

Documentation



iPad (4th generation) - Technical Specifications

Color

- Black
- White

Models

- Wi-Fi
- Wi-Fi + Cellular

Size and Weight ¹**Wi-Fi**

- Height: 9.50 inches (241.2 mm)
- Width: 7.31 inches (185.7 mm)
- Depth: 0.37 inch (9.4 mm)
- Weight: 1.44 pounds (652 g)

Wi-Fi + Cellular

- Height: 9.50 inches (241.2 mm)
- Width: 7.31 inches (185.7 mm)
- Depth: 0.37 inch (9.4 mm)
- Weight: 1.46 pounds (662 g)

Storage ²

- 16GB
- 32GB
- 64GB
- 128GB

Wireless and Cellular**Wi-Fi**

- 802.11a/b/g/n Wi-Fi (802.11n 2.4GHz and 5GHz)
- Bluetooth 4.0 wireless technology

Wi-Fi + Cellular

- Model A1459*

- GSM/EDGE (850, 900, 1800, 1900 MHz)
- UMTS/HSPA+/DC-HSDPA (850, 900, 1900, 2100 MHz)
- LTE (Bands 4 and 17)
- Model A1460*
 - CDMA EV-DO Rev. A and Rev. B (800, 1900, 2100 MHz)
 - GSM/EDGE (850, 900, 1800, 1900 MHz)
 - UMTS/HSPA+/DC-HSDPA (850, 900, 1900, 2100 MHz)
 - LTE (Bands 1, 3, 5, 13, 25)
- Data only ³
- 802.11a/b/g/n Wi-Fi (802.11n 2.4GHz and 5GHz)
- Bluetooth 4.0 wireless technology

Display

- **Retina display**
- 9.7-inch (diagonal) LED-backlit Multi-Touch display with IPS technology
- 2048-by-1536 resolution at 264 pixels per inch (ppi)
- Fingerprint-resistant oleophobic coating

Chip

- Dual-core A6X with quad-core graphics

Cameras, Photos, and Video Recording

FaceTime HD Camera

- 1.2MP photos
- 720p HD video
- FaceTime video calling over Wi-Fi or cellular ⁴
- Face detection
- Backside illumination
- Tap to control exposure for video or still images
- Photo and video geotagging

iSight Camera

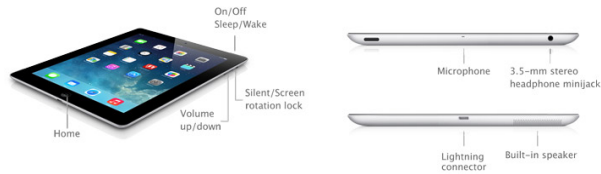
- 5MP photos
- Autofocus
- Face detection
- Backside illumination
- Five-element lens
- Hybrid IR filter
- $f/2.4$ aperture
- Tap to focus video or still images
- Tap to control exposure for video or still images
- Photo and video geotagging

Video Recording

- 1080p HD video recording

- Video stabilization
- Face detection
- Tap to focus while recording
- Backside illumination

External Buttons and Connectors



External Buttons and Controls

- Home
- On/Off; Sleep/Wake
- Silent/Screen rotation lock
- Volume up/down

Connectors and Input/Output

- Microphone
- 3.5-mm stereo headphone minijack
- Lightning connector
- Built-in speaker

Power and Battery ⁵

Wi-Fi

- Built-in 42.5-watt-hour rechargeable lithium-polymer battery
- Up to 10 hours of surfing the web on Wi-Fi, watching video, or listening to music
- Charging via power adapter or USB to computer system

Wi-Fi + Cellular

- Built-in 42.5-watt-hour rechargeable lithium-polymer battery
- Up to 10 hours of surfing the web on Wi-Fi, watching video, or listening to music
- Up to 9 hours of surfing the web using cellular data network
- Charging via power adapter or USB to computer system

Input/Output

Wi-Fi

- Lightning connector
- 3.5-mm stereo headphone minijack
- Built-in speaker
- Microphone

Wi-Fi + Cellular

	<ul style="list-style-type: none">• Lightning connector• 3.5-mm stereo headphone minijack• Built-in speaker• Microphone• Micro-SIM card tray
Sensors	<ul style="list-style-type: none">• Three-axis gyro• Accelerometer• Ambient light sensor
Location	Wi-Fi <ul style="list-style-type: none">• Wi-Fi• Digital compass Wi-Fi + Cellular <ul style="list-style-type: none">• Wi-Fi• Digital compass• Assisted GPS and GLONASS• Cellular
Audio Playback	<ul style="list-style-type: none">• Frequency response: 20Hz to 20,000Hz• Audio formats supported: AAC (8 to 320 Kbps), Protected AAC (from iTunes Store), HE-AAC, MP3 (8 to 320 Kbps), MP3 VBR, Audible (formats 2, 3, 4, Audible Enhanced Audio, AAX, and AAX+), Apple Lossless, AIFF, and WAV• User-configurable maximum volume limit
TV and Video	<ul style="list-style-type: none">• AirPlay Mirroring to Apple TV (2nd and 3rd generation)• Video mirroring and video out support: Up to 720p through Lightning Digital AV Adapter and Lightning to VGA Adapter (adapters sold separately)• Video formats supported: H.264 video up to 1080p, 30 frames per second, High Profile level 4.1 with AAC-LC audio up to 160 Kbps, 48kHz, stereo audio in .m4v, .mp4, and .mov file formats; MPEG-4 video up to 2.5 Mbps, 640 by 480 pixels, 30 frames per second, Simple Profile with AAC-LC audio up to 160 Kbps per channel, 48kHz, stereo audio in .m4v, .mp4, and .mov file formats; Motion JPEG (M-JPEG) up to 35 Mbps, 1280 by 720 pixels, 30 frames per second, audio in ulaw, PCM stereo audio in .avi file format
Mail Attachment Support	<ul style="list-style-type: none">• 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)

Languages

- Language support for English (U.S.), English (UK), Chinese (Simplified), Chinese (Traditional), French, German, Italian, Japanese, Korean, Spanish, Arabic, Catalan, Croatian, Czech, Danish, Dutch, Finnish, Greek, Hebrew, Hungarian, Indonesian, Malay, Norwegian, Polish, Portuguese, Portuguese (Brazil), Romanian, Russian, Slovak, Swedish, Thai, Turkish, Ukrainian, Vietnamese
- Keyboard support for English (U.S.), English (Australian), English (Canadian), English (UK), Chinese - Simplified (Handwriting, Pinyin, Stroke), Chinese - Traditional (Handwriting, Pinyin, Zhuyin, Cangjie, Stroke), French, French (Canadian), French (Switzerland), German (Germany), German (Switzerland), Italian, Japanese (Romaji, Kana), Korean, Spanish, Arabic, Bulgarian, Catalan, Cherokee, Croatian, Czech, Danish, Dutch, Emoji, Estonian, Finnish, Flemish, Greek, Hawaiian, Hebrew, Hindi, Hungarian, Icelandic, Indonesian, Latvian, Lithuanian, Macedonian, Malay, Norwegian, Polish, Portuguese (Portugal), Portuguese (Brazil), Romanian, Russian, Serbian (Cyrillic/Latin), Slovak, Swedish, Thai, Tibetan, Turkish, Ukrainian, Vietnamese
- Dictionary support (enables predictive text and autocorrect) for English (U.S.), English (Australian), English (Canadian), English (UK), Chinese - Simplified (Handwriting, Pinyin, Stroke), Chinese - Traditional (Handwriting, Pinyin, Zhuyin, Cangjie, Stroke), French, French (Canadian), French (Switzerland), German (Germany), German (Switzerland), Italian, Japanese (Romaji, Kana), Korean, Spanish, Arabic, Bulgarian, Catalan, Cherokee, Croatian, Czech, Danish, Dutch, Estonian, Finnish, Flemish, Greek, Hawaiian, Hebrew, Hindi, Hungarian, Icelandic, Indonesian, Latvian, Lithuanian, Macedonian, Malay, Norwegian, Polish, Portuguese (Portugal), Portuguese (Brazil), Romanian, Russian, Serbian (Cyrillic/Latin), Slovak, Swedish, Thai, Turkish, Ukrainian, Vietnamese
- Siri language support for English (U.S., UK, Canada, Australia), Spanish (U.S., Mexico, Spain), French (France, Canada, Switzerland), German (Germany, Switzerland), Italian (Italy, Switzerland), Japanese, Korean, Mandarin (China mainland, Taiwan), Cantonese (Hong Kong)

Accessibility

- VoiceOver screen reader
- Guided Access
- Support for playback of closed-captioned content
- AssistiveTouch interface for adaptive accessories
- Full-screen zoom magnification
- Large text

- Option to invert colors
- Left/right volume adjustment

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

System Requirements

- Apple ID (required for some features)
- Internet access ⁶
- **Syncing with iTunes on a Mac or PC requires:**
 - Mac: OS X v10.6.8 or later
 - PC: Windows 7; Windows Vista; or Windows XP Home or Professional with Service Pack 2 or later
 - Download iTunes at www.itunes.com/download

In the Box

- iPad with Retina display
- Lightning to USB Cable
- USB Power Adapter

Built-in Apps

- Safari
- Photos
- App Store
- Maps
- Photo Booth
- Reminders
- Camera
- Mail
- FaceTime
- iTunes
- Music
- Clock
- Calendar
- Messages
- Newsstand
- Videos
- Game Center
- Contacts
- Notes

iPad and the Environment

Apple takes a complete product life cycle approach to determining our environmental impact. [Learn more about iPad and the Environment](#)

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

- Mercury-free LCD display
- Arsenic-free display glass
- BFR-free
- PVC-free
- Recyclable aluminum enclosure

Apple and the Environment

[Learn more about Apple's dedication to reducing the environmental impact of our products and process.](#) [Apple Product Environmental Reports](#) detail the environmental attributes of our products.

Recycling

Apple takes a holistic view of materials management and waste minimization. [Learn more about how to recycle your iPad.](#)

*To identify your iPad model number, see <http://support.apple.com/kb/HT5452>. For details on LTE support, contact your carrier and see www.apple.com/ipad/LTE.

1. Actual size and weight vary by configuration and manufacturing process.
2. 1GB = 1 billion bytes; actual formatted capacity less.
3. Cellular data plan is sold separately. The model you purchase is configured to work with a particular cellular network technology. Check with your carrier for compatibility and cellular data plan availability.
4. FaceTime video 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. Testing conducted by Apple in October 2012 using preproduction iPad (4th generation) units and software. Testing consisted of full battery discharge while performing each of the following tasks: video playback, audio playback, and Internet browsing using Wi-Fi or cellular data network. Video content was a repeated 2-hour 23-minute movie purchased from the iTunes Store. Audio content was a playlist of 358 unique songs, consisting of a combination of songs imported from CDs using iTunes (128-Kbps AAC encoding) and songs purchased from the iTunes Store (256-Kbps AAC encoding). Internet over Wi-Fi and cellular data network tests were conducted using dedicated web and mail servers, browsing snapshot versions of 20 popular web pages, and receiving mail once an hour. All settings were default except: Wi-Fi was associated with a network (except for Internet browsing over cellular data network); the Wi-Fi feature Ask to Join Networks and Auto-Brightness were turned off. Battery life depends on device settings, usage, and many other factors. Battery tests are conducted using specific iPad units; actual results may vary.
6. Wireless broadband recommended; fees may apply.

Helpful?

Yes

No

Support

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