iPhone X - Technical Specifications



Finish

- Space Gray
- Silver

Capacity[1]

- 64GB
- 256GB

Size and Weight[2]

- Height: 5.65 inches (143.6 mm)
- Width: 2.79 inches (70.9 mm)
- Depth: 0.30 inch (7.7 mm)
- Weight: 6.14 ounces (174 grams)

Display

- Super Retina HD display
- 5.8-inch (diagonal) all-screen OLED Multi-Touch display
- HDR display
- 2436-by-1125-pixel resolution at 458 ppi
- 1,000,000:1 contrast ratio (typical)
- True Tone display
- Wide color display (P3)
- 3D Touch
- 625 cd/m2 max brightness (typical)
- Fingerprint-resistant oleophobic coating
- Support for display of multiple languages and characters simultaneously

The iPhone X display has rounded corners that follow a beautiful curved design, and these corners are within a standard rectangle. When measured as a standard rectangular shape, the screen is 5.85 inches diagonally (actual viewable area is less).

Splash, Water, and Dust Resistant[3]

- Rated IP67 under IEC standard 60529

Chip

- A11 Bionic chip with 64-bit architecture
- Neural engine
- Embedded M11 motion coprocessor

Camera

- 12MP wide-angle and telephoto cameras
- Wide-angle: ƒ/1.8 aperture
- Telephoto: ƒ/2.4 aperture
- Optical zoom; digital zoom up to 10x
- Portrait mode
- Portrait Lighting (beta)
- Dual optical image stabilization
- Six-element lens
- Quad-LED True Tone flash with Slow Sync
- Panorama (up to 63MP)
- Sapphire crystal lens cover
- Backside illumination sensor

- Hybrid IR filter
- Autofocus with Focus Pixels
- Tap to focus with Focus Pixels
- Live Photos with stabilization
- Wide color capture for photos and Live Photos
- Improved local tone mapping
- Body and face detection
- Exposure control
- Noise reduction
- Auto HDR for photos
- Auto image stabilization
- Burst mode
- Timer mode
- Photo geotagging
- Image formats captured: HEIF and JPEG

Video Recording

- 4K video recording at 24 fps, 30 fps, or 60 fps
- 1080p HD video recording at 30 fps or 60 fps
- 720p HD video recording at 30 fps
- Optical image stabilization for video
- Optical zoom; 6x digital zoom
- Quad-LED True Tone flash
- Slo-mo video support for 1080p at 120 fps or 240 fps
- Time-lapse video with stabilization
- Cinematic video stabilization (1080p and 720p)
- Continuous autofocus video
- Body and face detection
- Noise reduction
- Take 8MP still photos while recording 4K video
- Playback zoom
- Video geotagging
- Video formats recorded: HEVC and H.264

TrueDepth Camera

- 7MP camera
- Portrait mode
- Portrait Lighting (beta)
- Animoji
- 1080p HD video recording
- Retina Flash
- ƒ/2.2 aperture
- Wide color capture for photos and Live Photos
- Auto HDR
- Backside illumination sensor
- Body and face detection
- Auto image stabilization
- Burst mode
- Exposure control
- Timer mode

Face ID

- Enabled by TrueDepth camera for facial recognition

Apple Pay

- Pay with your iPhone using Face ID in stores, within apps, and on the web
- Complete purchases made with Apple Pay on your Mac
- Receive and redeem rewards using rewards cards

Learn more about Apple Pay

Cellular and Wireless

- **Model A1865***
  FDD-LTE (Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 18, 19, 20, 25, 26, 28, 29, 30, 66)
  TD-LTE (Bands 34, 38, 39, 40, 41)
  TD-SCDMA 1900 (F), 2000 (A)
  CDMA EV-DO Rev. A (800, 1900, 2100 MHz)
  UMTS/HSPA+/DC-HSDPA (850, 900, 1700/2100, 1900, 2100 MHz)
  GSM/EDGE (850, 900, 1800, 1900 MHz)
- **Model A1901***
  Model A1901 does not support CDMA networks, such as those used by Verizon and Sprint.

FDD-LTE (Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 18, 19, 20, 25, 26, 28, 29, 30, 66)
TD-LTE (Bands 34, 38, 39, 40, 41)
UMTS/HSPA+/DC-HSDPA (850, 900, 1700/2100, 1900, 2100 MHz)
GSM/EDGE (850, 900, 1800, 1900 MHz)

- **All models**
  802.11ac Wi-Fi with MIMO
  Bluetooth 5.0 wireless technology
  NFC with reader mode

Location

- Assisted GPS, GLONASS, Galileo, and QZSS
- Digital compass
- Wi-Fi
- Cellular
- iBeacon microlocation

Video Calling[4]

- FaceTime video calling over Wi-Fi or cellular

Audio Calling[4]

- FaceTime audio
- Voice over LTE (VoLTE)[5]
- Wi-Fi calling[5]

Audio Playback

- Audio formats supported: AAC-LC, HE-AAC, HE-AAC v2, Protected AAC, MP3, Linear PCM, Apple Lossless, FLAC, Dolby Digital (AC-3), Dolby Digital Plus (E-AC-3), and Audible (formats 2, 3, 4, Audible Enhanced Audio, AAX, and AAX+)
- User-configurable maximum volume limit

Video Playback

- Video formats supported: HEVC, H.264, MPEG-4 Part 2, and Motion JPEG
- High Dynamic Range with Dolby Vision and HDR10 content
- AirPlay Mirroring, photos, and video out to Apple TV (2nd generation or later)[6]
- Video mirroring and video out support: Up to 1080p through Lightning Digital AV Adapter and Lightning to VGA Adapter (adapters sold separately)[6]

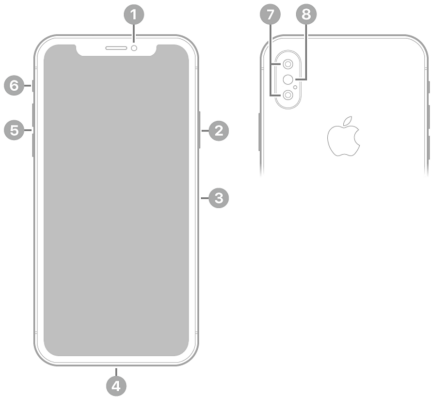
Siri[7]

- Use your voice to send messages, set reminders, and more
- Get intelligent suggestions in Messages, Mail, QuickType, and more
- Activate with only your voice using “Hey Siri”
- Listen and identify songs

Learn more about Siri

External Buttons and Connectors

1. Front Camera
2. Side button
3. SIM tray
4. Lightning Connector
5. Volume buttons
6. Ring/Silent switch
7. Rear cameras
8. Flash



Power and Battery[8]

- Lasts up to 2 hours longer than iPhone 7
- Talk time (wireless): Up to 21 hours
- Internet use: Up to 12 hours
- Video playback (wireless): Up to 13 hours
- Audio playback (wireless): Up to 60 hours
- Fast-charge capable: Up to 50% charge 30 minutes[9]
- Built-in rechargeable lithium-ion battery
- Wireless charging (works with Qi-certified chargers[10])
- Charging via USB to computer system or power adapter

Sensors

- Face ID
- Barometer
- Three-axis gyro
- Accelerometer
- Proximity sensor
- Ambient light sensor

Operating System
iOS 11
With new features and capabilities that let you get more done quickly and easily, iOS 11 makes iPhone more powerful, personal, and intelligent than ever.
See what's new in iOS
iPhone User Guide

Accessibility
Accessibility features help people with disabilities get the most out of their new iPhone X. With built-in support for vision, hearing, physical and motor skills, and learning and literacy, you can fully enjoy the world's most personal device.
Learn more about Accessibility

Features include:

- VoiceOver
- Zoom
- Magnifier
- Software TTY
- Siri and Dictation
- Type to Siri
- Switch Control
- Closed Captions
- AssistiveTouch
- Speak Screen

Built-in Apps

- Camera
- Photos
- Health
- Messages
- Phone
- FaceTime
- Mail
- Music
- Wallet
- Safari
- Maps
- Siri
- Calendar
- iTunes Store
- App Store
- Notes
- News
- Contacts
- iBooks
- Home
- Weather
- Reminders
- Clock
- TV
- Stocks
- Calculator

- Voice Memos
- Compass
- Podcasts
- Watch
- Tips
- Find My iPhone
- Find My Friends
- Settings
- Files

Free Apps from Apple
Pages, Numbers, Keynote, iMovie, GarageBand, iTunes U, Clips, and Apple Store app are preinstalled.

- iMovie
- Pages
- Numbers
- Keynote
- iTunes U
- GarageBand
- Apple Store
- Trailers
- Apple TV Remote
- iTunes Remote
- Music Memos
- Clips

Headphones

- EarPods with Lightning Connector

SIM Card

- Nano-SIM
- iPhone X is not compatible with existing micro-SIM cards.

Rating for Hearing Aids

- iPhone X (Model A1865, A1901): M3, T4

Mail Attachment Support

- **Viewable document types**
  .jpg, .tiff, .gif (images); .doc and .docx (Microsoft Word); .htm and .html (web pages); .key (Keynote); .numbers (Numbers); .pages (Pages); .pdf (Preview and Adobe Acrobat); .ppt and .pptx (Microsoft PowerPoint); .txt (text); .rtf (rich text format); .vcf (contact information); .xls and .xlsx (Microsoft Excel); .zip; .ics

System Requirements

- Apple ID (required for some features)
- Internet access[11]
- Syncing with iTunes on a Mac or PC requires:
  - Mac: OS X 10.10.5 or later
  - PC: Windows 7 or later
  - iTunes 12.7 or later (free download from www.itunes.com/download)

Environmental Requirements

- Operating ambient temperature: 32° to 95° F (0° to 35° C)
- Nonoperating temperature: −4° to 113° F (−20° to 45° C)
- Relative humidity: 5% to 95% noncondensing
- Operating altitude: tested up to 10,000 feet (3000 m)

Languages

- **Language support**
  English (Australia, UK, U.S.), Chinese (Simplified, Traditional, Traditional Hong Kong), French (Canada, France), German, Italian, Japanese, Korean, Spanish (Latin America, Mexico, Spain), Arabic, Catalan, Croatian, Czech, Danish, Dutch, Finnish, Greek, Hebrew, Hindi, Hungarian, Indonesian, Malay, Norwegian, Polish, Portuguese (Brazil, Portugal), Romanian, Russian, Slovak, Swedish, Thai, Turkish, Ukrainian, Vietnamese
- **QuickType keyboard support**
  English (Australia, Canada, India, Singapore, UK, U.S.), Chinese - Simplified (Handwriting, Pinyin, Stroke), Chinese - Traditional (Cangjie, Handwriting, Pinyin, Stroke, Sucheng, Zhuyin), French (Belgium, Canada, France, Switzerland), German (Austria, Germany, Switzerland), Italian, Japanese (Kana, Romaji), Korean, Spanish (Latin America, Mexico, Spain), Arabic (Modern Standard, Najdi), Armenian, Azerbaijani, Belarusian, Bengali, Bulgarian, Catalan, Cherokee, Croatian, Czech, Danish, Dutch, Emoji, Estonian, Filipino, Finnish, Flemish, Georgian, Greek, Gujarati, Hawaiian, Hebrew, Hindi (Devanagari, Transliteration), Hinglish, Hungarian, Icelandic, Indonesian, Irish, Kannada, Latvian, Lithuanian, Macedonian, Malay, Malayalam, Maori, Marathi, Norwegian, Odia, Persian, Polish, Portuguese (Brazil, Portugal), Punjabi, Romanian, Russian, Serbian (Cyrillic, Latin), Slovak, Slovenian, Swahili, Swedish, Tamil (Script, Transliteration), Telugu, Thai, Tibetan, Turkish, Ukrainian, Urdu, Vietnamese, Welsh

- **QuickType keyboard support with predictive input**
  English (Australia, Canada, India, Singapore, UK, U.S.), Chinese (Simplified, Traditional), French (Belgium, Canada, France, Switzerland), German (Austria, Germany, Switzerland), Italian, Japanese, Korean, Russian, Spanish (Latin America, Mexico, Spain), Portuguese (Brazil, Portugal), Thai, Turkish
- **Siri languages**
  English (Australia, Canada, India, Ireland, New Zealand, Singapore, South Africa, UK, U.S.), Spanish (Chile, Mexico, Spain, U.S.), French (Belgium, Canada, France, Switzerland), German (Austria, Germany, Switzerland), Italian (Italy, Switzerland), Japanese, Korean, Mandarin (China mainland, Taiwan), Cantonese (China mainland, Hong Kong), Arabic (Saudi Arabia, United Arab Emirates), Danish (Denmark), Dutch (Belgium, Netherlands), Finnish (Finland), Hebrew (Israel), Malay (Malaysia), Norwegian (Norway), Portuguese (Brazil), Russian (Russia), Swedish (Sweden), Thai (Thailand), Turkish (Türkiye)
- **Dictation languages**
  English (Australia, Canada, India, Indonesia, Ireland, Malaysia, New Zealand, Philippines, Saudi Arabia, Singapore, South Africa, United Arab Emirates, UK, U.S.), Spanish (Argentina, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Spain, Uruguay, U.S.), French (Belgium, Canada, France, Luxembourg, Switzerland), German (Austria, Germany, Luxembourg, Switzerland), Italian (Italy, Switzerland), Japanese, Korean, Mandarin (China mainland, Taiwan), Cantonese (China mainland, Hong Kong, Macao), Arabic (Kuwait, Qatar, Saudi Arabia, United Arab Emirates), Catalan, Croatian, Czech, Danish, Dutch (Belgium, Netherlands), Finnish, Greek, Hebrew, Hindi (India), Hungarian, Indonesian, Malaysian, Norwegian, Polish, Portuguese (Brazil, Portugal), Romanian, Russian, Shanghainese (China mainland), Slovakian, Swedish, Thai, Turkish, Ukrainian, Vietnamese
- **Definition dictionary support**
  English, Chinese (Simplified, Traditional), Danish, Dutch, French, German, Hindi, Italian, Japanese, Korean, Norwegian, Portuguese, Russian, Spanish, Swedish, Thai, Turkish
- **Bilingual dictionary support**
  Chinese (Simplified), Dutch, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish
- **Spell check**
  English, French, German, Italian, Spanish, Danish, Dutch, Finnish, Korean, Norwegian, Polish, Portuguese, Russian, Swedish, Turkish

In the Box

- iPhone with iOS 11
- EarPods with Lightning Connector
- Lightning to 3.5 mm Headphone Jack Adapter
- Lightning to USB Cable
- USB Power Adapter
- Documentation

iPhone and the Environment
Apple takes a complete product life cycle approach to determining our environmental impact.
Learn more about iPhone and the Environment

iPhone X embodies Apple's continuing environmental progress. It is designed with the following features to reduce environmental impact:

- Mercury-free
- Arsenic-free display glass
- Brominated flame retardant-free
- PVC-free
- Beryllium-free
- Highly recyclable stainless steel

Apple and the Environment
Learn more about Apple's dedication to reducing the environmental impact of our products and process. Or read our Product Environmental Reports for detailed information on the environmental performance of every Apple product.

* To identify your iPhone model number, see https://support.apple.com/kb/HT3939. For details on LTE support, contact your carrier and see www.apple.com/iphone/LTE. Cellular technology support is based on iPhone model number and configuration for either CDMA or GSM networks.

1. Available space is less and varies due to many factors. A standard configuration uses approximately 8GB to 11GB of space (including iOS and preinstalled apps) depending on the model and settings. Preinstalled apps use about 4GB, and you can delete these apps and restore them.
2. Size and weight vary by configuration and manufacturing process.
3. iPhone X is splash, water, and dust resistant and was tested under controlled laboratory conditions with a rating of IP67 under IEC standard 60529. Splash, water, and dust resistance are not permanent conditions and resistance might decrease as a result of normal wear. Do not attempt to charge a wet iPhone; refer to the user guide for cleaning and drying instructions. Liquid damage not covered under warranty.
4. FaceTime calling requires a FaceTime-enabled device for the caller and recipient and a Wi-Fi connection. Availability over a cellular network depends on carrier policies; data charges may apply.

5. Data plan required. LTE Advanced, LTE, VoLTE, and Wi-Fi calling are available in select markets and through select carriers. Speeds are based on theoretical throughput and vary based on site conditions and carrier. For details on LTE support, contact your carrier and see www.apple.com/iphone/LTE.
6. Standard Dynamic Range video content only.
7. Siri may not be available in all languages or in all areas, and features may vary by area. Internet access required. Cellular data charges may apply.
8. All battery claims depend on network configuration and many other factors; actual results will vary. Battery has limited recharge cycles and may eventually need to be replaced by Apple service provider. Battery life and charge cycles vary by use and settings. See www.apple.com/batteries and www.apple.com/iphone/battery.html for more information.
9. Testing conducted by Apple in August 2017 using preproduction iPhone X units and software and accessory Apple USB-C Power Adapters (29W Model A1540, 61W Model A1718, 87W Model A1719). Fast-charge testing conducted with drained iPhone units. Charge time varies with environmental factors; actual results will vary.
10. Compatible Qi-certified wireless chargers sold separately.
11. Wireless broadband recommended; fees may apply.

Some features may not be available for all countries or all areas. Click here to see complete list.

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