



## Apple Watch Series 11 - Tech Specs

Year introduced: 2025

### Material and Finish

#### Aluminium case

Rose Gold

Silver

Space Grey

Jet Black

#### Titanium case

Gold

Natural

Slate

### Size and Weight

## **46mm**

**Height:** 46mm

**Width:** 39mm

**Depth:** 9.7mm

416x496 pixels

1,220 sq mm display area

**Weight (aluminium, GPS):** 37.8 grams

**Weight (aluminium, GPS + Cellular):** 36.9 grams

**Weight (titanium):** 43.1 grams

Fits 140–245mm wrists

## **42mm**

**Height:** 42mm

**Width:** 36mm

**Depth:** 9.7mm

374x446 pixels

989 sq mm display area

**Weight (aluminium, GPS):** 30.3 grams

**Weight (aluminium, GPS + Cellular):** 29.7 grams

**Weight (titanium):** 34.6 grams

Fits 130–200mm wrists

## **Hardware and Buttons**

Display

Digital Crown

Microphone with Voice Isolation

Side button

Strap release button

Electrical heart sensor

Speaker / air vent

Blood oxygen sensor and optical heart sensor

## **Controls**

Digital Crown with haptic feedback

Side button

Double tap and wrist flick gestures

Faster on-device Siri

## **Chip**

S10 chip with 64-bit dual-core processor

4-core Neural Engine

64GB capacity

## **Sensors**

Electrical heart sensor

Third-generation optical heart sensor

Blood oxygen sensor<sup>1</sup>  
Temperature sensor<sup>2</sup>  
Compass  
Always-on altimeter  
High-g accelerometer  
High dynamic range gyroscope  
Ambient light sensor  
Depth gauge to 6 metres  
Water temperature sensor

## **Health and Wellness**

Blood Oxygen app<sup>1</sup>  
ECG app<sup>3</sup>  
Cycle Tracking app with retrospective ovulation estimates<sup>4</sup>  
Heart Rate app  
High and low heart rate notifications  
Irregular rhythm notifications<sup>5</sup>  
Medications app  
Mindfulness app with state of mind tracking  
Noise app  
Sleep app including sleep stages  
Sleep score  
Sleep apnoea notifications<sup>6</sup>  
Hypertension notifications<sup>7</sup>

## **Display**

Always-On Retina display with wide-angle OLEDs and LTPO3  
Ion-X front glass with 2x better scratch resistance (aluminium cases)<sup>8</sup>  
Sapphire front crystal (titanium cases)  
Up to 2,000 nits peak brightness  
1 nit minimum brightness  
326 pixels per inch

## **Audio**

Speaker  
Microphone  
Media playback

## **Power and Battery Life**

All-day battery life, up to 24 hours of normal use<sup>9</sup>  
Up to 38 hours in Low Power Mode<sup>9</sup>  
Built-in rechargeable lithium-ion battery  
Fast-charge capable<sup>10</sup>  
Up to 80% charge in about 30 minutes<sup>10</sup>  
15 minutes for up to 8 hours of normal use<sup>11</sup>  
5 minutes for up to 8 hours of sleep tracking<sup>11</sup>

[Learn more about Power and Battery Life](#)

## **Operating System**

### **watchOS**

watchOS is the world's most advanced wearable operating system, with apps and features designed to keep you active, healthy, safe and connected.

## **Workouts and Activity**

### **Running**

Custom workouts

Customisable Workout Views

Training Load

Heart Rate Zones

Race Route

Pacer

Stride Length, Ground Contact Time and Vertical Oscillation

Automatic track detection

Multisport workout

### **Hiking**

Compass with bearing, incline, elevation and coordinates

Custom waypoints

Automatically generated waypoints to cellular connectivity

Backtrack GPS data

Offline maps with custom route creation

Topographic maps for thousands of national and regional parks (US only)

Hundreds of curated hikes across all 63 US national parks

### **Cycling**

Average speed, elevation gained and distance

Connection to cycling accessories via Bluetooth

Functional Threshold Power

Power Zones

Cadence

Live Activity on iPhone

### **Swimming**

Pool swim or open water swim

Custom workouts for pool swims

Splits and auto sets

SWOLF score

Automatic stroke detection

Kickboard detection

Average pace, total distance and lengths

### **More Workouts**

Skiing

Snowboarding

Outdoor Rowing

Paddling

Golf  
Walk  
Elliptical  
Rowing Machine  
Stair Stepper  
HIIT  
Yoga  
Functional Strength Training  
Dance  
Cooldown  
Core Training  
Pilates  
Tai Chi  
Wheelchair  
Kickboxing  
Multisport  
Other

### **Safety**

Emergency SOS<sup>12</sup>  
International emergency calling<sup>13</sup>  
Crash Detection<sup>12</sup>  
Fall Detection  
Noise monitoring  
Backtrack

### **Durability**

Water resistance 50m (swimproof)<sup>14</sup>  
Dust resistance IP6X<sup>15</sup>

### **Connectivity**

L1 GPS, GLONASS, Galileo, QZSS and BeiDou  
5G<sup>16</sup> and LTE<sup>17</sup>  
Wi-Fi 4 (802.11n)  
Support for 2.4GHz and 5GHz Wi-Fi networks  
Bluetooth 5.3  
Second-generation Ultra Wideband chip<sup>18</sup>  
Apple Pay<sup>19</sup>  
GymKit  
Support for Apple Watch For Your Kids<sup>20</sup>

### **Accessibility**

Built-in accessibility features supporting vision, mobility, hearing and cognitive disabilities.

[Learn more about Accessibility](#)

#### **Features include:**

VoiceOver  
Zoom  
On/Off Labels  
Reduce Transparency  
Increase Contrast  
Colour Filters

Text Size  
Bold Text  
Reduce Motion  
Hourly Chimes  
AssistiveTouch  
Button Click Speed  
Touch Accommodations  
Auto-Answer Calls  
Type to Siri  
RTT Support  
Audio Volume Balance  
Auto Transcription  
Live Speech  
Accessibility Shortcut  
Mono Audio  
Taptic Time  
Personal Voice  
Live Listen

## Environmental Requirements

**Operating temperature:** 0° to 35° C (32° to 95° F)

**Non-operating storage temperature:** -20° to 45° C (-4° to 113° F)

**Relative humidity:** 5% to 90% non-condensing

**Operating altitude:** 0 to 3,000 metres (0 to 10,000 feet)

## Apple Watch and the Environment

Apple Watch Series 11 is designed to reduce environmental impact:<sup>21</sup>

[See the Apple Watch Series 11 Product Environmental Report \(PDF\).](#)

### Progress towards Apple 2030

Apple 2030 is our commitment to be carbon neutral for our entire carbon footprint. Our plan to decarbonise products is rigorous and focuses on transitioning to low-carbon electricity, designing with recycled and low-carbon materials, and prioritising lower-carbon ways of shipping products, like sea freight.

[See Apple's commitment](#)

### Materials

Apple Watch Series 11 is made with 40% recycled content,<sup>22</sup> including:

100% recycled aluminium in the aluminium case

100% recycled titanium in the titanium case

100% recycled cobalt and 95% recycled lithium in the battery

100% recycled rare earth elements in all magnets

100% recycled gold plating and tin solder in all Apple-designed printed circuit boards

100% recycled tungsten in the Taptic Engine

40% recycled glass in the display glass

### Energy

100% of manufacturing electricity for Apple Watch Series 11 is sourced from renewable electricity<sup>23</sup>

100% of expected customer energy use matched with low-carbon electricity

Meets California Energy Commission's energy efficiency standards for battery charger systems<sup>24</sup>

### Packaging

100% fibre-based packaging<sup>25</sup>

The Apple Watch Series 11 box is designed to increase the total number of boxes we can fit on a pallet by 40% compared to Apple Watch Series 8

## Waste

No established final assembly sites generate waste sent to landfill as part of Apple's Zero Waste Programme<sup>26</sup>

## Smarter chemistry<sup>27</sup>

All the materials used in Apple products, accessories and packaging are covered by the requirements of our [Regulated Substances Specification](#), which was one of the first in industry to restrict the use of key substances of concern. See the latest [Environmental Progress Report](#) to understand Apple's recent efforts in phasing out these chemistries.

## Compatibility

iPhone 11 or later, including iPhone SE (2nd generation or later), with iOS 26 or later

## In the Box

### Apple Watch Series 11

#### Strap

#### Apple Watch Magnetic Fast Charger to USB-C Cable (1m)

1. The Blood Oxygen app is for wellness purposes only and not for medical use.
2. The temperature sensing feature is not intended for medical use. Temperature sensing is available only on Apple Watch Series 8 and later, Apple Watch SE 3 and all Apple Watch Ultra models.
3. The ECG app is available on Apple Watch Series 4 and later (excluding Apple Watch SE models) and can generate an ECG similar to a single-lead electrocardiogram. Intended for use by people 22 years old and over.
4. The Cycle Tracking app should not be used for birth control or to diagnose a health condition.
5. Irregular rhythm notification requires the latest version of watchOS and iOS. It is not intended for use by people under 22 years old or those who have been previously diagnosed with atrial fibrillation (AF).
6. Sleep apnoea notifications are available on Apple Watch Series 9 and later, Ultra 2 and later, and SE 3. The feature is intended to detect signs of moderate to severe sleep apnoea for people 18 years old or older without a diagnosis of sleep apnoea.
7. As of 9 September 2025, hypertension notifications are pending regulatory review and expected to be cleared this month, with availability on Apple Watch Series 9 and later and Apple Watch Ultra 2 and later. The feature is not intended for use by people under 22 years old, those who have been previously diagnosed with hypertension, or pregnant persons.
8. Apple Watch Series 11 with Ion-X glass has a ceramic coating that provides 2x more scratch resistance than Series 10 with Ion-X glass.
9. All-day battery life including sleep tracking is based on the following use: 300 time checks, 90 notifications, 15 minutes of app use, a 60-minute workout with music playback from Apple Watch via Bluetooth and 6 hours of sleep tracking, over the course of 24 hours; Apple Watch Series 11 (GPS) usage includes connection to iPhone via Bluetooth during the entire 24-hour test; Apple Watch Series 11 (GPS + Cellular) usage includes a total of 4 hours of cellular connection and 20 hours of connection to iPhone via Bluetooth over the course of 24 hours. Battery life in Low Power Mode including sleep tracking is based on the following use: 530 time checks, 160 notifications, 26 minutes of app use, a 60-minute workout with music playback from Apple Watch via Bluetooth and 6 hours of sleep tracking, over the course of 38 hours; Apple Watch Series 11 (GPS) usage includes connection to iPhone via Bluetooth during the entire 38-hour test; Apple Watch Series 11 (GPS + Cellular) usage includes on-demand cellular connection and 30 hours of connection to iPhone via Bluetooth over the course of 38 hours. Testing conducted by Apple in July and August 2025 using pre-production Apple Watch Series 11 (GPS) and Apple Watch Series 11 (GPS + Cellular), each paired with an iPhone; all devices tested with pre-release software. Battery life varies by use, configuration, mobile network, signal strength and many other factors; actual results will vary.
10. Charge times are from 0–80% and 0–100% using the included Apple Watch Magnetic Fast Charger to USB-C Cable. Testing conducted by Apple in July and August 2025 using pre-production Apple Watch Series 11 (GPS) and Apple Watch Series 11 (GPS + Cellular), each paired with an iPhone; all devices tested with pre-release software, Apple Watch Magnetic Fast Charger to USB-C Cable (Model A2515) and Apple 20W USB-C Power Adapter (Model A2305). Fast-charge testing conducted with drained Apple Watch units. Times measured from the appearance of the Apple logo as the unit started up. Charge time varies with adapter, region, settings, initial battery levels, usage and environmental factors; actual results will vary.
11. Testing conducted by Apple in July and August 2025 using pre-production Apple Watch Series 11 (GPS) and Apple Watch Series 11 (GPS + Cellular), each paired with an iPhone; all devices tested with pre-release software, Apple Watch Magnetic Fast Charger to USB-C Cable (Model A2515) and Apple 20W USB-C Power Adapter (Model A2305). Charge time varies with adapter, region, settings, initial battery levels, usage and environmental factors; actual results will vary.
12. Emergency SOS requires a cellular connection or Wi-Fi calling with an internet connection from your Apple Watch or nearby iPhone. You can use cellular models of Apple Watch to make an emergency call in many locations, provided that mobile service is available. Some mobile networks may not accept an emergency call from your Apple Watch if your Apple Watch isn't activated, if it isn't compatible with or configured to operate on a particular mobile network, if it isn't set up for mobile service, or if the mobile network does not support emergency calling over IMS. See [support.apple.com/en-gb/108374](https://support.apple.com/en-gb/108374) and [apple.com/uk/watch/cellular](https://apple.com/uk/watch/cellular) for more information.
13. Requires Apple Watch Series 7, Apple Watch SE, Apple Watch Ultra or later. For a list of supported countries and regions, see [apple.com/uk/watchos/feature-availability](https://apple.com/uk/watchos/feature-availability).
14. Apple Watch Series 11 has a water resistance rating of 50 metres under ISO standard 22810:2010. This means that it may be used for shallow-water activities like swimming in a pool or ocean. Apple Watch Series 11 should not be used for scuba diving, waterskiing or other

activities involving high-velocity water or submersion below shallow depth. Water resistance is not a permanent condition and can diminish over time. For additional information, see [support.apple.com/en-gb/109522](https://support.apple.com/en-gb/109522).

15. Apple Watch Series 11 is rated IP6X dust resistant.
16. Data plan required. 5G is available in selected markets and through selected network providers. Speeds vary based on site conditions and network. For details on 5G support, contact your provider and see [apple.com/uk/watch/cellular](https://apple.com/uk/watch/cellular).
17. Wireless service plan required for cellular service. Contact your service provider for more details. Connection may vary based on network availability. Check [apple.com/uk/watch/cellular](https://apple.com/uk/watch/cellular) for participating network providers and eligibility. See [support.apple.com/en-gb/HT207578](https://support.apple.com/en-gb/HT207578) for additional setup instructions.
18. Ultra Wideband availability varies by region.
19. To use Apple Pay you need a supported card from a participating card issuer. To check if your card is compatible with Apple Pay, contact your card issuer. Apple Pay is not available in all markets. [View Apple Pay countries and regions](#).
20. Not all features will be available if the Apple Watch is set up through Apple Watch For Your Kids. Check [support.apple.com/en-gb/109036](https://support.apple.com/en-gb/109036) for details. Wireless service plan required for cellular service. Check [apple.com/uk/watch/cellular](https://apple.com/uk/watch/cellular) for participating network providers and eligibility.
21. Data accurate as of product launch.
22. Product recycled or renewable content is the mass of certified recycled material relative to the overall mass of the device, not including packaging or in-box accessories.
23. Our manufacturing electricity is sourced from clean electricity, including a mix of supplier and Apple clean-energy projects.
24. Apple Watch Series 11 meets California Energy Commission's Energy Efficiency Standards for Small Battery Charger Systems as outlined in the [California Code of Regulations](#).
25. Based on retail packaging as shipped by Apple. Breakdown of US retail packaging by weight. Adhesives, inks and coatings are excluded from our calculations of plastic content and packaging weight.
26. All established final assembly supplier sites — those that have been Apple suppliers for more than one year — for Apple Watch Series 11 are third-party verified as Zero Waste by UL LLC (UL 2799 Standard). UL requires at least 90% diversion through methods other than waste to energy to achieve Zero Waste to Landfill (Silver 90–94%, Gold 95–99% and Platinum 100%) designations.
27. Apple's Regulated Substances Specification describes Apple's restrictions on the use of certain chemical substances in materials in Apple products, accessories, manufacturing processes and packaging used for shipping products to Apple's end customers. Restrictions are derived from international laws or directives, regulatory agencies, eco-label requirements, environmental standards and Apple policies. Every Apple product is free of PVC and phthalates except for AC power leads in India, Thailand (for two-pin AC power leads) and South Korea, where we continue to seek government approval for our PVC and phthalates replacement. Apple products comply with the European Union Directive 2011/65/EU and its amendments, including exemptions for the use of lead such as high-temperature solder. Apple is working to phase out the use of these exempted substances for new products where technically possible.

Apple Watch Ultra 3, Apple Watch Series 11 and Apple Watch SE 3 require iPhone 11 or later with iOS 26 or later.

Features are subject to change. Some features, applications and services may not be available in all regions or all languages. [View complete list](#).

Helpful?

Yes

No

Support

Apple Watch Series 11 - Tech Specs