Documentation

iPhone XR - Technical Specifications

Year introduced: 2018

[Identify your iPhone model](#)

Finish	• (PRODUCT)RED™ • Yellow • White • Coral • Black • Blue
Capacity[1]	• 64GB • 128GB • 256GB
Size and Weight[2]	• Width: 2.98 inches (75.7 mm) • Height: 5.94 inches (150.9 mm) • Depth: 0.33 inch (8.3 mm) • Weight: 6.84 ounces (194 grams)
Display	• Liquid Retina HD display • 6.1-inch (diagonal) all-screen LCD Multi-Touch display with IPS technology • 1792-by-828-pixel resolution at 326 ppi • 1400:1 contrast ratio (typical) • True Tone display

- Wide color display (P3)

- Haptic Touch

- 625 nits max brightness (typical)

- Fingerprint-resistant oleophobic coating

- Support for display of multiple languages and characters simultaneously

The iPhone XR 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 6.06 inches diagonally (actual viewable area is less).

Splash, Water, and Dust Resistant[3]

- Rated IP67 (maximum depth of 1 meter up to 30 minutes) under IEC standard 60529

Chip

- A12 Bionic chip

- Second-generation Neural Engine

Camera

- 12MP Wide camera

- ƒ/1.8 aperture

- Digital zoom up to 5x

- Portrait mode with advanced bokeh and Depth Control

- Portrait Lighting with three effects (Natural, Studio, Contour)

- Optical image stabilization

- Six-element lens

- LED True Tone flash with Slow Sync

- Panorama (up to 63MP)

- Autofocus with Focus Pixels

- Smart HDR for photos

- Wide color capture for photos and Live Photos

- Advanced red-eye correction

- Auto image stabilization

- Burst 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

- Extended dynamic range for video up to 30 fps

- Optical image stabilization for video
- Digital zoom up to 3x
- 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
- Take 8MP still photos while recording 4K video
- Playback zoom
- Video formats recorded: HEVC and H.264
- Stereo recording

TrueDepth Camera

- 7MP camera
- f/2.2 aperture
- Portrait mode with advanced bokeh and Depth Control
- Portrait Lighting with six effects (Natural, Studio, Contour, Stage, Stage Mono, High-Key Mono)
- Animoji and Memoji
- 1080p HD video recording at 30 fps or 60 fps
- Smart HDR for photos
- Extended dynamic range for video at 30 fps
- Cinematic video stabilization (1080p and 720p)
- Wide color capture for photos and Live Photos
- Retina Flash
- Auto image stabilization
- Burst 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
- Send and receive money in Messages
- Complete purchases made with Apple Pay on your Mac

Learn more about Apple Pay

Cellular and Wireless

- **Model A1984***
  - FDD-LTE (Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 18, 19, 20, 25, 26, 29, 30, 32, 66, 71)
  - TD-LTE (Bands 34, 38, 39, 40, 41)

- ○ CDMA EV-DO Rev. A (800, 1900 MHz)
- ○ UMTS/HSPA+/DC-HSDPA (850, 900, 1700/2100, 1900, 2100 MHz)
- ○ GSM/EDGE (850, 900, 1800, 1900 MHz)
- **All models**
- ○ LTE Advanced[4]
- ○ 802.11ac Wi-Fi with 2x2 MIMO
- ○ Bluetooth 5.0 wireless technology
- ○ NFC with reader mode
- ○ Express Cards with power reserve

For details on LTE support, contact your carrier and see
apple.com/iphone/LTE.

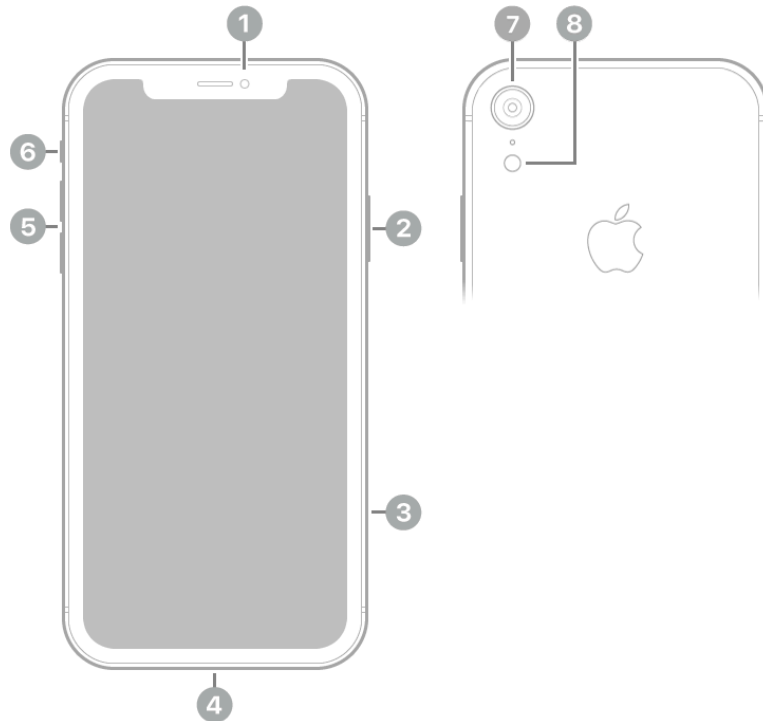|	
Location	- Built-in GPS/GNSS - Digital compass - Wi-Fi - Cellular - iBeacon microlocation
Video Calling[5]	- FaceTime video calling over cellular or Wi-Fi - FaceTime HD (1080p) video calling over Wi-Fi
Audio Calling[5]	- FaceTime audio - Voice over LTE (VoLTE)[4] - Wi-Fi calling[4]
Audio Playback	- 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), Dolby Atmos, and Audible (formats 2, 3, 4, Audible Enhanced Audio, AAX, and AAX+) - Wider stereo playback - User-configurable maximum volume limit
Video Playback	- Video formats supported: HEVC, H.264, MPEG-4 Part 2, and Motion JPEG - Supports 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 on your Lock screen and in Messages, Mail, QuickType, and more
- Activate hands-free with only your voice using "Hey Siri"
- Use your voice to run shortcuts from your favorite apps

[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 camera
8. Flash

Power and Battery[8]

- Talk time : Up to 25 hours
- Internet use: Up to 15 hours
- Video playback : Up to 16 hours
- Audio playback : Up to 65 hours

- Fast-charge capable: Up to 50% charge in 30 minutes[9] with 20W adapter or higher (sold separately)
- Built-in rechargeable lithium-ion battery
- Wireless charging (works with Qi 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

iOS is the world's most personal and secure mobile operating system, packed with powerful features and designed to protect your privacy.

[See what's new in iOS](#)

[iPhone User Guide](#)

Accessibility

Accessibility features help people with disabilities get the most out of their new iPhone XR. With built-in support for vision, hearing, mobility, and learning, you can fully enjoy the world's most personal device.
[Learn more about Accessibility](#)

Features include:

- Voice Control
- VoiceOver
- Zoom
- Magnifier
- RTT and TTY support
- Siri and Dictation
- Type to Siri
- Switch Control
- Closed Captions
- AssistiveTouch
- Speak Screen
- Back Tap

Built-in Apps

- Camera
- Photos

- Health
- Messages
- Phone
- FaceTime
- Mail
- Music
- Wallet
- Safari
- Maps
- Siri
- Calendar
- iTunes Store
- App Store
- Notes
- News
- Contacts
- Books
- Home
- Weather
- Reminders
- Clock
- TV
- Stocks
- Calculator
- Voice Memos
- Compass
- Podcasts
- Watch
- Tips
- Find My
- Settings
- Files
- Measure
- Shortcuts
- Translate

Free Apps from Apple

Pages, Numbers, Keynote, iMovie, GarageBand, Clips, and Apple Store app are preinstalled.

- iMovie
- Pages
- Numbers

- Keynote
- GarageBand
- Apple Store
- Trailers
- iTunes Remote
- Clips
- Support

SIM Card

- Dual SIM (nano-SIM and eSIM)[11]
- iPhone XR is not compatible with existing micro-SIM cards.

eSIM not supported in all regions. Learn more about eSIM on iPhone.

Rating for Hearing Aids

- 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; .usdz (USDZ Universal)

System Requirements

- Apple ID (required for some features)
- Internet access[12]
- Syncing to a Mac or a PC requires:
  - macOS Catalina 10.15 using the Finder
  - macOS El Capitan 10.11.6 through macOS Mojave 10.14.6 using iTunes 12.8 or later
  - Windows 7 or later using iTunes 12.9 or later (free download from 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 QWERTY, Pinyin 10 Key, Shuangpin, Stroke), Chinese - Traditional (Cangjie, Handwriting, Pinyin QWERTY, Pinyin 10 Key, Shuangpin, Stroke, Sucheng, Zhuyin), French (Belgium, Canada, France, Switzerland), German (Austria, Germany, Switzerland), Italian, Japanese (Kana, Romaji), Korean (2-Set, 10 Key), Spanish (Latin America, Mexico, Spain), Albanian, Arabic (Modern Standard, Najdi), Armenian, Assamese, Azerbaijani, Bangla, Belarusian, Bodo, Bulgarian, Burmese, Cantonese - Traditional (Cangjie, Handwriting, Stroke, Sucheng), Catalan, Cherokee, Croatian, Czech, Danish, Dhivehi, Dogri, Dutch, Emoji, Estonian, Faroese, Filipino, Finnish, Flemish, Georgian, Greek, Gujarati, Hawaiian, Hebrew, Hindi (Devanagari, Latin, Transliteration), Hungarian, Icelandic, Indonesian, Irish Gaelic, Kannada, Kashmiri (Arabic, Devanagari), Kazakh, Khmer, Konkani (Devanagari), Kurdish (Arabic, Latin), Kyrgyz, Lao, Latvian, Lithuanian, Macedonian, Maithili, Malay (Arabic, Latin), Malayalam, Maltese, Manipuri (Bangla, Meetei Mayek), Maori, Marathi, Mongolian, Nepali, Norwegian (Bokmål, Nynorsk), Odia, Pashto, Persian, Persian (Afghanistan), Polish, Portuguese (Brazil, Portugal), Punjabi, Romanian, Russian, Sanskrit, Santali (Devanagari, Ol Chiki), Serbian (Cyrillic, Latin), Sindhi (Arabic, Devanagari), Sinhala, Slovak, Slovenian, Swahili, Swedish, Tajik, Tamil (Anjal, Tamil 99), Telugu, Thai, Tibetan, Tongan, Turkish, Turkmen, Ukrainian, Urdu, Uyghur, Uzbek (Arabic, Cyrillic, Latin), Vietnamese, Welsh

- **QuickType keyboard support with autocorrection**

  - Arabic (Modern Standard), Arabic (Najdi), Bangla, Bulgarian, Catalan, Cherokee, Chinese - Simplified (Pinyin QWERTY), Chinese - Traditional (Pinyin QWERTY), Chinese - Traditional (Zhuyin), Croatian, Czech, Danish, Dutch, English (Australia), English (Canada), English (India), English (Japan), English (Singapore), English (UK), English (U.S.), Estonian, Filipino, Finnish, Dutch (Belgium), French (Belgium), French (Canada), French (France), French (Switzerland), German (Austria), German (Germany), German (Switzerland), Greek, Gujarati, Hawaiian, Hebrew, Hindi (Devanagari), Hindi (Transliteration), Hungarian, Icelandic, Indonesian, Irish Gaelic, Italian, Japanese (Kana), Japanese (Romaji), Korean (2-set), Latvian, Lithuanian, Macedonian, Malay, Marathi, Norwegian (Bokmål), Norwegian (Nynorsk), Persian, Persian (Afghanistan), Polish, Portuguese (Brazil), Portuguese (Portugal), Punjabi, Romanian, Russian, Serbian (Cyrillic), Serbian (Latin), Slovak, Slovenian, Spanish (Latin America), Spanish (Mexico), Spanish (Spain), Swedish, Tamil (Anjal), Tamil (Tamil 99), Telugu, Thai, Turkish, Ukrainian, Urdu, Vietnamese

- **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, Spanish (Latin America, Mexico, Spain), Arabic (Modern Standard, Najdi), Cantonese (Traditional), Dutch, Hindi (Devanagari, Latin), Portuguese (Brazil, Portugal), Russian, Swedish, Thai, Turkish, Vietnamese

- **QuickType keyboard support with multilingual input**

  - English (U.S.), English (Australia), English (Canada), English (India), English (Singapore), English (UK), Chinese – Simplified (Pinyin), Chinese – Traditional (Pinyin), French (France), French (Belgium), French (Canada), French (Switzerland), German (Germany), German (Austria), German (Switzerland), Italian, Japanese (Romaji), Portuguese (Brazil), Portuguese (Portugal), Spanish (Spain), Spanish (Latin America), Spanish (Mexico), Dutch (Belgium), Dutch (Netherlands), Hindi (Latin)

- **QuickType keyboard support with contextual suggestions**

  - English (U.S.), English (Australia), English (Canada), English (India), English (Singapore), English (UK), Chinese (Simplified), French (Belgium), French (Canada), French (France), French (Switzerland), German (Austria), German (Germany), German (Switzerland), Italian, Spanish (Latin America), Spanish (Mexico), Spanish (Spain), Arabic (Modern Standard), Arabic (Najdi), Dutch (Belgium), Dutch (Netherlands), Hindi (Devanagari), Hindi (Latin), Russian, Swedish, Portuguese (Brazil), Turkish, Vietnamese

- **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 (Japan), Korean (Republic of Korea), Mandarin Chinese (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), Slovak, Swedish, Thai, Turkish, Ukrainian, Vietnamese

- **Definition dictionary support**

  - English (UK, U.S.), Chinese (Simplified, Traditional), Danish, Dutch, French, German, Hebrew, Hindi, Italian, Japanese, Korean, Norwegian, Portuguese, Russian, Spanish, Swedish, Thai, Turkish

- **Bilingual dictionary support**

  - Arabic – English, Chinese (Simplified) – English, Chinese (Traditional) – English, Dutch – English, French – English, French – German, German – English, Hindi – English, Indonesian – English, Italian – English, Japanese – English, Japanese – Chinese (Simplified), Korean – English, Polish – English, Portuguese – English, Russian – English, Spanish – English, Thai – English, Vietnamese – English

- **Thesaurus**

  - English (UK, U.S.)

- **Spell check**

  - English, French, German, Italian, Spanish, Arabic, Arabic Najdi, Danish, Dutch, Finnish, Korean, Norwegian, Polish, Portuguese, Russian, Swedish, Turkish

- **Apple Pay supported regions**

  - Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, China mainland,[13] Croatia, Cyprus, Czech Republic, Denmark, Estonia, Faroe Islands, Finland, France, Georgia, Germany, Greece, Greenland, Guernsey, Hong Kong, Hungary, Iceland, Ireland, Isle of Man, Italy, Japan, Jersey, Kazakhstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Macao, Malta, Montenegro, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, San Marino, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, Spain, Sweden, Switzerland, Taiwan, UK, Ukraine, United Arab Emirates, U.S., Vatican City

In the Box

- iPhone with iOS 14
- USB-C to Lightning Cable
- 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](https://support.apple.com/en-us/111868)

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

- Arsenic-free display glass
- Mercury-free display
- Brominated flame retardant–free
- PVC-free

- Beryllium-free

- Recyclable low-carbon aluminum

Apple and the Environment

Read our Product Environmental Reports for detailed information on the environmental performance of every Apple product.

* To identify your iPhone model number, see support.apple.com/kb/HT3939. For details on LTE support, contact your carrier and see 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 11GB to 14GB 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. Storage capacity subject to change based on software version and may vary by device.

2. Size and weight vary by configuration and manufacturing process.

3. iPhone XR is splash, water, and dust resistant and was tested under controlled laboratory conditions with a rating of IP67 under IEC standard 60529 (maximum depth of 1 meter up to 30 minutes). 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. 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 apple.com/iphone/LTE.

5. 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.

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 apple.com/batteries and apple.com/iphone/battery.html for more information.

9. Testing conducted by Apple in August 2018 using preproduction iPhone XR units and software and accessory Apple USB-C Power Adapters (18W Model A1720, 29W Model A1540, 30W Model A1882, 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. Qi wireless chargers sold separately.

11. Use of eSIM requires a wireless service plan (which may include restrictions on switching service providers and roaming, even after contract expiration). Not all carriers support eSIM. Use of eSIM in iPhone may be disabled when purchased from some carriers. See your carrier for details. To learn more, visit support.apple.com/kb/HT209044.

12. Wireless broadband recommended; fees may apply.

13. In China mainland, you can use Apple Pay on the web in Safari only on compatible iPhone and iPad models using iOS 11.2 or later.

Some features may not be available for all countries or all areas. View complete list.

Helpful?   Yes   No

Support   iPhone XR - Technical Specifications