Apple Watch Series 10 - Tech Specs
Year introduced: 2024

Identify your Apple Watch

Material and Finish
Aluminum case

Jet Black

Rose Gold

Silver

Titanium case

Slate

Gold

Natural

Size and Weight
46mm

Height: 46mm

Width: 39mm

Depth: 9.7mm

416 by 496 pixels

1220 sq mm display area

Weight (aluminum, GPS): 36.4 grams

Weight (aluminum, GPS + Cellular): 35.3 grams

Weight (titanium): 41.7 grams

Fits 140-245mm wrists

42mm

Height: 42mm

Width: 36mm

Depth: 9.7mm

374 by 446 pixels

989 sq mm display area

Weight (aluminum, GPS): 30 grams

Weight (aluminum, GPS + Cellular): 29.3 grams

Weight (titanium): 34.4 grams

Fits 130-200mm wrists

Hardware and Buttons
Display

Digital Crown

Microphone with voice isolation

Side button

Band release button

Electrical heart sensor

Speaker/air vent

Optical heart sensor

Controls
Digital Crown with haptic feedback

Side button

Double tap gesture

Siri with on-device processing

Chip
S10 SiP with 64-bit dual core processor

4-core Neural Engine

64GB capacity

Sensors
Electrical heart sensor

Third-generation optical heart sensor

Temperature sensor1

Compass

Always-on altimeter

High-g accelerometer

High dynamic range gyroscope

Ambient light sensor

Depth gauge

Water temperature sensor

Health and Wellness
ECG app2

Cycle Tracking app with retrospective ovulation estimates3

Heart Rate app

High and low heart rate notifications

Irregular rhythm notifications4

Medications app

Mindfulness app with state of mind tracking

Noise app

Sleep app including sleep stages

Sleep apnea notifications5

Display
LTPO3 OLED Always‑On Retina display

Wide‑angle OLED

Up to 40% brighter when viewed at an angle

Edge‑to‑edge display

Ion‑X front glass (aluminum cases)

Sapphire front crystal (titanium cases)

Up to 2000 nits maximun brightness

1 nit minimum brightness

326 pixels per inch

Audio
Speaker

Media playback

Power and Battery Life
All‑day battery life, up to 18 hours of normal use6

Up to 36 hours in Low Power Mode6

Built‑in rechargeable lithium‑ion battery

Fast‑charge capable7

Up to 80% charge in about 30 minutes7

15 minutes for up to 8 hours of normal use

8 minutes for up to 8 hours of sleep tracking

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.

Learn more about watchOS

Workouts and Activity
Running

Custom workouts

Customizable 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

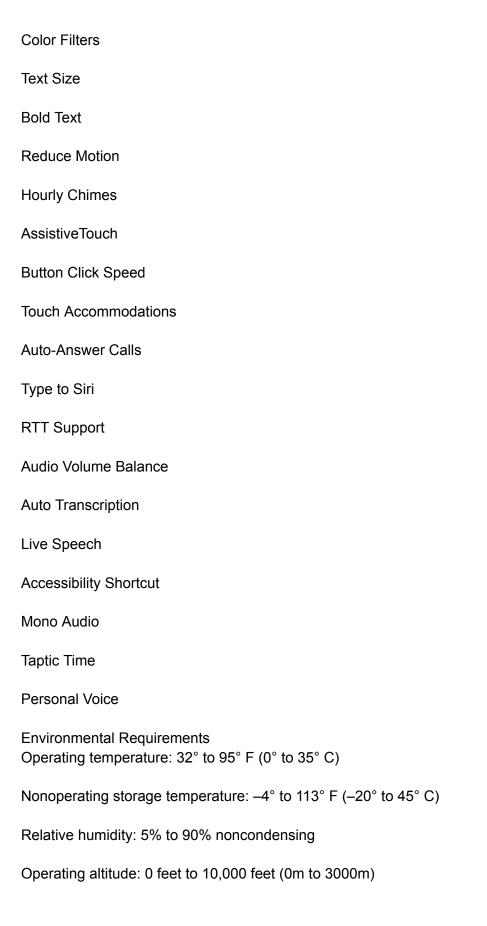Automatically generated waypoints to cellular connectivity

Backtrack GPS data

Offline maps with custom route creation

Topographic maps for thousands of national and regional parks (U.S. only)

Hundreds of curated hikes across all 63 U.S. 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 laps

More Workouts

Skiing

Snowboarding

Outdoor Rowing

Paddling

Golf

Walk

Elliptical

Rower

Stair Stepper

HIIT

Yoga

Functional Stength Training

Dance

Cooldown

Core Training

Pilates

Tai Chi

Wheelchair

Kickboxing

Multisport

Other

Safety
Emergency SOS8

International emergency calling9

Crash Detection8

Fall Detection

Noise monitoring

Backtrack

Durability
Water resistance 50m (swimproof)10

Dust resistance IP6X11

Connectivity
L1 GPS, GLONASS, Galileo, QZSS, and BeiDou

LTE and UMTS12

Wi-Fi 4 (802.11n)

Bluetooth 5.3

Second-generation Ultra Wideband chip13

Apple Pay

GymKit

Support for Apple Watch For Your Kids14

International roaming15

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

Color 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

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

Nonoperating storage temperature: –4° to 113° F (–20° to 45° C)

Relative humidity: 5% to 90% noncondensing

Operating altitude: 0 feet to 10,000 feet (0m to 3000m)

Apple Watch Series 10 and the Environment
Apple Watch Series 10 is designed to reduce environmental impact:16

See the Apple Watch Series 10 Product Environmental Report (PDF)

Progress toward Apple 2030

Apple Watch Series 10 is one of Apple's carbon neutral products17

More than 30% recycled or renewable content18

100% of manufacturing electricity sourced from renewable electricity19

50% or more non-air shipping20

More than 80% emissions reduction against baseline21

8.4 kg CO2e total remaining emissions covered by high-quality carbon credits22

See Apple's commitment

Materials

100% recycled aluminum in the case

95% recycled titanium in the case

100% recycled cobalt in the battery23

100% recycled gold in the plating of multiple printed circuit boards

100% recycled copper in multiple printed circuit boards

100% recycled tin in the solder of all Apple-designed printed circuit boards

100% recycled tungsten and copper wire in the Taptic Engine

100% recycled rare earth elements in all magnets

80% recycled steel in the speaker yoke and Taptic Engine

25% renewable plastic component in the speaker

100% fiber-based packaging24

30% recycled content in fiber packaging

Energy

100% of manufacturing electricity for Apple Watch Series 10 is sourced from renewable electricity

100% of expected customer energy use matched with low-carbon energy25

Meets California Energy Commission's energy efficiency standards for battery charger systems26

Waste

No established final assembly sites generate waste sent to landfill as part of Apple's Zero Waste Program

Smarter chemistry27

Arsenic-free glass

Mercury-, BFR-, and PVC-free

Compatibility
iPhone Xs or later, including iPhone SE (2nd generation or later), with iOS 18 or later

In the Box
Apple Watch Series 10

Band

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

The temperature sensing feature is not intended for medical use.

The ECG app is available on Apple Watch Series 4 and later (excluding Apple Watch SE) and can generate an EGC similar to a single-lead electorcariogram. Intended for use by people 22 years and over.

The Cycle Tracking app should not be used for birth control or to diagnose a health condition.

Irregular rythmn 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 (AFib).

The Sleep Apnea Notification Feature is pending FDA clearance and expected to be available later this month. The feature will be supported on Apple Watch Series 9 and later and Ultra 2. It is intended to detect signs of moderate to severe sleep apnea for people 18 years old or older without a diagnosis of sleep apnea.

All-day battery life is based on the following use: 300 time checks, 90 notifications, 15 minutes of app use, and a 60-minute workout with music playback from Apple Watch via Bluetooth, over the course of 18 hours; Apple Watch Series 10 (GPS) usage includes connection to iPhone via Bluetooth during the entire 18-hour test; Apple Watch Series 10 (GPS + Cellular) usage includes a total of 4 hours of LTE connection and 14 hours of connection to iPhone via Bluetooth over the course of 18 hours. Battery life in Low Power Mode is based on the following use: 600 time checks, 180 notifications, 30 minutes of app use, and a 60-minute workout with music playback from Apple Watch via Bluetooth, over the course of 36 hours; Apple Watch Series 10 (GPS) usage includes connection to iPhone via Bluetooth during the entire 36-hour test; Apple Watch Series 10 (GPS + Cellular) usage includes on-demand LTE connection and 28 hours of connection to iPhone via Bluetooth over the course of 36 hours. Testing conducted by Apple in August 2024 using preproduction Apple Watch Series 10 (GPS) and Apple Watch Series 10 (GPS + Cellular), each paired with an iPhone; all devices tested with prerelease software. Battery life varies by use, configuration, cellular network, signal strength, and many other factors; actual results will vary.

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 August 2024 using preproduction Apple Watch Series 10 (GPS) and Apple Watch Series 10 (GPS + Cellular), each paired with an iPhone; all devices tested with prerelease 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 region, settings, and environmental factors; actual results will vary.

Emergency SOS requires a cellular connection or Wi-Fi calling with an internet connection from your Apple Watch or nearby iPhone.

Requires Apple Watch Series 7, SE, Ultra, or later. For a list of supported countries and regions, see apple.com/watchos/feature-availability.

Apple Watch Series 10 has a water resistance rating of 50 meters under ISO standard 22810:2010. This means that it may be used for shallow-water activities like snorkeling or swimming in a pool or ocean. Apple Watch Series 10 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-us/HT205000.

Apple Watch Series 10 is rated IP6X dust resistant.

Wireless service plan required for cellular service. Contact your service provider for more details. Connection may vary based on network availability. Check apple.com/watch/cellular for participating wireless carriers and eligibility. See support.apple.com/HT207578 for additional setup instructions.

Ultra Wideband availability varies by region.

Not all features will be available if the Apple Watch is set up through Apple Watch For Your Kids. Wireless service plan required for cellular service. Contact your service provider for more details. Check apple.com/watch/cellular for participating wireless carriers and eligibility.

International roaming coverage is determined by your carrier. Please check with your carrier for details. For a list of supported carriers, see apple.com/watch/cellular.

Data accurate as of product launch.

Carbon neutral combinations of this product include Apple Watch Series 10 paired with Sport Loop, Milanese Loop, Braided Solo Loop, and Pride Edition Braided Solo Loop.

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.

Our manufacturing electricity is sourced from clean electricity, including a mix of supplier and Apple clean energy projects.

50% of all carbon neutral products by weight are planned, as of product launch, to be shipped via non-air modes of transportation over the lifetime of the products.

Carbon reductions are calculated against a baseline scenario: 1) No use of clean electricity for manufacturing or product use, beyond what is already available on the latest modeled grid (based on regional emissions factors). 2) Apple's carbon intensity of key materials as of 2015 (our baseline year for our 2030 product carbon neutrality goal). Carbon intensity of materials reflects use of recycled content and production technology. 3) Apple's average mix of transportation modes (air, rail, ocean, ground) by product line across three years (fiscal years 2017 to 2019) to best capture the baseline transportation emissions of our products.

For more information about our use of carbon credits, please see the Product Environmental Report.

All cobalt claims are on a mass balance allocation.

Based on retail packaging as shipped by Apple. Breakdown of U.S. retail packaging by weight. Adhesives, inks, and coatings are excluded from our calculations of plastic content and packaging weight.

Apple is matching 100% of expected electricity consumption only for carbon neutral aluminum Apple Watch Series 10, Apple Watch SE, and Apple Watch Ultra 2 combinations.

Apple Watch Series 10 meets California Energy Commission's Energy Efficiency Standards for Small Battery Charger Systems as outlined in the California Code of Regulations.

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 cords in India, Thailand (for two-prong AC power cords), 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.

The ability to measure blood oxygen is no longer available on Apple Watch units sold by Apple in the United States beginning January 18, 2024. These are indicated with part numbers ending in LW/A. Learn how to identify your Apple Watch.

Apple Watch Ultra 2, Apple Watch Series 10, and Apple Watch SE require iPhone Xs or later with iOS 18 or later.