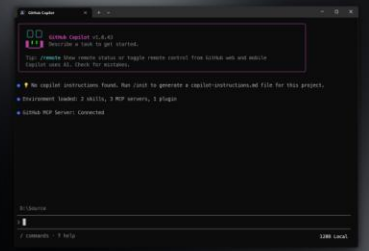


Platinum or Nightfall[9]

Creative AI workflows



Accelerate your coding with agents



Game ready



Ray tracing and NVIDIA DLSS

Our largest ever haptic touchpad



Microsoft Surface

Released
October 2026

Surface Laptop Ultra for Business

15-inch (NVIDIA)

Co-engineered with NVIDIA.
Built around NVIDIA RTX Spark™



Access to the CUDA™ ecosystem — one of the industry's most widely used platforms for accelerated computing — alongside the full Windows AI stack to develop and run demanding AI applications.[8]

The ports makers need includes USB-C®, USB-A, HDMI, headphone jack, and an SD card reader

Power for professional workloads

- Up to 1 petaflop of AI performance[5]
- Run AI agents up to 120 billion parameters – locally[6]
- Up to 128 GB of unified memory the GPU draws from[1]
- Up to 6144-core GPU and 20-core CPU
- Up to 2.5x more thermal power capacity than Surface Laptop (8th Edition)

Sharpest and brightest display for pixel precision

- 15-inch PixelSense™ Ultra touchscreen[2]
- The brightest, sharpest, most vivid display on a Surface Laptop
- Up to 2,000 nits peak HDR brightness[10]
- High pixel density (262 PPI) keeps text, UI elements, and visual assets sharp

Crafted for makers by makers

- Weighs under 4.5 lbs
- 30% larger touchpad with advanced haptics[7]
- User-removeable SSD to upgrade, replace, or secure your storage[4]
- Drive up to three 4k external displays natively[9]
- Up to 15 hours of battery life[3]

Secure and manageable for critical work

- A memory-safe security architecture combines a Rust-based firmware foundation, Secure Embedded Controller, discrete TPM, and Microsoft Pluton to help protect device integrity from boot through runtime
- Local AI processing gives more control over how and where sensitive data is processed

[1]Memory varies by configuration. 128GB total system memory in a unified memory architecture dynamically shared between CPU and GPU. Maximum amount addressable by the GPU depends on system configuration and workload and is less than the total. [2]Optimized for touch interaction only. Pen input and compatibility with Surface Pen, Surface Slim Pen, or similar accessories is not supported. [3]Based on local video playback test. Testing conducted by Microsoft September 2026 using preproduction software and preproduction Surface Laptop Ultra with NVIDIA RTX Spark™ N1X 6144-core GPU, 64Gb RAM and 1TB storage devices. Testing consisted of full battery discharge during video playback of a .mov file through the Windows Media Player application in 1080p at 24 FPS. All settings were default except screen brightness set to 150 nits with auto-brightness disabled. Wi-Fi was connected to a network. Battery life varies significantly with settings, usage, and other factors. [4]Drive Retention is only available on Microsoft Surface devices in which the Drive is marketed as removable in the technical specifications. Devices returned without a drive may incur a replacement fee unless covered by a Drive Retention benefit (sold separately). Available plans and options may vary by device and region. See Surface Warranty, Protection Plans & Support – Microsoft Surface for Business for details. [5]The NVIDIA RTX Spark™ delivers up to 1 petaflop of peak AI compute (FP4) on select configurations; actual performance varies by model, app, and settings. source Slim Laptops & Small Desktops | NVIDIA RTX Spark [6]Based on 1 Theoretical FP4 TOPS using the sparsity feature See; NVIDIA Corporation - NVIDIA and Microsoft Reinvent Windows PCs for the Age of Personal AI [7]Compared to Surface Laptop 8th Edition. [8]CUDA™ is a registered trademark by NVIDIA. [9]External monitor support requires compatible displays, cables, and accessories. See Surface tested peripherals page for compatibility information. [10]HDR requires HDR content and enabling HDR in device settings.

Microsoft Surface

Surface Laptop Ultra for Business

15-inch (NVIDIA)

PROCESSOR

- NVIDIA RTX Spark™ N1X with 5120-core GPU and 18-core CPU
- NVIDIA RTX Spark™ N1X with 6144-core GPU and 20-core CPU

NPU

- NVIDIA NPU

GRAPHICS

- NVIDIA Blackwell RTX 5120-core GPU
- NVIDIA Blackwell RTX 6144-core GPU

MEMORY AND STORAGE[1]

- **Memory options:** 24GB, 32GB, 48GB, 64GB, 128GB LPDDR5x unified memory
- **Storage options:**
  - Removable[2] solid-state drive (Gen 4 SSD): 512GB
  - Removable[2] solid-state drive (Gen 5 SSD): 1TB, 2TB

DISPLAY

- Touchscreen: 15-inch[6] PixelSense™ Ultra display[8]
- Resolution: 3270 x 2180 (262 PPI)
- Aspect ratio: 3:2
- Contrast ratio: 100,000:1
- Dynamic refresh rate up to 120Hz
- Color profile:
  - SDR mode: sRGB and Vivid
  - HDR mode: HDR[13]
- Color accuracy: DCI-P3 100%, D65 white point
- Individually color-calibrated display
- Adaptive color
- Auto color management
- Touch: 10-point multi-touch
- Dolby Vision IQ™ support[9]
- Strengthened glass display
- Anti-reflective, ISO 9241-307 certified[11]
- Brightness:
  - SDR: 1000 nits maximum (typical)
  - HDR: 2000 nits peak luminance[13]

SIZE AND WEIGHT[14]

- Length: 12.95 inch (328.8 mm)
- Width: 9.40 inch (238.7 mm)
- Height:
  - Without feet: 0.71 Inch (17.99 mm)
  - With feet: 0.75 inch (19.16 mm)
- Weight: 4.41 lbs (2.0 kg)

BATTERY LIFE

- Up to 15 hours of local video playback[74]
- Up to 12 hours of active web usage[75]

SECURITY

- Windows 11 Secured-core PC
- Enterprise grade security with TPM 2.0 chip and BitLocker support
- Windows Hello facial recognition with Enhanced Sign-In Security
- Memory safe Secured Embedded Controller built with open source ODP code

Firmware

- Surface UEFI built with Patina and Project Mu open-source components available through the Open Device Partnership (ODP)
- Firmware built with Secured Embedded Controller project open-source components available through ODP
- Updated through Windows Update

CAMERA

- Full HD front-facing Surface Studio Camera
  - 1080p Full HD camera
- Windows Hello face authentication camera with Enhanced Sign-in Security

AUDIO

- Dual Studio Mics
- Quad Omnisonic® speakers with Dolby Atmos®[20]
- Support for Bluetooth® LE Audio

PORTS AND CHARGING

- 2 x USB-C® with USB4®
- 1 x USB-C® with USB4®
- All USB-C® ports support:
  - 140W Charging
  - 40 Gbps Data transfer
  - DisplayPort 2.1 supporting up to three 4K monitors at 60 Hz[21]
- Supports fast charging with minimum 115W charger via USB-C®[22]
- HDMI 2.1b
- USB-A 3.1
- SD card reader
- 3.5 mm headphone jack

NETWORK AND CONNECTIVITY

- Wi-Fi 7[26]
- Bluetooth® Core 5.4 technology

[1]System software uses significant storage space. Available storage is subject to change based on system software updates and apps usage. 1GB = 1 billion bytes. 1TB = 1,000 GB. Surface.com/Storage more details. [2]Drive Retention is only available on Microsoft Surface devices in which the Drive is marketed as removable in the technical specifications. Devices returned without a drive may incur a replacement fee unless covered by a Drive Retention benefit (sold separately). Available plans and options may vary by device and region. See Surface Warranty, Protection Plans & Support – Microsoft Surface for Business for details.[6]Surface display has rounded corners within a standard rectangle. When measured as a standard rectangular shape the screen is 15" diagonally (actual viewable area is less). [8] Optimized for touch interaction only. Pen input and compatibility with Surface Pen, Surface Slim Pen, or similar accessories is not supported. [9]Requires Dolby Vision® encoded content and video. [11]The Surface Laptop Ultra display has been designed to minimize unwanted reflections and has been certified by TÜV SÜD to meet the requirements of ISO 9241-307. [13]HDR requires HDR content and enabling HDR in device settings.[14]Might vary depending on manufacturing processes. [20]Requires Dolby Atmos® encoded content/audio. [21]External monitor support requires compatible displays, cables, and accessories. See Surface tested peripherals page for compatibility information. [22]In select markets, only specific configurations come with 140W Surface Power Supply. Fast charging is supported with minimum 115W Surface Power Supply or minimum 115W USB Type-C® PD charger or higher, sold separately. Testing conducted by Microsoft in December 2024. For details on fast charging see USB-C® and fast charging for Surface - Microsoft Support. [26]6GHz band not available in all regions. [74]Based on local video playback test. Testing conducted by Microsoft September 2026 using preproduction software and preproduction Surface Laptop Ultra with NVIDIA RTX Spark™ N1X 6144-core GPU, 64Gb RAM and 1TB storage devices. Testing consisted of full battery discharge during video playback of a .mov file through the Windows Media Player application in 1080p at 24 FPS. All settings were default except screen brightness set to 150 nits with auto-brightness disabled. Wi-Fi was connected to a network. Battery life varies significantly with settings, usage, and other factors. [75]Based on active web browsing test. Testing conducted by Microsoft September 2026 using preproduction software and preproduction Surface Laptop Ultra with NVIDIA RTX Spark™ N1X 6144-core GPU, 64Gb RAM and 1TB storage devices. Testing consisted of full battery discharge while accessing twelve popular websites over multiple open tabs through the browser. All settings were default except screen brightness set to 150 nits with auto-brightness disabled. Wi-Fi was connected to a network. Battery life varies significantly with settings, usage, and other factors.

Microsoft Surface

Surface Laptop Ultra for Business

15-inch (NVIDIA)

SOFTWARE

- Windows 11 Pro
- Preloaded Microsoft 365 Apps[33]
- Microsoft 365 Business Standard, Microsoft 365 Business Premium, or Microsoft 365 Apps 30-day trial[34]

ACCESSIBILITY

- Surface precision haptic touchpad with adaptive touch mode
- Compatible with Surface Adaptive Kit and Microsoft adaptive accessories[36]
- Includes Windows Accessibility Features – Learn more
- Discover more Microsoft Accessible Devices & Products

SUSTAINABILITY

Designed with sustainability in mind

More recycled materials

- 66% recycled content in the enclosure, including 100% recycled aluminum alloy and 100% recycled rare earth metals[37]
- 100% recycled cobalt in battery[38]
- 100% recycled tin in solder[39]
- 100% recycled gold in the motherboard[39]
- 100% recycled copper in the motherboard[39]

Thoughtful packaging

- 87% recycled content in wood-based fiber packaging[46]
- 50% of our virgin paper sourced comes from responsibly managed forests[47]

Energy efficient

ENERGY STAR® certified

Repairability

Clear visual icons and built-in access to repair instructions[41]

Surface Trade-in

We make trade-in convenient and secure for our commercial customers in the USA at Microsoft Trade In Program.

Microsoft is committed to be carbon negative, water positive, and achieve zero waste by 2030. Learn more about how we design with sustainability in mind at Microsoft Surface Sustainability.

SERVICEABILITY

Replacement components include:[41]

- Display assembly (including camera)
- Keyboard assembly
- Touchpad
- Removable solid-state drive
- Battery
- Motherboard (including main processor and main memory)
- Fan
- Speakers
- Enclosure (bucket)
- Audio jack
- USB Mag-C port
- USB-C ports
- USB-A port
- Feet
- Screw kit
- Device Entry Kit

EXTERIOR

- Casing: Anodized aluminum
- Colors: Platinum and Nightfall[42]

SENSORS

- Ambient color sensor
- Accelerometer
- Gyroscope

WHAT'S IN THE BOX

- Surface Laptop Ultra
- Quick Start Guide
- Safety and warranty documents

KEYBOARD LAYOUT

- Activation: Moving (mechanical) keys
- Layout: QWERTY, full row of function keys (F1 – F12)
- Windows key and dedicated buttons for media controls, screen brightness
- Automatic keyboard backlight
- Copilot key[43]
- Precision haptic touchpad

WARRANTY[44]

- 1-year limited hardware warranty

ENERGY USAGE [JAPAN]

Surface Laptop Ultra 構成：12 区分 24.31 kWh/年(AAA)

RADIO FREQUENCY [FRANCE][i]

Le débit d'absorption spécifique (DAS) local quantifie l'exposition de l'utilisateur aux ondes électromagnétiques de l'équipement concerné. Le DAS maximal autorisé est de 0.129W/kg pour le tronc et de 0.129W/kg pour les membres.

ENERGY EFFICIENCY [KOREA]

제품은 에너지소비효율등급 중 최저소비효율 기준을 만족합니다.

[33]Sold separately. Software license required for some features. [34]Activation required. If your device is managed by your organization's IT department, contact your IT administrator for activation. After 30 days, you will be charged the applicable monthly or annual subscription fee. Credit card required. Cancel any time to stop future charges. See https://aka.ms/m365businesstrialinfo. [36]Sold separately. [37]Enclosure includes A Cover, C bucket, D Cover. 100% recycled aluminum alloy in bucket. 100% recycled rare earth metals in magnets. Based on validation performed by Underwriter Laboratories, Inc. using Environmental Claim Validation Procedure (ECVP) for Recycled Content, UL ECVP 2809-2, Second Edition, dated June 20, 2024.[38]Device (excluding power supply unit) contains 4.2% recycled cobalt, consisting of 100% recycled cobalt in battery cell. Based on validation performed by Underwriter Laboratories, Inc. using Environmental Claim Validation Procedure (ECVP) for Recycled Content, UL ECVP 2809-2, Second Edition, dated June 20, 2024. [39]Device (excluding power supply) contains 3.4% recycled content, consisting of 90% recycled stainless in Keyboard Bracket, 100% recycled rare earth metals in magnets, 100% recycled tin in solder, 100% recycled copper and 100% recycled gold in the motherboard. Based on validation performed by Underwriter Laboratories, Inc. using Environmental Claim Validation Procedure (ECVP) for Recycled Content, UL ECVP 2809-2, Second Edition, dated June 20, 2024. [41]Replacement components available through Surface Commercial authorized device resellers. Components can be replaced on-site by a skilled technician following Microsoft's Service Guide. Microsoft tools (sold separately) may also be required. Availability of replacement components and service options may vary by product, market and over time. See Surface service options - Surface | Microsoft Learn. Opening and/or repairing your device can present electric shock, fire and personal injury risks and other hazards. Use caution if undertaking do-it-yourself repairs. Unless required by law, device damage caused during repair will not be covered under Microsoft's Hardware Warranty or protection plans. [42]Colors available on selected models only. Available colors, sizes, finishes, and processors may vary by store, market, and configuration. [43]Copilot key feature availability varies by market, see key support. [44]Microsoft's Limited Warranty is in addition to your consumer law rights. [46]Recycled content calculation based on IEEE Std 1680.1-2018. IEEE Standard for Environmental and Social Responsibility Assessment of Computers and Displays. 4.7.3.1 Required—Recycled content in wood-based fiber packaging. [47]Based on FSC Certification [i]Le débit d'absorption spécifique (DAS) local quantifie l'exposition de l'utilisateur aux ondes électromagnétiques de l'équipement concerné. Le DAS maximal autorisé est de 2 W/kg pour la tête et le tronc et de 4 W/kg pour les membres. Consultez cette page pour en savoir plus.