

# Tech Specs MHDA3LZ/A

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## **Capacity**

64GB<sup>4</sup>

128GB<sup>4</sup>

256GB<sup>4</sup>

## **Processor**

A13 Bionic chip

Third-generation Neural Engine

## **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 11 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**

Rated IP68 (maximum depth of 2 meters up to 30 minutes) under IEC standard 60529<sup>3</sup>

## **Power and Battery**

Lasts up to 1 hour longer than iPhone XR<sup>13</sup>

**Video playback:** Up to 17 hours

**Video playback (streamed):** Up to 10 hours

**Audio playback:** Up to 65 hours

**Fast-charge capable:** Up to 50% charge in 30 minutes<sup>4</sup> with 18W adapter or higher (sold separately)

Built-in rechargeable lithium-ion battery

Wireless charging (works with Qi chargers<sup>15</sup>)

Charging via USB to computer system or power adapter

## **Input/Output**

Volume up/down

Ring/Silent

Side button

Built-in stereo speakers

Lightning connector  
Built-in microphones

### **SIM Card**

Dual SIM (nano-SIM and eSIM)<sup>8</sup>

iPhone 11 is not compatible with existing micro-SIM cards

### **Video Calling**

FaceTime video calling over Wi-Fi or cellular<sup>9</sup>

### **Audio Calling**

FaceTime audio<sup>9</sup>

Voice over LTE (VoLTE)<sup>10</sup>

Wi-Fi calling<sup>10</sup>

### **Audio**

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+)

Spatial audio playback

User-configurable maximum volume limit

### **Sensors**

Accelerometer

Ambient light sensor

Barometer

Face ID

Proximity sensor

Three-axis gyro

### **FaceTime HD Camera**

12MP 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

4K video recording at 24 fps, 30fps, or 60 fps

1080p HD video recording at 30 fps or 60 fps

Slo-mo video support for 1080p at 120 fps

Next-generation Smart HDR for photos

Extended dynamic range for video at 30 fps

Cinematic video stabilization (4K, 1080p, and 720p)

Wide color capture for photos and Live Photos

Retina Flash

Auto image stabilization

Burst mode

### **Camera**

Dual 12MP Ultra Wide and Wide cameras  
Ultra Wide:  $f/2.4$  aperture and 120° field of view  
Wide:  $f/1.8$  aperture  
2x optical zoom out; digital zoom up to 5x  
Portrait mode with advanced bokeh and Depth Control  
Portrait Lighting with six effects (Natural, Studio, Contour, Stage, Stage Mono, High-Key Mono)  
Optical image stabilization (Wide)  
Five-element lens (Ultra Wide); six-element lens (Wide)  
Brighter True Tone flash with Slow Sync  
Panorama (up to 63MP)  
Sapphire crystal lens cover  
100% Focus Pixels (Wide)  
Night mode  
Auto Adjustments  
Next-generation 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 60 fps  
Optical image stabilization for video (Wide)  
2x optical zoom out; digital zoom up to 3x  
Audio zoom  
Brighter True Tone flash  
QuickTake video with subject tracking  
Slo-mo video support for 1080p at 120 fps or 240 fps  
Time-lapse video with stabilization  
Cinematic video stabilization (4K, 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

**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

### **Cellular and Wireless**

Model A2221<sup>1</sup>

FDD-LTE (Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 18, 19, 20, 25, 26, 29, 30, 66, 71)

TD-LTE (Bands 34, 38, 39, 40, 41, 42, 46, 48)

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)

Gigabit-class LTE with 2x2 MIMO and LAA<sup>5</sup>

802.11ax Wi-Fi 6 with 2x2 MIMO

Bluetooth 5.0 wireless technology

Ultra Wideband chip for spatial awareness<sup>6</sup>

NFC with reader mode

Express Cards with power reserve

### **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)<sup>11</sup>

Video mirroring and video out support: Up to 1080p through Lightning Digital

AV Adapter and Lightning to VGA Adapter (adapters sold separately)<sup>11</sup>

### **Intelligent Assistant**

Siri<sup>12</sup>- 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

### **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)

### **Languages**

Language support: English (Australia, UK, U.S.), Chinese (Simplified, Traditional, Traditional Hong Kong), French (Canada, France), German, Italian, Japanese, Korean, Spanish (Latin America, 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), Romanian, Russian, Shanghainese (China mainland), Slovak, Swedish, Thai, Turkish, Ukrainian, Vietnamese

Definition dictionary support: English, Chinese (Simplified, Traditional), French, German, Italian, Japanese, Korean, Spanish, Danish, Dutch, Hebrew, Hindi, Norwegian, Portuguese, Russian, Swedish, Thai, Turkish

Thesaurus: English (UK, U.S.)

Bilingual dictionary support with English: Arabic, Chinese (Simplified, Traditional), French, German, Italian, Japanese, Spanish, Korean, Dutch, Hindi, Portuguese, Russian, Thai, Vietnamese

Spell check: English, French, German, Italian, Spanish, Danish, Dutch, Finnish, Korean, Norwegian, Polish, Portuguese, Russian, Swedish, Turkish

#### **Location**

Built-in GPS/GNSS

Cellular

Digital compass

iBeacon microlocation

Wi-Fi

#### **Accessibility**

Accessibility features help people with disabilities get the most out of their new iPhone 11. With built-in support for vision, hearing, mobility, and learning, you can fully enjoy the world's most personal device.

Features Include:

Voice Control

VoiceOver

Zoom

Magnifier

RTT and TTY support

Siri and Dictation

Type to Siri

Switch Control

Closed Captions

AssistiveTouch

Speak Screen

#### **Size and Weight**

Height: 5.94 inches (150.9 mm)<sup>16</sup>

Width: 2.98 inches (75.7 mm)<sup>16</sup>

Depth: 0.33 inch (8.3 mm)<sup>16</sup>

Weight: 6.84 ounces (194 grams)<sup>16</sup>

