# iPad Pro 12.9-inch (3rd generation) -Technical Specifications



## Finish

**Capacity**<sup>1</sup>

•

Space Gray

Size and Weight<sup>2</sup>

- 256GB
- Wi–Fi models
  - Width: 8.46 inches (214.9 mm)
  - Height: 11.04 inches (280.6 mm)
  - Depth: 0.23 inch (5.9 mm)

• Weight: 1.39 pounds (631 grams)

## **Buttons and Connectors**

- Five microphones for calls, video recording, and audio recording
- Four speaker audio
- On/Off Sleep/Wake
- Volume up/down
- USB-C connector
- Smart Connector
- Magnetic connector

In the Box

- iPad Pro
- USB-C Charge Cable (1 meter)
- 18W USB-C Power Adapter

#### Display

- Liquid Retina display
- 12.9-inch (diagonal) LED-backlit Multi-Touch display with IPS technology
- 2732-by-2048-pixel resolution at 264 pixels per inch (ppi)
- ProMotion technology
- Wide color display (P3)
- True Tone display
- Fingerprint-resistant oleophobic coating
- Fully laminated display
- Antireflective coating
- 1.8% reflectivity
- 600 nits brightness

The 12.9-inch iPad Pro 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 12.9 inches diagonally (actual viewable area is less).

#### Chip

- A12X Bionic chip with 64-bit architecture
- Neural Engine
- Embedded M12 coprocessor

#### Camera

- 12-megapixel camera
- f/1.8 aperture
- Digital zoom up to 5x
- Five-element lens
- Quad-LED True Tone flash

- Panorama (up to 63 megapixels)
- 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
- Exposure control
- Noise reduction
- Smart HDR for photos
- Auto image stabilization
- Burst mode
- Timer mode
- Photo geotagging
- Image formats captured: HEIF and JPEG

#### Video Recording

- 4K video recording at 30 fps or 60 fps
- 1080p HD video recording at 30 fps or 60 fps
- 720p HD video recording at 30 fps
- Quad-LED True Tone flash
- Slo-mo video support for 1080p at 240 fps
- Time-lapse video with stabilization
- Cinematic video stabilization (1080p and 720p)
- Continuous autofocus video
- Noise reduction
- Playback zoom
- Video geotagging
- Video formats captured: HEVC and H.264

## TrueDepth Camera

- 7-megapixel photos
- Portrait mode
- Portrait Lighting
- Animoji and Memoji
- 1080p HD video recording at 30 fps or 60 fps
- Retina Flash
- f/2.2 aperture
- Wide color capture for photos and Live Photos
- Smart HDR
- Backside illumination sensor
- Auto image stabilization

Video Calling <sup>3</sup>	<ul><li>Burst mode</li><li>Exposure control</li><li>Timer mode</li></ul>	
Audio Calling	<ul> <li>FaceTime video</li> <li>iPad to any FaceTime-enabled device over Wi-Fi or cellular</li> </ul>	
Speakers	<ul> <li>FaceTime audio</li> <li>iPad to any FaceTime-enabled device over Wi-Fi or cellular</li> </ul>	
Microphones	<ul><li>Four speaker audio</li><li>Five microphones for calls, video recording, and audio</li></ul>	
Cellular and Wireless	recording	
	<ul> <li>All models</li> <li>Wi-Fi (802.11a/b/g/n/ac); simultaneous dual band (2.4GHz and 5GHz); HT80 with MIMO</li> <li>Bluetooth 5.0 technology</li> </ul>	
Location	<ul> <li>All models         <ul> <li>Digital compass</li> <li>Wi-Fi</li> </ul> </li> </ul>	
Sensors	• iBeacon microlocation	
Face ID	<ul> <li>Face ID</li> <li>Three-axis gyro</li> <li>Accelerometer</li> <li>Barometer</li> <li>Ambient light sensor</li> </ul>	
	<ul> <li>Enabled by TrueDepth camera for facial recognition</li> <li>Unlock iPad</li> <li>Secure personal data within apps</li> <li>Make purchases from the iTunes Store, App Store, and Apple Books</li> </ul>	
Apple Pay	<ul> <li>Pay with your iPad using Face ID within apps and on the web</li> <li>Send and receive money in Messages</li> </ul>	
Learn more about Apple Pay		

Siri<sup>7</sup>

- Use your voice to send messages, set reminders, and more
- Get proactive suggestions
- Use hands-free
- Listen and identify songs

## Learn more about Siri

## Charging and Expansion

USB-C

## Power and Battery<sup>8</sup>

- 12.9-inch iPad Pro
  - Built-in 36.71-watt-hour rechargeable lithiumpolymer battery
- All models
  - Up to 10 hours of surfing the web on Wi-Fi, watching video, or listening to music
  - Charging via power adapter or USB-C to computer system

## **Operating System**

iPadOS

iPadOS comes with powerful features and built-in apps designed to take advantage of the unique capabilities of iPad.

See what's new in iPadOS

## Accessibility

Accessibility features help people with disabilities get the most out of their new iPad Pro. With built-in support for vision, hearing, physical and motor skills, and learning and literacy, you can create and do amazing things. <u>Learn more about Accessibility</u>

Features include:

- VoiceOver
- Voice Control
- Zoom
- Magnifier
- Siri and Dictation
- Switch Control
- Closed Captions
- AssistiveTouch
- Speak Screen

#### Built-in Apps

- App Store
- Books
- Calendar

- Camera
- Clock
- Contacts
- FaceTime
- Files
- Find My
- Home
- iTunes Store
- Mail
- Maps
- Measure
- Messages
- Music
- News
- Notes
- Photo Booth
- Photos
- Podcasts
- Reminders
- Safari
- Settings
- Shortcuts
- Siri
- Stocks
- Tips
- TV
- Voice Memos

# Free Apps from Apple

Pages, Numbers, Keynote, iMovie, GarageBand, iTunes U, Clips, and Apple Store app are preinstalled on iPad.

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

- Swift Playgrounds
- Support

## System Requirements

- Apple ID (required for some features)
- Internet access<sup>9</sup>
- Syncing to a Mac or PC requires:
  - $\circ$  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 12.10 or later (free download from <u>itunes.com/download</u>)

#### 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, Kannada, Kashmiri (Arabic, Devanagari), Kazakh, Khmer, Konkani (Devanagari), Kurdish (Arabic, Latin), Kyrgyz, Lao, Latvian, Lithuanian, Macedonian, Maithili (Bangla), Malay (Arabic, Latin), Malayalam, Maltese, Manipuri (Bangla, Meetei Mayek), Maori, Marathi, Mongolian, Nepali, Norwegian, Odia,

Pashto, Persian, 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 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 (Najdi), Cantonese (Traditional), Dutch, Hindi (Devanagari, Latin), Portuguese (Brazil, Portugal), Russian, Swedish, Thai, 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, 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 (Turkey)

#### 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),

Audio Playback	<ul> <li>Romanian, Russian, Shanghainese (China mainland), Slovakian, Swedish, Thai, Turkish, Ukrainian, Vietnamese</li> <li>Definition dictionary support English, Chinese (Simplified, Traditional), Danish, Dutch, French, German, Hebrew, Hindi, Italian, Japanese, Korean, Norwegian, Portuguese, Russian, Spanish, Swedish, Thai, Turkish</li> <li>Thesaurus English (UK, U.S.)</li> <li>Bilingual dictionary support with English Arabic, Chinese (Simplified, Traditional), French, German, Italian, Japanese, Spanish, Korean, Dutch, Hindi, Portuguese, Russian, Thai, Vietnamese</li> <li>Spell check English, French, German, Italian, Spanish, Danish, Dutch, Finnish, Korean, Norwegian, Polish, Portuguese, Russian, Swedish, Turkish</li> <li>Audio formats supported: AAC (8 to 320 Kbps), Protected AAC (from iTunes Store), HE-AAC, MP3 (8 to 320 Kbps), MP3 VBR, Dolby Digital (AC-3), Dolby Digital Plus (E-AC-3), Dolby Atmos, Audible (formats 2, 3, 4, Audible Enhanced Audio, AAX, and AAX+), Apple Lossless, AIFF, and WAV</li> <li>User-configurable maximum volume limit</li> </ul>
TV and Video	<ul> <li>AirPlay Mirroring, photos, audio, and video out to Apple TV (2nd generation or later)</li> <li>Supports Dolby Vision and HDR10 content</li> <li>Video mirroring and video out support: Up to 4K through USB-C Digital AV Multiport Adapter and USB-C VGA Multiport Adapter (adapter sold separately)</li> <li>Video formats supported: H.264 video up to 4K, 30 frames per second, High Profile level 4.2 with AAC-LC audio up to 160 Kbps, 48kHz, stereo audio or Dolby Audio up to 1008 Kbps, 48kHz, stereo or multichannel 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 or Dolby Audio up to 160 Kbps per channel, 48kHz, stereo audio or Dolby Audio or Dolby Audio up to 1008 Kbps, 48kHz, stereo audio or polby Audio up to 1008 Kbps, 48kHz, stereo audio or multichannel 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 or Dolby Audio up to 1008 Kbps, 48kHz, stereo audio or multichannel 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</li> </ul>

## **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

# **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)
- 1. Available space is less and varies due to many factors. A standard configuration uses approximately 10GB to 13GB of space (including iPadOS 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. 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.
- Data plan required. Gigabit-class LTE 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 <u>apple.com/ipad/LTE</u>.
- 5. 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.
- 6. Not all carriers support Apple SIM and eSIM. See your carrier for details. Not available in China mainland.
- 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. Testing conducted by Apple in October 2018 using preproduction iPad Pro (11-inch) and iPad Pro (12.9-inch) (3rd 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 audio tracks purchased from the iTunes Store. 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; Brightness was set to 50%; and WPA2 encryption was enabled. Battery life depends on device settings, usage, and many other factors. Battery tests are conducted using specific iPad units; actual results may vary.
- 9. Wireless broadband recommended; fees may apply.