



Copilot+PC

# Surface Laptop

Fact Sheet

May 2024



# The fastest, most intelligent Surface Laptop ever.

The new Surface Laptop is not just faster—it's smarter. Powered by Snapdragon® X Elite and Plus processors with an industry leading NPU, the new Surface Laptop unlocks new levels of speed and all-new AI experiences that enhance productivity and creativity. Experience visuals like never before on its stunning touchscreen display with razor-thin bezels. This light and stylish laptop delivers exceptionally long battery life, ultimate typing comfort now with a haptic touchpad, and a full HD Surface Studio Camera.



## Powerful performance and exceptional battery life

Lightning-fast speed and AI-accelerated power for ultimate multitasking and the longest battery life on any Surface.

## Unlock new superpowers

Now with a Copilot key for instant access to your AI assistant, and new enhanced AI features like Recall, Cocreator, Windows Studio Effects, and Live Captions with live translation.

## Immersive display with touch

Brilliant touchscreen display with HDR for brighter brights, darker darks, and a wider range of colors, Dolby Vision IQ™ for cinematic viewing and 120Hz refresh rate for smoother motions.

## AI-enhanced camera & audio

Surface Studio Camera with AI-powered Windows Studio Effects and enhanced sound with premium Omnisonic® Speakers, Dolby® Atmos, and Studio Mics to amplify your impact.

## Sleek and modern design

An evolution of our iconic Laptop design, now with razor-thin bezels. Available in a choice of two sizes (13.8" and 15") and four stunning colors – Platinum, Black, Sapphire, and Dune.



Surface Laptop 13.8"  
7<sup>th</sup> Edition



Surface Laptop 15"  
7<sup>th</sup> Edition

Processor



Snapdragon® X Plus (10 Core) X1P64100  
Snapdragon® X Elite (12 Core) X1E80100



Snapdragon® X Elite (12 Core) X1E80100

Neural Processing Unit (NPU)

Qualcomm® Hexagon™ with 45 TOPS

Graphics

Qualcomm® Adreno™ GPU

Memory and Storage<sup>1</sup>

Memory options:  
16GB, 32GB, 64GB LPDDR5x RAM

Storage options:  
Removable<sup>2</sup> solid-state drive (Gen 4 SSD) 256GB, 512GB, 1TB

## Display



Touchscreen: 13.8" PixelSense Flow™ Display

Resolution: 2304 x 1536 (201 PPI)

Aspect ratio: 3:2

Contrast ratio 1400:1

Dynamic refresh rate: up to 120Hz

Color profile: sRGB and Vivid

Individually color-calibrated display

Adaptive color

Adaptive contrast

Auto color management

Touch: 10-point multi-touch

Dolby Vision IQ™<sup>3</sup>

Corning® Gorilla® Glass 5

SDR (Brightness): 600 nits maximum (typical)

HDR<sup>4</sup> (Brightness): 600 nits peak luminance

Touchscreen: 15" PixelSense Flow™ Display

Resolution: 2496 x 1664 (201 PPI)

Aspect ratio: 3:2

Contrast ratio: 1300:1

Dynamic refresh rate: up to 120Hz

Color profile: sRGB and Vivid

Individually color-calibrated display

Adaptive color

Adaptive contrast

Auto color management

Touch: 10-point multi-touch

Dolby Vision IQ™<sup>3</sup>

Corning® Gorilla® Glass 5

SDR (Brightness): 600 nits maximum (typical)

HDR<sup>4</sup> (Brightness): 600 nits peak luminance

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## Size and weight<sup>5</sup>

**Length:** 11.85 inches (301 mm)

**Width:** 8.67 inches (220 mm)

**Height:** 0.69 inches (17.5 mm)

**Weight:** 2.96 lbs (1.34 kg)

**Length:** 12.96 inches (329 mm)

**Width:** 9.41 inches (239 mm)

**Height:** 0.72 inches (18.29 mm)

**Weight:** 3.67 lbs (1.66 kg)



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## Battery life

Up to 20 hours of local video playback<sup>6</sup>

Up to 13 hours of web browsing<sup>7</sup>

Up to 22 hours of local video playback<sup>8</sup>

Up to 15 hours of web browsing<sup>9</sup>

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## Security

Enhanced security with Microsoft Pluton TPM 2.0

Windows 11 Secured-core PC

Windows Hello face authentication with Enhanced Sign-in Security

Microsoft Defender – for enhanced identity and privacy protection<sup>10</sup>

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## Camera

Full HD (1080p) front-facing Surface Studio Camera

Support for Windows Studio Effects

Windows Hello face authentication camera

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## Audio

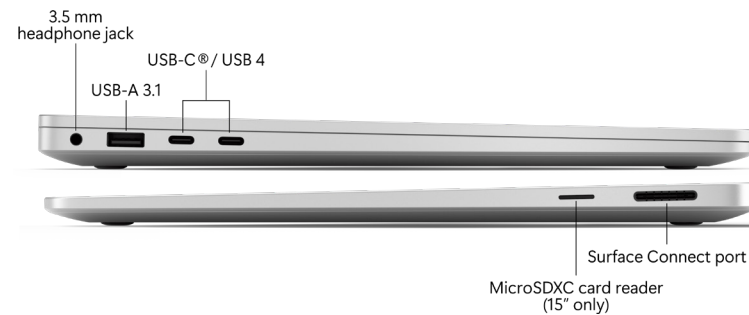
Dual Studio Mics with voice focus<sup>11</sup>

Omnisonic<sup>®</sup> Speakers with Dolby<sup>®</sup> Atmos<sup>®</sup><sup>12</sup>

Support for Bluetooth<sup>®</sup> LE Audio

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## Ports and charging



2X USB-C<sup>®</sup> / USB 4 ports with support for:  
Charging  
Data transfer  
DisplayPort 1.4a  
Surface Thunderbolt™ 4 Dock & other accessories

Supports fast charging with minimum 65W power supply  
via Surface Connect or USB-C<sup>®</sup><sup>13</sup>

USB-A 3.1

3.5 mm headphone jack

Surface Connect port

2X USB-C<sup>®</sup> / USB 4 ports with support for:  
Charging  
Data transfer  
DisplayPort 1.4a  
Surface Thunderbolt™ 4 Dock & other accessories

Supports fast charging with minimum 65W power supply  
via Surface Connect or USB-C<sup>®</sup><sup>12</sup>

USB-A 3.1

3.5 mm headphone jack

Surface Connect port

MicroSDXC card reader

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## Network and connectivity

Wi-Fi 7<sup>14</sup>

Bluetooth® Wireless 5.4 technology

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## Software

Windows 11 Home

Exclusive Copilot+ PC experiences: Recall<sup>15</sup>, Window Studio Effects, Cocreator<sup>16</sup>, Live Captions with translation<sup>17</sup>, plus additional Copilot+ PC experiences in the future available through Windows Update

Preloaded Microsoft 365 Apps<sup>18</sup>

Microsoft 365 Family 30-day trial<sup>19</sup>

Microsoft Defender App<sup>20</sup>

Preloaded Xbox app

Xbox Game Pass Ultimate 30-day trial<sup>21</sup> (accessible through [Xbox Cloud Gaming](#))

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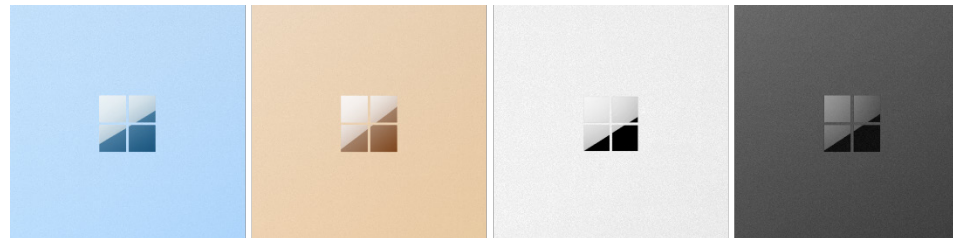
## Exterior

Casing: Anodized aluminum

Colors: Sapphire, Dune, Platinum, Black<sup>22</sup>

Casing: Anodized aluminum

Colors: Platinum, Black<sup>22</sup>



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**What's included in the box**

Surface Laptop 13.8"  
39W Power Supply  
Quick Start Guide  
Safety and warranty documents

Surface Laptop 15"  
65W Power Supply  
Quick Start Guide  
Safety and warranty documents

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**Sensors**

Ambient color sensor

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**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  
Keyboard backlight  
Copilot key<sup>23</sup>  
Precision Haptic touchpad

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**Warranty<sup>24</sup>**

1-year limited hardware warranty

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**Battery Capacities**

Battery Capacity Nominal (Wh) 54  
Battery Capacity Min (Wh) 52

Battery Capacity Nominal (Wh) 66  
Battery Capacity Min (Wh) 64



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## Accessibility

Surface precision haptic touchpad with adjustable click sensitivity, right click area, and adaptive touch mode

Compatible with Surface Adaptive Kit

Compatible with Microsoft Adaptive Accessories

Includes Windows Accessibility Features – Learn More [Accessibility Features](#) | [Microsoft Accessibility](#)

Discover more Microsoft Accessible Devices & Products - [Accessible Devices & Products for PC & Gaming](#) | [Assistive Tech Accessories](#)

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## Sustainability

Surface Laptop is designed with sustainability in mind

### More recycled materials

Enclosure is made with a minimum of 67.2% recycled content, including 100% recycled aluminum alloy and 100% recycled rare earth metal<sup>25</sup>

### Thoughtful packaging

76% recycled content in wood-based fiber packaging

Paper-based, minimizing plastic use

100% of our virgin paper sourced is FSC certified to be responsibly forested

### More energy efficient

ENERGY STAR® certified

### More repairable

Easier to repair, with clear visual icons and built-in access to repair instructions<sup>26</sup>

### Surface Trade-in

We make trade-in and recycling convenient and secure with global programs. Learn more at [Microsoft Trade In & Recycling 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: [Environmental Sustainability](#) | [Microsoft CSR](#), [Microsoft Surface Sustainability - Microsoft Sustainability](#)

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## Serviceability

[Replaceable components and self-repair information](#)

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<sup>1</sup> System software uses significant storage space. Available storage is subject to change based on system software updates and apps usage. 1 GB = 1 billion bytes. 1 TB = 1,000 GB. See [Surface.com/Storage](https://surface.com/storage) for more details.

<sup>2</sup> Solid State Drive (SSD) Retention is only available on Microsoft Surface devices in which the SSD is marketed as removable per the Technical Specifications. Solid State Drive (SSD) Retention is included in both Extended Hardware Service Plus and Microsoft Complete for Business Plus and is also available as an Optional Add-on when purchasing Microsoft Extended Hardware Service and Microsoft Complete for Business. Devices returned to Microsoft with a missing Solid State Drive (SSD) are subject to a Solid State Drive (SSD) replacement fee unless the device is enrolled in the Drive (SSD) Retention offer.

<sup>3</sup> Requires Dolby Vision® encoded content and video.

<sup>4</sup> HDR requires HDR content and enabling HDR in device settings.

<sup>5</sup> Might vary depending on manufacturing processes.

<sup>6</sup> Local video playback: Testing conducted by Microsoft in April 2024 using preproduction software and preproduction Surface Laptop Snapdragon® X Plus C10 256GB, 16GB RAM 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. Tested with Windows 11. Battery life varies significantly with settings, usage, and other factors.

<sup>7</sup> Web browsing: Based on web browsing test. Testing conducted by Microsoft in April 2024 using preproduction software and preproduction Surface Laptop Snapdragon® X Plus C10 256GB, 16GB RAM devices. Testing consisted of full battery discharge while accessing eight 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. Tested with Windows 11. Battery life varies significantly with settings, usage, and other factors.

<sup>8</sup> Local video playback: Testing conducted by Microsoft in April 2024 using preproduction software and preproduction Surface Laptop Snapdragon® X Elite C12 512GB, 16GB RAM 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. Tested with Windows 11. Battery life varies significantly with settings, usage, and other factors.

<sup>9</sup> Based on web browsing test. Testing conducted by Microsoft in April 2024 using preproduction software and preproduction Surface Laptop Snapdragon® X Elite C12 512GB, 16GB RAM devices. Testing consisted of full battery discharge while accessing eight 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. Tested with Windows 11. Battery life varies significantly with settings, usage, and other factors.

<sup>10</sup> Microsoft 365 Personal or Family subscription required.

<sup>11</sup> Voice focus requires activation, requires Windows 11 and is available in apps which use integrated device microphones and use certain Windows audio processing modes.

<sup>12</sup> Requires Dolby® Atmos® encoded content/audio.

<sup>13</sup> 13.8" Surface Laptop comes with 39 W Surface power supply. Fast charging (from 5% to 80%) is supported with minimum 45W Surface power supply or USB-C® PD charger, sold separately. Testing was conducted at Microsoft in February 2024, using pre-production devices, software, and minimum of 45W USB-C® charger under controlled conditions. The device was powered on to the desktop screen with default display brightness settings. Actual charge time will vary based on operating conditions. Measured at typical office ambient temperature of 23C

<sup>14</sup> 6GHz band not available in all regions.

<sup>15</sup> Optimized for select languages (English, Chinese (simplified), French, German, Japanese, and Spanish). Content-based and storage limitations apply. See <https://aka.ms/copilotpluspcs>.

<sup>16</sup> Microsoft Account required.

<sup>17</sup> Currently supports translation for video and audio subtitles into English from 40+ languages. See <https://aka.ms/copilotpluspcs>

<sup>18</sup> Requires license or subscription (sold separately) to activate and use.

<sup>19</sup> Activation required. 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 Free Trial - Try Microsoft 365 for a month - Microsoft Store.

<sup>20</sup> Microsoft 365 Personal or Family subscription required.

<sup>21</sup> Activation required for Xbox Game Pass Ultimate. Xbox Game Pass ultimate 30 day trial accessible through [Xbox.com/Play](https://xbox.com/play). You can use it to play games on Xbox One and Xbox Series Consoles, and stream select games where available to Surface Hillcrest through [Xbox.com/Play](https://xbox.com/play) and other supported devices. Not currently available in China.

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<sup>22</sup> Colors available on selected models only. Available colors, sizes, finishes, and processors may vary by store, market, and configuration.

<sup>23</sup> Feature availability varies by market, see [aka.ms/WindowsAIFeatures](https://aka.ms/WindowsAIFeatures). When Copilot for Windows is not available or enabled on the device, pressing the Copilot key will launch Windows Search.

<sup>24</sup> Microsoft's Limited Warranty is in addition to your consumer law rights.

<sup>25</sup> Enclosure includes A Cover, C Bucket and D Cover. 100% recycled aluminum alloy in A Cover and C 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 2809-2, Second Edition, November 7, 2023.

<sup>26</sup> 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.