

FACTORS

THE REFERENCE GUIDE FOR PLANNING, BUILDING & RELEASING APPS



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Why We Created *Factors*

Our customers often ask us a simple question:

On what devices and browsers should I be testing my apps and websites?

As the leader in quality for mobile apps and websites, Perfecto is uniquely positioned to give the most accurate answer. In this report, we've merged our exclusive data with current market data to provide a benchmark of devices, web browsers and user conditions (location changes, apps in the background) to test on, to aid in your pursuit of digital excellence. This is the culmination of what we've learned from our most-valued customers and we're excited to pass these insights on to you.

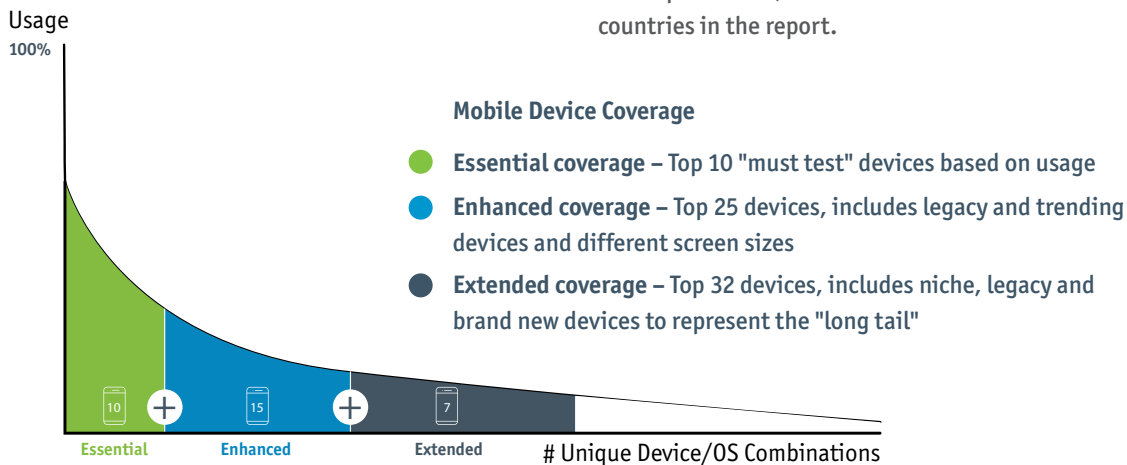


How We Built the Index



No single data source tells the full story, so for these indexes we've combined exclusive Perfecto data and mobile market usage data across a variety of countries into our own analysis.

The indexes offer up-to-date benchmarks that list the top smartphones, tablets and operating systems based on usage. **These are the device/OS combinations on which you should develop and test your mobile, web and responsive web apps.** For desktop browsers, we include one index that can be applied to all 14 countries in the report.



How to Read *Factors*

Each country featured in the report gets its own digital coverage profile with testing recommendations for mobile devices and operating system versions to create a holistic view of what's required for digital quality testing.

To identify your most optimal test coverage, you'll first need to determine your device coverage goal.

Devices that Matter to You

Our list of 32 devices per index for each country is winnowed down from hundreds of possible devices to give you the maximum coverage with the fewest devices possible. Each index is divided into three groups—"Essential", "Enhanced" and "Extended" (See graphic above). Each group includes the previous group's devices. If your testing covers all 32 devices across the three groups, you'll have the most complete recommended test coverage with the least risk.

Select your target country and then refer to the corresponding device list, making note of the "recommended OS version" column to see the recommended testing mix of devices and platforms. We include an up/down arrow or equals sign to indicate usage changes since last quarter. Devices that are new to the index or are reference devices running the latest OS are marked as such.

In this edition, we're featuring the top 16 most-used apps across six countries. We recommend installing and launching these apps prior to testing your mobile app to get you closer to the real user environment.

Testing Web Browsers

In our standalone Web Test Coverage Index (pg. 10), we list the browser/OS combinations—categorized by Latest, Previous and Newest Beta—that organizations in every country should test on to achieve desired market coverage. Given that browser versions update quickly and often automatically without users knowing, it's important to ensure that browser quality aligns with a variety of OS versions.

And finally, we've included an updated **mobile market and web calendars** (pgs 25 and 26) showing what device models, OS versions and browser/OS combinations to look out for this year.

Note

Factors is an objective reflection of selected markets based on mobile device usage of specific operating system versions. Some of the device and operating system combinations that are recommended in this report may no longer be available from OEMs or wireless network providers due to today's ever-changing market dynamics.

Key Takeaways

Market Insights & Recommendations

1. **Beta OS versions** remain an important aspect of your test coverage strategy. With Apple releasing 7 different minor iOS 10 versions since the iOS 10 launch in September 2016, iPhone/iOS 10 beta are a must-include device/OS combination. On the browser side, Chrome and Firefox beta versions are also critical to test for sustaining the quality of your mobile web/responsive websites. Look ahead to the upcoming [Chrome 59](#) that is going to change the browser UI. Implementing visual based test automation could be a great way to overcome such changes.

iOS



2. **Android fragmentation** continues to be a challenge from dev and test perspective. Teams ought to have a well structure of their test automation suites in place to support the various Android OS supported capabilities across the various devices. [Android O](#) that is in developer preview stage, is also going to introduce more Dev and test challenges.



Galaxy S7 Galaxy S7 Edge

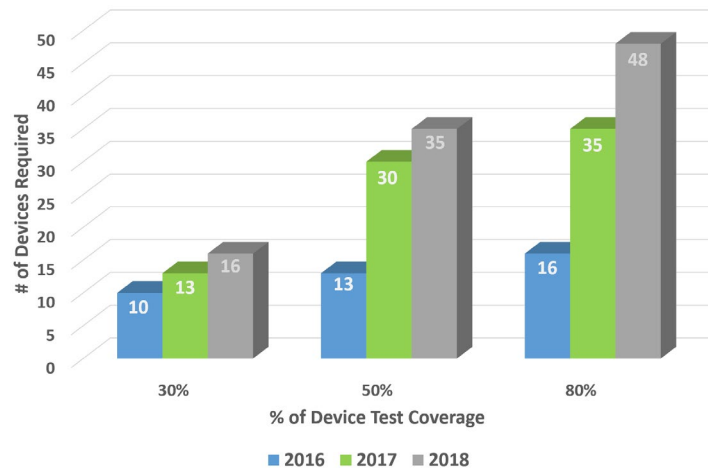
3. **Galaxy S7 and S7 Edge were a turning point for Samsung:** Over the last year, Samsung has seen a revenue slowdown because of competition from both Apple and emerging Android vendors OnePlus, Xiaomi and Huawei. With the launch of Samsung S7 & S7 Edge, the company is regaining its market share. We can see in this edition of the Index and the previous one, that Samsung is the de-facto brand in many countries, which should impact the test coverage plans in Brazil, India, Netherlands, UK, Germany and U.S. where Samsung is the leading Android vendor. With the releases of **Samsung S8 and S8 plus** that introduce new screen sizes, the test coverage should be adapted accordingly.
4. **Test automation framework and open-source:** with organizations shifting toward open-source test automation frameworks, it is important [to understand the differences](#) and requirements in order to assign the right one for your projects. In many cases, it's recommended to have a mix of more than 1 framework (e.g. Appium and XCTest UI/Espresso)

to allow both dev to develop unit tests and DevTest/QA to develop system level functional test automation.

5. **H2 is going to change the mobile space with iOS 11 and Android O releases:** Both Apple and Google are planning huge changes in the OS level as well as new iPhone 8 series. Plan for Q3 first hands-on experience with these Beta versions for quick feedback on your project status and your app compatibility with the upcoming major releases.
6. **Lab size is expected to slightly grow YoY as market matures:** Looking at the below annual growth projection, shows a slight growth in a 10, 25 and 32 device lab based on new devices that are introduced in the market in a higher pace than older devices are retired or used in a non-significant way. What we see is an annual introduction of around 15 leading devices per year with an average retirement of 5-7 per year due to decreased usage, terminated support by vendor etc. Integrating these numbers into the 30%-80% model would bring the annual growth as demonstrated in the following graph.

Lab Size Annual Growth

of Devices, Coverage %, Yearly



Regional Insights

Brazil:

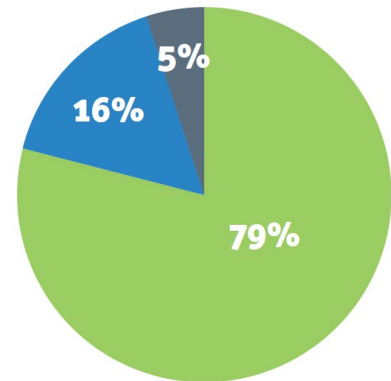
Brazil is very well dominated by **Android OS**, with the major players that are operating in that region are Samsung with nearly 50% market share, followed by Motorola, LG and Alcatel. Apple is only picking a small 4% of this market.



EU5, UK and Germany:

Europe has a lot in common with the U.S around the Samsung and iOS devices, however it is seeing clear and growing trend of Chinese devices such as Huawei and OnePlus. Huawei P8lite, Huawei P9lite, and Huawei P8/P9 are showing growth in usage in this region and ought to be included in testing coverage for these countries.

- iOS 10
- iOS 9 16%
- Earlier 5%



China:

In **China** Apple is taking ~10% of the market share while again, Android is the most dominant vendor as reflected in the Index itself. Vendors such as OPP, Huawei and Vivo are holding ~50% of that market. Amazingly, Samsung is not in the top 5 vendors in China. Take the below and the Index into account when building your device coverage for China.

Top Five Smartphone Vendors in PRC, Shipments, Market Share, and Year-Over-Year Growth, 2016 Preliminary Data (Units in Millions)

Vendor	2016 Shipment Volume	2016 Market Share	2015 Shipment Volume	2015 Market Share	Year-Over-Year Growth
1. OPPO	78.4	16.8%	35.3	8.2%	122.2%
2. Huawei	76.6	16.4%	62.9	14.6%	21.8%
3. Vivo	69.2	14.8%	35.1	8.2%	96.9%
4. Apple	44.9	9.6%	58.4	13.6%	-23.2%
5. Xiaomi	41.5	8.9%	64.9	15.1%	-36.0%
Other	156.7	33.5%	173.4	40.3%	-9.6%
TOTAL	467.3	100.0%	429.9	100.0%	8.7%

Source: IDC Quarterly Mobile Phone Tracker, Feb 6, 2017

Understand 2017 Smartphone Market Trends to Plan Your Future Mobile Strategy

IHS-Markit, the world's leading source for research, analysis, and strategic guidance in the technology, media, and telecommunications industries, sets out the key smartphone trends and briefly analyzes the implications:

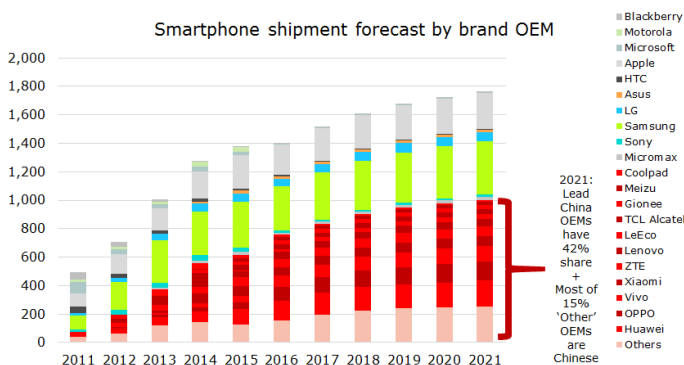
1) Timing trade-offs: OEMs have adopted different flagship strategies, some using older hardware, because Qualcomm's Snapdragon 835 will be available at a later date than previous years' chipsets and initially in limited supplies. There were three main approaches which smartphone makers adopted at MWC2017:

- Use last years' chipset and launch early, e.g. LG G6, Huawei P10 (as well as HTC's U Ultra, announced in January).
- Pre-announce using upcoming Snapdragon 835, but ship in late Spring. Examples include ZTE, Sony Xperia XZ Premium
- Delay flagship announcement until closer to availability, for example Samsung, Lenovo/Moto, Xiaomi, HMD/Nokia, Oppo and Vivo.

Samsung will be the first to ship a flagship with the Snapdragon 835 in late April 2017 with the arrival of the Galaxy S8 and S8+, and other flagships using this years' flagship Qualcomm chipset will arrive gradually over subsequent months. However, while IHS Markit expects Samsung to use most of the initial 835 production, many S8 models in Europe and Asia will use Samsung's 2017 in-house Exynos chipset.

2) Rising Chinese Stars: It continues to be critical to watch the activities – and successes – of the rising Chinese stars, many of which are looking to develop an enhanced export strategy. As a result, established smartphone OEMs are under increasing pressure, affecting profits.

Established OEMs are under increasing pressure from rising China stars, affecting profits

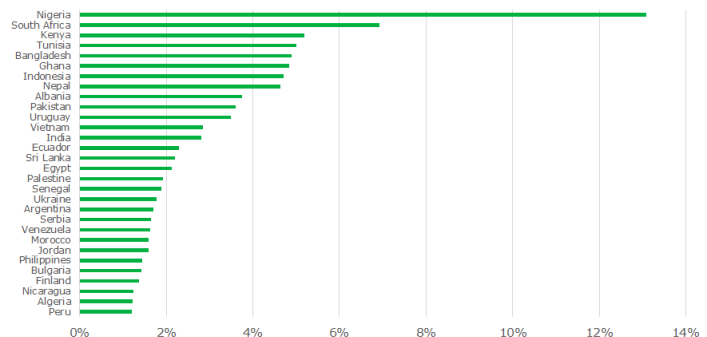


3) Brand Power Revival: As the smartphone market matures, brand becomes a more important way to market given the commonality across hardware designs. Notable examples have included Chinese OEM TCL's launch of a BlackBerry brand handset. Huawei renewed its Leica partnership and is also now working with GoPro. Start-up HMD launched its first global Android smartphone models under the Nokia brand and revived the iconic Nokia 3310 featurephone.

Today, the Nokia brand is predominantly strong in emerging markets only. However, Nokia 3310 nostalgia will help HMD re-enter Europe.

Nokia brand is now only strong in emerging markets, But Nokia 3310 nostalgia will help HMD re-enter Europe

Nokia share of combined featurephone/smartphone installed base, October 2016



IHS Markit

4) New Design Language- wide HDR displays, glass: LG, Sony and Samsung have all launched devices with high dynamic range (HDR) displays which offers vivid color. IHS Markit expects there will soon be many more HDR-capable smartphones in use than any other device category because of the size of the smartphone market and the rapid replacement cycle.

The wider 18:9 aspect ratio of the LG G6 heralds a renewed move to increase screen size inside a similar volume with much smaller bezels. Most OEMs, with the exception of Huawei, Apple and TCL's BlackBerry, are moving fingerprint sensor to the rear to make space. This shape display improves the video viewing experience and also offers new ways to display traditional smartphone apps side by side.

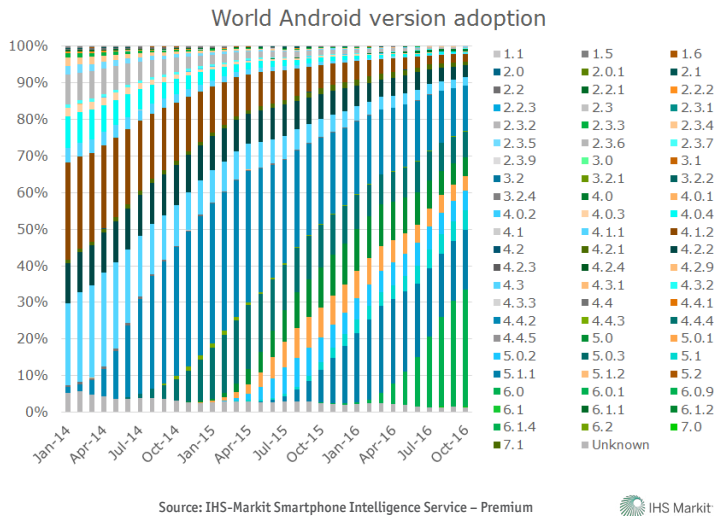
5) Smarter smartphones with Embedded AI: Machine learning is becoming a standard part of what makes a smartphone smart. The smartphone is the perfect device to offer AI voice agents because it is a personal device so all training data ties back to an individual.

Consumers' entire lives exist on a smartphone, ready to be used for machine learning analysis, and smartphones have extensive selection of sensors an AI agent can use to understand the world.

5) Smarter smartphones with Embedded AI (cont'd)

AI can be used in multiple ways on smartphones. The voice agent is the most visible, but it's far from the only approach. Huawei's new P10 smartphone includes a new photo gallery organization feature co-developed with GoPro, similar to Apple's Photos app or Google Photos. Lenovo announced an add-on Alexa Moto mod with additional microphone array.

Most significantly, Google announced its Assistant will be made available for download for all Android v6 and v7 smartphones, in essence for almost all modern Android smartphones.



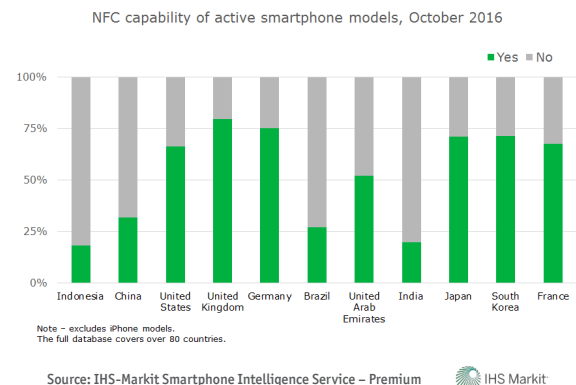
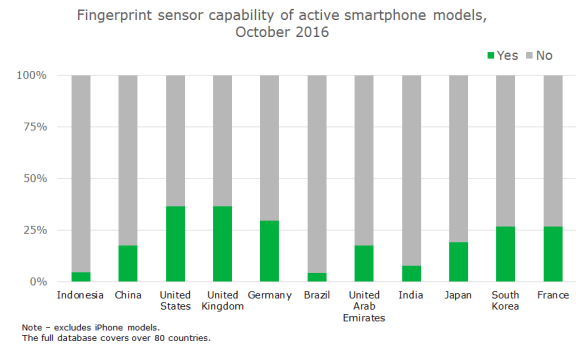
6) Modular mobile experiences: The mobile experience used to be delivered only on the smartphone device itself. Last year, OEMs launched modular hardware designs to extend the experience. Now, there is a shift to focus more on extending the mobile experience to run across wireless-connected smart accessories as well, such as 'hearables', 'smart glasses', smartwatches and fitness trackers. In 2017, Sony showed its Xperia Ear stereo prototype with intelligent audio. Lenovo announced a range of new hardware modules. TCL Alcatel went modular with the LED case for A5 smartphone. Vuzix demonstrated smartglasses, while the new cellular Huawei Watch 2 can run Google Assistant, providing users with a choice where to interact with Google's AI, either on their wrist or on their phone.

Sensors are key enablers for this modular experience, and their use is increasing in both smartphones as well as connected wearable devices for mobile payments, security, and enabling devices to be better aware of the world around them.

However, to become a critical piece of a user's everyday experiences, smartphones must benefit from a range of technologies, from NFC for payments, transport, marketing and other features, to fingerprint sensors for enhanced security. Developers need to be aware that the ability of smartphones to support enhanced functionality will vary significantly by country, with older or less expensive models being more commonplace in certain locations around the world.

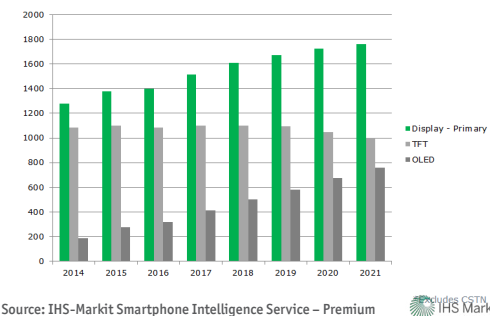
7) Gigabit LTE: Operators and vendors are heavily marketing the

latest evolution of LTE speed increases. On hardware, Samsung announced 'Gigabit LTE' support for its upcoming Exynos 8895 chipset which will be included in the upcoming Galaxy S8 flagship; Sony's Xperia XZ Premium marketed support with Qualcomm's Snapdragon 835; ZTE pre-announced it would support gigabit LTE but with little detail and Motorola has demonstrated a working 'Gigabit LTE' smartphone running on Sprint's Band 41 network in the US



8) Rise of OLED capacity: With the strategic investment of Apple in OLED display technology and capacity for their upcoming iPhones, IHS Markit is forecasting a dramatic growth of OLED share of overall smartphone displays growing from 27% in 2017 to 43% of all smartphone displays in 2021. OLED displays affords smartphone OEMs more design options as the backplane substrate is flexible in OLED (instead of rigid for LCD), allowing designs to make thinner smartphone displays with little to no bezel. Additionally, OLED's low persistence makes it suited for VR usage.

Smartphone Shipments using TFT and OLED Primary Displays



To find out more about IHS-Markit's coverage of the smartphone, media, gaming, app and other related markets, please contact Lisa. Arrowsmith@ihsmarkit.com to arrange a briefing with one of our industry-leading analyst team. For detailed smartphone information, please refer to the IHS-Markit Smartphone Intelligence Service – Premium.

Web Test Coverage – Global



CHROME
(15 COMBINATIONS)



FIREFOX
(9 COMBINATIONS)



INTERNET EXPLORER
(5 COMBINATIONS)

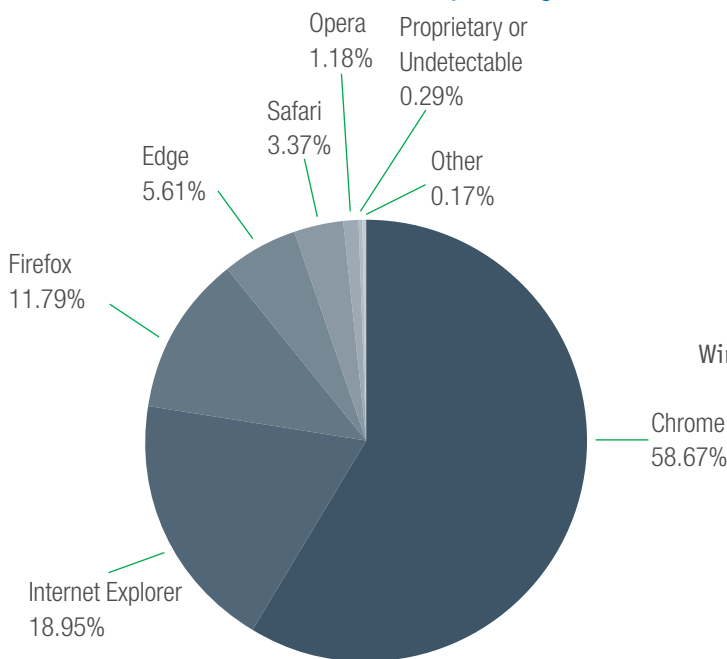


SAFARI
(3 COMBINATIONS)

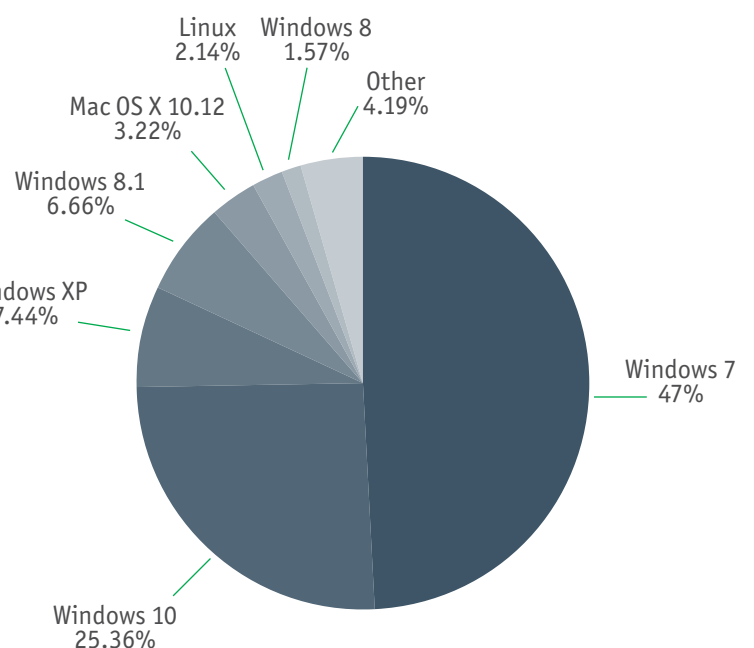


EDGE
(1 COMBINATION)

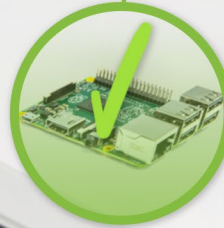
Global Web Browser Popularity-



Global OS Popularity



TESTING FOR:
**WEB
MOBILE
IOT**



**PERFECTO IS THE ONLY SINGLE PLATFORM FOR
WEB, MOBILE, AND IOT SOFTWARE TESTING.**

Eliminate test lab complexity with Perfecto, featuring real web browsers, smart phones and devices in the cloud. One platform for all digital software testing. Only with Perfecto.



Essential

Device Name	Screen Size	Screen Resolution	PPI (Pixel Per Inch)	Release Date	Recommended OS Version
Apple iPhone 6 =	4.7"	750 x 1334	326	Sep-2014	iOS 10.3.1
Apple iPhone 5S ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Samsung Galaxy S7 ↑	5.1"	1440 x 2560	577	Mar-2016	Android 7.0
Samsung Galaxy S6 ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Apple iPhone 6 Plus =	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Samsung Galaxy S5 ↓	5.1"	1080 x 1920	432	April 2014	Android 6.0.1
Apple iPhone 6S	4.7"	750 x 1334	326	Sep-2015	iOS 10.3.1
Apple iPhone 5C ↑	4.0"	640 x 1136	326	Sep-2012	iOS 10.2.1
Samsung Galaxy Note 5 =	5.7"	1440 x 2560	515	Aug-2015	Android 7.0
Google Nexus 6P = [REF]	5.7"	1440 x 2560	518	Oct-2015	Android 7.1.2

Enhanced

Apple iPad 2 ↓	9.7"	1024 x 768	132	Mar-2011	iOS 9.3.5
Samsung Galaxy S4 ↓	5.0"	1080 x 1920	440	Apr-2013	Android 5.0.1
Apple iPhone 7 ↑	4.7"	750 x 1334	326	Sep-2016	iOS 10.3.1
Apple iPad mini ↑	7.9"	1024 x 768	162	Nov-2012	iOS 9.3.5
Samsung Galaxy S7 Edge ↑	5.5"	1440 x 2560	534	Mar-2016	Android 6.0.1
Samsung Galaxy Tab S2 ↑	9.7"	1536 x 2048	264	Sep-2015	Android 6.0.1
Apple iPad Air 2 ↑	9.7"	2048 x 1536	264	Oct-2014	iOS 10.3.1
Apple iPhone 6S Plus ↓	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Apple iPhone 4S ↑	3.5"	640 x 960	330	Oct-2011	iOS 9.3.5
Samsung Galaxy S6 Edge ↓	5.1"	1440 x 2560	515	April 2015	Android 6.0.1
Google Pixel ↑	5.0"	1080 x 1920	441	Oct-2016	Android 7.1.2
Apple iPhone 7 Plus ↑	5.5"	1080 x 1920	401	Sep-2016	iOS 10.3.1
Apple iPad Air ↓	9.7"	2048 x 1536	264	Oct-2013	iOS 9.3.5
Google Pixel XL NEW	5.5"	1440 x 2560	534	Oct-2016	Android 7.1.2
Apple iPad 4 ↓	9.7"	2048 x 1536	264	Nov-2012	iOS 10.3.1

Extended

Apple iPad mini 2 ↓	7.9"	2048 x 1536	324	Nov-2013	iOS 10.3.1
Motorola Moto Z NEW	5.5"	1440 x 2560	535	Sep-2016	Android 7.0
iPad Pro ↑	12.9"	2048 x 2732	264	Nov-2015	iOS 10.3.1
Samsung Galaxy Tab 4 ↑	10.1"	800 x 1280	149	Feb-2014	Android 5.0.2
Samsung Galaxy Grand Prime ↑	5.0"	540 x 960	220	Oct-2014	Android 5.1.1
Samsung Galaxy S6 Edge Plus ↓	5.7"	1440 x 2560	518	Aug-2015	Android 6.0.1
LG V20 =	5.7"	1440 x 2560	513	Oct-2016	Android 7.1



Essential

Device Name	Screen Size	Screen Resolution	PPI (Pixel Per Inch)	Release Date	Recommended OS Version
Apple iPhone 6 =	4.7"	750 x 1334	326	Sep-2014	iOS 10.3.1
Apple iPhone 5S ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Samsung Galaxy S6 ↓	5.1"	1440 x 2560	515	April 2015	Android 6.0.1
Apple iPhone 5C ↑	4.0"	640 x 1136	326	Sep-2012	iOS 10.2.1
Samsung Galaxy S7 ↑	5.1"	1440 x 2560	577	Mar-2016	Android 7.0
Samsung Galaxy S5 neo (SM-G903W) ↑	5.1"	1080 x 1920	432	Aug-2015	Android 6.0.1
Apple iPhone 6 Plus ↓	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Samsung Galaxy S5 ↑	5.1"	1080 x 1920	432	Apr-2014	Android 6.0.1
Apple iPhone 4S ↓	3.5"	640 x 960	330	Oct-2011	iOS 10.3.1
Google Nexus 6P NEW [REF]	5.7"	1440 x 2560	518	Oct-2015	Android 7.1.2

Enhanced

Apple iPhone 6S =	4.7"	750 x 1334	326	Sep-2015	iOS 10.3.1
Apple iPad mini ↑	7.9"	1024 x 768	162	Nov-2012	iOS 9.3.5
Samsung Galaxy S4 ↓	5.0"	1080 x 1920	440	Apr-2013	Android 5.0.1
Apple iPhone 7 ↑	4.7"	750 x 1334	326	Sep-2016	iOS 10.3.1
LG G4 ↑	5.5"	1440 x 2560	515	Apr-2015	Android 6.0
Samsung Galaxy Tab E NEW	9.6"	800 x 1280	157	Jul-2015	Android 5.1
Apple iPad 2 ↓	9.7"	1024 x 768	132	Mar-2011	iOS 9.3.5
Samsung Galaxy S7 Edge ↑	5.5"	1440 x 2560	534	Mar-2016	Android 7.0
Apple iPad mini 2 ↑	7.9"	2048 x 1536	324	Nov-2013	iOS 10.3.1
Samsung Galaxy Grand Prime ↓	5.0"	540 x 960	220	Oct-2014	Android 5.1.1
Samsung Galaxy Note 4 ↑	5.7"	1440 x 2560	515	Sep-2014	Android 5.1.1
Apple iPad Air ↑	9.7"	2048 x 1536	264	Oct-2013	iOS 9.3.5
Samsung Galaxy S6 Edge ↑	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Samsung Galaxy Tab 4 ↑	10.1"	800 x 1280	149	Feb-2014	Android 5.0.2
Samsung Galaxy Avant ↓	4.5"	540 x 960	245	July 2014	Android 4.4.2

Extended

Google Pixel NEW	5.0"	1080 x 1920	441	Oct-2016	Android 7.1.2
Apple iPad 4 ↓	9.7"	2048 x 1536	264	Nov-2012	iOS 10.3.1
Apple iPhone 6S Plus ↓	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Apple iPad Air 2 ↓	9.7"	2048 x 1536	264	Oct-2014	iOS 10.3.1
Blackberry DTEK50 NEW	5.2"	1080 x 1920	424	Jul-2016	Android 6.0
iPad Pro =	12.9"	2048 x 2732	149	Nov-2015	iOS 10.3.1
Apple iPhone 7 Plus =	5.5"	1080 x 1920	401	Sep-2016	iOS 10.3.1



Essential

Device Name	Screen Size	Screen Resolution	PPI (Pixel Per Inch)	Release Date	Recommended OS Version
Samsung Galaxy S6 ↑	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Samsung Galaxy S7 ↑	5.1"	1440 x 2560	577	Feb-2016	Android 7.0
Motorola Moto X Force ↑	5.4"	1440 x 2560	540	Nov-2015	Android 5.1.1
Samsung Galaxy Duos J5 (J500) ↓	5.0"	720 x 1280	294	Jun-2015	Android 6.0.1
Motorola Moto G4 Plus (XT1640) ↓	5.5"	1080 x 1920	401	May-2016	Android 6.0.1
LG K10 (K430) NEW	5.3"	720 x 1280	277	Jan-2016	Android 5.1.1
Motorola Moto G 3rd Gen ↓	5.0"	720 x 1280	294	Jul-2015	Android 5.1.1
Apple iPhone 6 ↑	4.7"	750 x 1334	326	Sep-2014	iOS 10.3.1
Samsung Galaxy S5 ↓	5.1"	1080 x 1920	432	April 2014	Android 5.0
Google Nexus 5X = [REF]	5.0"	1080 x 1920	424	Oct-2015	Android 7.1.2

Enhanced

LG G5 ↑	5.3"	1440 x 2560	554	Apr-2016	Android 6.0.1
Alcatel One Touch Pixi3 ↑	4.5"	480 x 854	218	May-2015	Android 4.4.2
Motorola Moto X Play NEW	5.5"	1080 x 1920	403	Aug-2015	Android 5.1.1
LG G4 ↓	5.5"	1440 x 2560	515	April 2015	Android 6.0
Samsung Galaxy A3 Duos ↑	4.5"	540 x 960	245	Dec-2014	Android 4.4.4
Apple iPhone SE ↑	4.0"	640 x 1136	326	Mar-2016	iOS 10.3.1
Alcatel Pop 4 NEW	5.0"	720 x 1280	294	Apr-2016	Android 6.0
Samsung Galaxy S7 Edge ↑	5.5"	1440 x 2560	534	Feb-2016	Android 6.0.1
Apple iPhone 5S ↓	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Apple iPhone 7 NEW	4.7"	750 x 1334	326	Sep-2016	iOS 10.3.1
Samsung Galaxy A9 NEW	6.0"	1080 x 1920	367	Jan-2016	Android 5.1.1
Apple iPhone 6 Plus ↑	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
LG K4 (K130) ↑	4.5"	480 x 854	218	Feb-2016	Android 5.1.1
Apple iPad mini 2 =	7.9"	2048 x 1536	324	Nov-2013	iOS 10.3.1
Samsung Galaxy A5 ↑	5.2"	1080 x 1920	424	Dec-2015	Android 6.0.1

Extended

iPhone 6S ↓	4.7"	750 x 1334	326	Sep-2015	iOS 10.3.1
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Samsung Galaxy Note 5 ↓	5.7"	1440 x 2560	515	Aug-2015	Android 6.0.1
Motorola Moto Z Play (XT1635M) NEW	5.5"	1080 x 1920	441	Oct-2016	Android 6.0.1
Samsung Galaxy J1 Mini NEW	4.0"	480 x 800	233	Feb-2016	Android 5.1
Sony Xperia M5 ↑	5.0"	1080 x 1920	441	Sep-2015	Android 5.0.1
Samsung Galaxy J7 Duos ↑	5.5"	720 x 1280	267	Jun-2015	Android 6.0.1



Essential

Device Name	Screen Size	Screen Resolution	PPI (Pixel Per Inch)	Release Date	Recommended OS Version
Apple iPhone 6 =	4.7"	750 x 1334	326	Sep-2014	iOS 10.3.1
Apple iPhone 5S ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Samsung Galaxy S6 ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Samsung Galaxy S7 Edge ↑	5.5"	1440 x 2560	534	Feb-2016	Android 7.0
Apple iPhone 5C ↓	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Samsung Galaxy S6 Edge ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Samsung Galaxy S7 ↑	5.1"	1440 x 2560	577	Feb-2016	Android 7.0
Samsung Galaxy S5 ↓	5.1"	1080 x 1920	432	Apr-2014	Android 6.0.1
Apple iPad 2 =	9.7"	1024 x 768	132	Mar-2011	iOS 9.3.5
LG Nexus 5x [REF]	5.2"	1080x1920	423	Sep-2015	Android 7.1.2

Enhanced

Apple iPhone 6 Plus ↓	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Apple iPhone 6S ↓	4.7"	750x1334	326	Sep-2015	iOS 10.3.1
Apple iPhone 4S ↑	3.5"	640 x 960	330	Oct-2011	iOS 9.3.5
Apple iPhone 5 ↓	4.0"	640 x 1136	326	Sep-2012	iOS 10.3.1
Samsung Galaxy J5 Duos ↓	5.0"	720 x 1280	294	Jun-2015	Android 5.1.1
Apple iPad mini ↓	7.9"	1024 x 768	162	Nov-2012	iOS 9.3.5
Apple iPhone 6S Plus ↓	5.5"	1080x1920	401	Sep-2015	iOS 10.3.1
Apple iPad Air ↑	9.7"	2048 x 1536	264	Oct-2013	iOS 9.3.5
Apple iPad 4 ↑t	9.7"	2048 x 1536	264	Nov-2012	iOS 10.3.1
Samsung Galaxy S4 ↓	5.0"	1080 x 1920	440	Apr-2013	Android 5.0.1
Apple iPad Air 2 ↓	9.7"	2048 x 1536	264	Oct-2014	iOS 10.3.1
Samsung Galaxy S4 mini ↑	4.3"	540 x 960	256	Jul-2013	Android 4.4.2
Samsung Galaxy A3 ↑	4.7"	720 x 1280	312	Dec-2015	Android 6.0.1
Samsung Galaxy Note 5 ↑	5.67"	1440 x 2560	515	Aug-2015	Android 7.0
Apple iPhone 7 ↑	4.7"	750 x 1334	326	Sep-2016	iOS 10.3.1

Extended

Samsung Galaxy S3 neo ↑	4.8"	720 x 1280	306	May-2014	Android 4.4.2
Samsung Galaxy Grand Prime ↑	5.0"	540 x 960	220	Oct-2014	Android 5.1.1
Huawei P9lite NEW	5.2"	1080 x 1920	424	Apr-2016	Android 6.0
Samsung Galaxy Tab A ↓	9.7"	768 x 1024	131	May-2015	Android 6.0.1
Apple iPad mini 2 ↓	7.9"	2048 x 1536	324	Nov-2013	iOS 10.3.1
Samsung Galaxy Core Prime ↓	4.5"	480 x 800	207	Nov-2014	Android 4.4.4
Samsung Galaxy A5 NEW	5.2"	1080 x 1920	424	Dec-2015	Android 6.0.1

*Some devices/OS combinations may not be commercially available. See Note on page 4.



Essential

Device Name	Screen Size	Screen Resolution	PPI (Pixel Per Inch)	Release Date	Recommended OS Version
Apple iPhone 6 =	4.7"	750 x 1334	326	Sep-2014	iOS 10.3.1
Apple iPhone 5S ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Samsung Galaxy S6 ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Apple iPhone 5C ↓	4.0"	640 x 1136	326	Sep-2013	iOS 10.2
Samsung Galaxy S7 ↑	5.1"	1440 x 2560	577	Feb-2016	Android 7.0
Apple iPhone 6S ↑	4.7"	750 x 1334	326	Sep-2015	iOS 10.3.1
Samsung Galaxy S6 Edge ↑	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Apple iPad 2 ↑	9.7"	1024 x 768	132	Mar-2011	iOS 9.3.5
Samsung Galaxy S7 Edge ↑	5.5"	1440 x 2560	534	Mar-2016	Android 7.0
LG Nexus 5x [REF]	5.2"	1080x1920	423	Sep-2015	Android 7.1.2

Enhanced

Apple iPhone 4S ↑	3.5"	640 x 960	330	Oct-2011	iOS 9.3.5
Apple iPhone 7 ↑	4.7"	750 x 1334	326	Sep-2016	iOS 10.3.1
Apple iPhone 6 Plus ↑	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Apple iPad mini ↑	7.9"	1024 x 768	162	Nov-2012	iOS 9.3.5
Apple iPad Air 2 ↓	9.7"	2048 x 1536	264	Oct-2014	iOS 10.3.1
LG G5 NEW	5.3"	1440 x 2560	554	Apr-2016	Android 7.0
Samsung Galaxy J5 Duos ↑	5.0"	720 x 1280	294	Jun-2015	Android 5.1.1
Samsung Galaxy S5 ↓	5.1"	1080 x 1920	432	Apr-2014	Android 6.0.1
Apple iPad Air ↑	9.7"	2048 x 1536	264	Oct-2013	iOS 9.3.5
iPhone SE ↑	4.0"	640 x 1136	326	Mar-2016	iOS 10.3.1
Samsung Galaxy S4 ↓	5.0"	1080 x 1920	440	Apr-2013	Android 5.0.1
Apple iPad 4 ↑	9.7"	2048 x 1536	264	Nov-2012	iOS 10.3.1
Samsung Galaxy J3 ↑	5.0"	720 x 1280	294	Jan-2016	Android 5.1.1
Google Pixel NEW	5.0"	1080 x 1920	441	Oct-2016	Android 7.1.2
Samsung Galaxy A3 ↑	4.7"	720 x 1280	312	Dec-2015	Android 6.0.1

Extended

Huawei P9 NEW	5.2"	1080 x 1920	423	Apr-2016	Android 6.0
Samsung Galaxy Note 5 NEW	5.67"	1440 x 2560	515	Aug-2015	Android 7.0
Apple iPhone 6S Plus ↓	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Samsung Galaxy Tab 3 ↓	10.1"	800 x 1280	149	July 2013	Android 4.4.2
Apple iPhone 7 Plus ↑	5.5"	1080 x 1920	401	Sep-2016	iOS 10.3.1
Apple iPad mini 2 ↓	7.9"	2048 x 1536	324	Nov-2013	iOS 10.3.1
OnePlus 3T NEW	5.5"	1080 x 1920	401	Nov-2016	Android 6.0.1

*Some devices/OS combinations may not be commercially available. See Note on page 4.



Essential

Device Name	Screen Size	Screen Resolution	PPI (Pixel Per Inch)	Release Date	Recommended OS Version
Apple iPhone 6 =	4.7"	750 x 1334	326	Sep-2014	iOS 10.3.1
Apple iPhone 5S ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Samsung Galaxy S6 ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Samsung Galaxy S7 ↑	5.1"	1440 x 2560	577	Feb-2016	Android 7.0
Apple iPhone 5 ↑	4.0"	640 x 1136	326	Sep-2012	iOS 10.3.1
Samsung Galaxy S6 Edge ↓	5.1"	1440 x 2560	515	Apr-2015	Android 5.1.1
Samsung Galaxy S7 Edge ↑	5.5"	1440 x 2560	534	Mar-2016	Android 7.0
Apple iPhone 6S ↑	4.7"	750 x 1334	326	Sep-2015	iOS 10.3.1
Samsung Galaxy S5 ↓	5.1"	1080 x 1920	432	Apr-2014	Android 6.0.1
Google Nexus 5X = [REF]	5.0"	1080 x 1920	424	Oct-2015	Android 7.1.2

Enhanced

Samsung Galaxy S4 ↑	5.0"	1080 x 1920	440	Apr-2013	Android 5.0.1
Apple iPhone 6 Plus ↑	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Samsung S5 Mini NEW	4.5"	720 x 1280	326	Jun-2014	Android 5.1.1
Apple iPhone 4S ↓	3.5"	640 x 960	330	Oct-2011	iOS 9.3.5
Apple iPad mini ↑	7.9"	1024 x 768	162	Nov-2012	iOS 9.3.5
Huawei P8lite ↑	5.0"	720 x 1280	294	May-2015	Android 6.0
Apple iPad Air ↑	9.7"	2048 x 1536	264	Oct-2013	iOS 9.3.5
Google Pixel ↑	5.0"	1080 x 1920	441	Oct-2016	Android 7.1.2
Apple iPhone 7 ↑	4.7"	750 x 1334	326	Sep-2016	iOS 10.3.1
Samsung Galaxy S3 Neo ↓	4.8"	720 x 1280	306	May-2014	Android 4.4.2
Huawei P9 ↑	5.2"	1080 x 1920	423	Apr-2016	Android 6.0
Apple iPad Air 2 ↑	9.7"	2048 x 1536	264	Oct-2014	iOS 10.3.1
Apple iPad 2 ↓	9.7"	1024 x 768	132	Mar-2011	iOS 9.3.5
Samsung Galaxy Tab 4 ↑	10.1"	800 x 1280	149	Feb-2014	Android 5.0.2
Apple iPhone 7 Plus NEW	5.5"	1080 x 1920	401	Sep-2016	iOS 10.3.1

Extended

Samsung Galaxy A5 NEW	5.2"	1080 x 1920	424	Dec-2015	Android 6.0.1
Sony Xperia Z3 Compact ↑	4.6"	720 x 1280	319	Sep-2014	Android 6.0.1
Samsung Galaxy J5 Duos ↓	5.0"	720 x 1280	294	Jun-2015	Android 5.1.1
iPhone SE NEW	4.0"	640 x 1136	326	Mar-2016	iOS 10.3.1
Sony Xperia XZ NEW	5.2"	1080 x 1920	424	Sep-2016	Android 6.0.1
Apple iPad mini 2 ↓	7.9"	2048 x 1536	324	Nov-2013	iOS 10.3.1
Samsung Galaxy A3 ↓	4.7"	720 x 1280	312	Dec-2015	Android 6.0.1



Essential

Device Name	Screen Size	Screen Resolution	PPI (Pixel Per Inch)	Release Date	Recommended OS Version
Apple iPhone 6 =	4.7"	750 x 1334	326	Sep-2014	iOS 10.3.1
Apple iPhone 5S ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Samsung Galaxy S6 ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Apple iPhone 4S ↑	3.5"	640 x 960	330	Oct-2011	iOS 9.3.5
Samsung Galaxy S7 Edge ↑	5.5"	1440 x 2560	534	Feb-2016	Android 7.0
Apple iPhone 5 ↑	4.0"	640 x 1136	326	Sep-2012	iOS 10.2
Samsung Galaxy S7 ↑	5.1"	1440 x 2560	577	Feb-2016	Android 7.0
Apple iPhone 6 Plus ↑	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Apple iPad 2 ↑	9.7"	1024 x 768	132	Mar-2011	iOS 9.3.5
Google Nexus 5X = [REF]	5.0"	1080 x 1920	424	Oct-2015	Android 7.1.2

Enhanced

Samsung Galaxy S6 Edge ↑	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Samsung Galaxy S5 ↓	5.1"	1080 x 1920	432	Apr-2014	Android 6.0.1
Samsung Galaxy S4 ↓	5.0"	1080 x 1920	440	Apr-2013	Android 5.0.1
Apple iPhone 6S ↑	4.7"	750 x 1334	326	Sep-2015	iOS 10.3.1
Apple iPhone 7 ↑	4.7"	750 x 1334	326	Sep-2016	iOS 10.3.1
Samsung Galaxy S5 Neo ↑	5.1"	1080 x 1920	432	Aug-2015	Android 6.0.1
Apple iPhone 5C ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Apple iPad Air ↑	9.7"	2048 x 1536	264	Oct-2013	iOS 9.3.5
Apple iPad mini ↑	7.9"	1024 x 768	162	Nov-2012	iOS 9.3.5
Huawei P8lite ↑	5.0"	720 x 1280	294	May-2015	Android 6.0
Samsung Galaxy A5 NEW	5.2"	1080 x 1920	424	Dec-2015	Android 6.0.1
Apple iPad Air 2 ↓	9.7"	2048 x 1536	264	Oct-2014	iOS 10.3.1
Samsung S5 Mini NEW	4.5"	720 x 1280	326	Jun-2014	Android 5.1.1
Samsung Galaxy A3 ↑	4.7"	720 x 1280	312	Dec-2015	Android 6.0.1
Samsung Galaxy Tab 4 ↑	10.1"	800 x 1280	149	Feb-2014	Android 5.0.2

Extended

Samsung Galaxy J5 Duos ↑	5.0"	720 x 1280	294	Jun-2015	Android 5.1.1
Sony Xperia XZ NEW	5.2"	1080 x 1920	424	Sep-2016	Android 6.0.1
Apple iPhone 7 Plus NEW	5.5"	1080 x 1920	401	Sep-2016	iOS 10.3.1
Samsung Galaxy Note 4 ↓	5.7"	1440 x 2560	515	Sep-2014	Android 6.0.1
Huawei P9 ↑	5.2"	1080 x 1920	423	Apr-2016	Android 6.0
LG G5 ↑	5.3"	1440 x 2560	554	Apr-2016	Android 7.0
HTC 10 NEW	5.2"	1440 x 2560	565	Apr-2016	Android 7.0



Essential

Device Name	Screen Size	Screen Resolution	PPI (Pixel Per Inch)	Release Date	Recommended OS Version
Apple iPhone 6 =	4.7"	750 x 1334	326	Sep-2014	iOS 10.3.1
Apple iPhone 5S ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.2
Samsung Galaxy S7 Edge ↓	5.5"	1440 x 2560	534	Feb-2016	Android 7.0
Samsung Galaxy S7 ↑	5.1"	1440 x 2560	577	Feb-2016	Android 7.0
Apple iPhone 4S ↑	3.5"	640 x 960	330	Oct-2011	iOS 9.3.5
Samsung Galaxy S6 Edge ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Apple iPhone 6 Plus ↓	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Apple iPhone 6S ↓	4.7"	750 x 1334	326	Sep-2015	iOS 10.3.1
Samsung Galaxy S6 ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Google Nexus 5X = [REF]	5.0"	1080 x 1920	424	Oct-2015	Android 7.1.2

Enhanced

Apple iPad 2 ↓	9.7"	1024 x 768	132	Mar-2011	iOS 9.3.5
Apple iPhone 5C ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Apple iPhone 6S Plus ↑	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Apple iPad Air ↑	9.7"	2048 x 1536	264	Oct-2013	iOS 9.3.5
Apple iPad mini ↓	7.9"	1024 x 768	162	Nov-2012	iOS 9.3.5
Apple iPad Air 2 ↓	9.7"	2048 x 1536	264	Oct-2014	iOS 10.3.1
Samsung Galaxy S5 ↓	5.1"	1080 x 1920	432	Apr-2014	Android 6.0.1
Apple iPad 4 ↑	9.7"	2048 x 1536	264	Nov-2012	iOS 10.0.2
Samsung Galaxy A5 NEW	5.2"	1080 x 1920	424	Dec-2015	Android 6.0.1
Samsung Galaxy S4 ↓	5.0"	1080 x 1920	440	Apr-2013	Android 5.0.1
Apple iPhone 7 ↑	4.7"	750 x 1334	326	Sep-2016	iOS 10.3.1
Samsung Galaxy S4 mini ↑	4.3"	540 x 960	256	Jul-2013	Android 4.4.2
Samsung Galaxy Note 4 ↑	5.7"	1440 x 2560	515	Sep-2014	Android 5.1.1
Samsung Galaxy Tab S2 NEW	9.7"	1536 x 2048	264	Sep-2015	Android 6.0.1
Samsung Galaxy A3 NEW	4.7"	720 x 1280	312	Dec-2015	Android 6.0.1

Extended

LG G5 =	5.3"	1440 x 2560	554	Apr-2016	Android 7.0
Huawei P9 ↑	5.2"	1080 x 1920	423	Apr-2016	Android 6.0
HTC 10 ↓	5.2"	1440 x 2560	565	Apr-2016	Android 6.0.1
Samsung Galaxy Tab A ↓	9.7"	768 x 1024	131	May 2015	Android 6.0.1
Sony Xperia XZ NEW	5.2"	1080 x 1920	424	Sep-2016	Android 6.0.1
Apple iPhone 7 Plus NEW	5.5"	1080 x 1920	401	Sep-2016	iOS 10.3.1
Huawei P9lite NEW	5.2"	1080 x 1920	424	Apr-2016	Android 6.0



Essential

Device Name	Screen Size	Screen Resolution	PPI (Pixel Per Inch)	Release Date	Recommended OS Version
Apple iPhone 6 =	4.7"	750 x 1334	326	Sep-2014	iOS 10.3.1
Samsung Galaxy S3 Neo ↑	4.8"	720 x 1280	306	May 2014	Android 4.4.4
Huawei P9lite ↑	5.2"	1080 x 1920	424	Apr-2016	Android 6.0
Samsung Galaxy J5 Duos ↑	5.0"	720 x 1280	294	Jun-2015	Android 5.1.1
Apple iPhone 5S ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Samsung Galaxy S7 Edge ↑	5.5"	1440 x 2560	534	Feb-2016	Android 7.0
Apple iPhone 4S ↑	3.5"	640 x 960	330	Oct-2011	iOS 9.3.5
Samsung Galaxy Grand Neo ↓	5.0"	480 x 800	186	NEED DATE	Android 4.4.4
Samsung Galaxy S6 ↓	5.1"	1440 x 2560	515	Apr-2015	Android 5.1.1
Google Nexus 5X = [REF]	5.0"	1080 x 1920	424	Oct-2015	Android 7.1.2

Enhanced

Huawei P8lite ↑	5.0"	720 x 1280	294	NEED DATE	Android 6.0
Apple iPhone 5 ↓	4.0"	640 x 1136	326	Sep-2012	iOS 9.3.5
Samsung Galaxy S7 ↑	5.1"	1440 x 2560	577	Feb-2016	Android 6.0.1
Apple iPad 2 ↓	9.7"	1024 x 768	132	Mar-2011	iOS 9.3.5
Samsung Galaxy S6 Edge ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Apple iPhone 6S ↑	4.7"	750 x 1334	326	Sep-2015	iOS 10.3.1
Samsung Galaxy S4 ↑	5.0"	1080 x 1920	440	Apr-2013	Android 5.0.1
Apple iPhone 6 Plus ↓	5.5"	1080 x 1920	401	Sep-2014	iOS 10.2
Samsung Galaxy S5 ↓	5.1"	1080 x 1920	432	Apr-2014	Android 6.0.1
Apple iPhone 7 ↑	4.7"	750 x 1334	326	Sep-2016	iOS 10.2
Samsung Galaxy J3 NEW	5.0"	720 x 1280	294	Jan-2016	Android 5.1.1
Apple iPad mini ↑	7.9"	1024 x 768	162	Nov-2012	iOS 9.3.5
Samsung Galaxy Note 4 ↑	5.7"	1440 x 2560	515	Sep-2014	Android 6.0.1
Apple iPad 4 ↑	9.7"	2048 x 1536	264	Nov-2012	iOS 10.3.1
Samsung Galaxy Tab 4 ↑	10.1"	800 x 1280	149	Feb-2014	Android 5.0.2

Extended

Apple iPhone 5C ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Apple iPad Air 2 ↓	9.7"	2048 x 1536	264	Oct-2014	iOS 10.3.1
Apple iPhone 7 Plus NEW	5.5"	1080 x 1920	401	Sep-2016	iOS 10.3.1
Apple iPhone 6S Plus ↓	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Samsung Galaxy Tab A NEW	10.1"	1200 x 1920	224	May-2016	Android 6.0
LG G5 NEW	5.3"	1440 x 2560	554	Apr-2016	Android 7.0
Sony Xperia XZ NEW	5.2"	1080 x 1920	424	Sep-2016	Android 6.0.1



Essential

Device Name	Screen Size	Screen Resolution	PPI (Pixel Per Inch)	Release Date	Recommended OS Version
Apple iPhone 6 ↑	4.7"	750 x 1334	326	Sep-2014	iOS 10.3.1
Apple iPhone 5S ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Samsung Galaxy S6 ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Huawei P8lite ↑	5.0"	720 x 1280	294	NEED DATE	Android 6.0
Samsung Galaxy S7 Edge ↑	5.5"	1440 x 2560	534	Feb-2016	Android 7.0
Apple iPhone 4S ↑	3.5"	640 x 960	330	Oct-2011	iOS 9.3.5
Samsung Galaxy S4 ↓	5.0"	1080 x 1920	440	Apr-2013	Android 5.0.1
Samsung Galaxy Grand Prime ↑	5.0"	540 x 960	220	Oct-2014	Android 5.1.1
Google Nexus 5X = [REF]	5.0"	1080 x 1920	424	Oct-2015	Android 7.1.2
Samsung Galaxy J5 Duos ↑	5.0"	720 x 1280	294	Jun-2015	Android 6.0.1

Enhanced

Apple iPad 2 ↑	9.7"	1024 x 768	132	Mar-2011	iOS 9.3.5
Samsung Galaxy S5 ↑	5.1"	1080 x 1920	432	Apr-2014	Android 6.0.1
Huawei P9lite ↑	5.2"	1080 x 1920	424	Apr-2016	Android 6.0
Samsung Galaxy S7 ↑	5.1"	1440 x 2560	577	Feb-2016	Android 7.0
Samsung Galaxy Grand Neo ↑	5.0"	480 x 800	186	Feb-2014	Android 4.4.4
Apple iPhone 6S ↓	4.7"	750 x 1334	326	Sep-2015	iOS 10.3.1
Apple iPhone 7 ↑	4.7"	750 x 1334	326	Sep-2016	iOS 10.3.1
Apple iPhone 6 Plus ↑	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Apple iPad Air ↑	9.7"	2048 x 1536	264	Oct-2013	iOS 9.3.5
Apple iPad mini ↑	7.9"	1024 x 768	162	Nov-2012	iOS 9.3.5
Samsung Galaxy J7	5.5"	720 x 1280	267	Apr-2016	Android 6.0.1
Apple iPhone 5C NEW	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Samsung Galaxy S6 Edge ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Huawei Y635 ↑	5.0"	480 x 854	196	May-2015	Android 4.4.4
Samsung Galaxy Note 4 NEW	5.7"	1440 x 2560	515	Sep-2014	Android 6.0.1

Extended

Samsung Galaxy Tab A ↓	9.7"	768 x 1024	132	May-2015	Android 6.0.1
Samsung Galaxy A3 ↑	4.7"	720 x 1280	312	Dec-2015	Android 6.0.1
Apple iPad Air 2 ↑	9.7"	2048 x 1536	264	Oct-2014	iOS 10.3.1
bq Aquaris M5 ↓	5.0"	1080 x 1920	441	Jan-2015	Android 6.0.1
Apple iPhone 7 Plus NEW	5.5"	1080 x 1920	401	Sep-2016	iOS 10.3.1
Samsung Galaxy A5 NEW	5.2"	1080 x 1920	424	Dec-2015	Android 6.0.1
Sony Xperia XZ NEW	5.2"	1080 x 1920	424	Sep-2016	Android 6.0.1



Essential

Device Name	Screen Size	Screen Resolution	PPI (Pixel Per Inch)	Release Date	Recommended OS Version
Apple iPhone 6 ↑	4.7"	750 x 1334	326	Sep-2014	iOS 10.3.1
Apple iPad 2 ↑	9.7"	1024 x 768	132	Mar-2011	iOS 9.3.5
Samsung Galaxy S7 Edge ↑	5.5"	1440 x 2560	534	Feb-2016	Android 7.0
Samsung Galaxy S6 ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Samsung Galaxy S7 ↑	5.1"	1440 x 2560	577	Feb-2016	Android 7.0
Samsung Galaxy S6 Edge ↑	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Apple iPhone 5S ↓	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Apple iPhone 4S ↑	3.5"	640 x 960	330	Oct-2011	iOS 9.3.5
Samsung Galaxy S5 ↓	5.1"	1080 x 1920	432	Apr-2014	Android 5.0
Google Nexus 5X = [REF]	5.0"	1080 x 1920	424	Oct-2015	Android 7.1.2

Enhanced

Apple iPhone 6S ↓	4.7"	750x1334	326	Sep-2015	iOS 10.3.1
Samsung Galaxy A3 ↑	4.7"	720 x 1280	312	Dec-2015	Android 6.0.1
Apple iPad mini ↑	7.9"	1024 x 768	162	Nov-2012	iOS 9.3.5
Apple iPhone 5C ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Samsung Galaxy A5 ↑	5.2"	1080 x 1920	424	Dec-2015	Android 6.0.1
Samsung Galaxy S4 ↓	5.0"	1080 x 1920	440	Apr-2013	Android 5.0.1
Apple iPhone 7 ↑	4.7"	750 x 1334	326	Sep-2016	iOS 10.3.1
Huawei P8lite ↑	5.0"	720 x 1280	294	NEED DATE	Android 6.0
Samsung Galaxy Grand Prime ↑	5.0"	540 x 960	220	Oct-2014	Android 5.1.1
Apple iPhone 6 Plus ↑	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Samsung Galaxy Tab A ↑	9.7"	768 x 1024	131	May-2015	Android 5.0.2
Samsung Galaxy J3 ↑	5.0"	720 x 1280	294	Jan-2016	Android 5.1.1
Apple iPad Air 2 ↑	9.7"	2048 x 1536	264	Oct-2014	iOS 10.3.1
Apple iPhone 7 Plus NEW	5.5"	1080 x 1920	401	Sep-2016	iOS 10.3.1
Samsung Galaxy Tab 3 ↑	10.1"	800 x 1280	149	Jul-2013	Android 4.4.2

Extended

Apple iPad Air ↑	9.7"	2048 x 1536	264	Oct-2013	iOS 9.3.5
Samsung Galaxy J5 Duos ↑	5.0"	720 x 1280	294	Jun-2015	Android 5.1.1
Apple iPhone 6S Plus ↑	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Samsung Galaxy Note 4 ↑	5.7"	1440 x 2560	515	Sep-2014	Android 6.0.1
Apple iPad mini 2 ↓	7.9"	2048 x 1536	324	Nov-2013	iOS 10.3.1
Huawei P9 =	5.2"	1080 x 1920	423	Apr-2016	Android 6.0
Sony Xperia XZ =	5.2"	1080 x 1920	424	Sep-2016	Android 6.0.1



Essential

Device Name	Screen Size	Screen Resolution	PPI (Pixel Per Inch)	Release Date	Recommended OS Version
Apple iPhone 6 =	4.7"	750 x 1334	326	Sep-2014	iOS 10.3.1
Apple iPhone 5S ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Samsung Galaxy S7 ↑	5.1"	1440 x 2560	577	Feb-2016	Android 7.0
Apple iPhone 6 Plus ↑	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Samsung Galaxy S5 ↓	5.1"	1080 x 1920	432	Apr-2014	Android 5.0
Samsung Galaxy S6 ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Apple iPhone 6S ↑	4.7"	750 x 1334	326	Sep-2015	iOS 10.3.1
Samsung Galaxy S7 Edge ↑	5.5"	1440 x 2560	534	Feb-2016	Android 7.0
Apple iPad 2 ↓	9.7"	1024 x 768	132	Mar-2011	iOS 9.3.5
Apple iPhone 5 ↑	4.0"	640 x 1136	326	Sep-2012	iOS 10.3.1

Enhanced

Google Nexus 5X = [REF]	5.0"	1080 x 1920	424	Oct-2015	Android 7.1.2
Apple iPhone 5C ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Apple iPhone 4S ↑	3.5"	640 x 960	330	Oct-2011	iOS 9.3.5
Apple iPad mini ↑	7.9"	1024 x 768	162	Nov-2012	iOS 9.3.5
Samsung Galaxy S6 Edge ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Apple iPad 4 ↑	9.7"	2048 x 1536	264	Nov-2012	iOS 10.3.1
Apple iPhone 7 ↑	4.7"	750 x 1334	326	Sep-2016	iOS 10.3.1
Apple iPad Air 2 =	9.7"	2048 x 1536	264	Oct-2014	iOS 10.3.1
Samsung Galaxy Note 5 ↑	5.7"	1440 x 2560	515	Aug-2015	Android 7.0
iPhone SE ↑	4.0"	640 x 1136	326	Mar-2016	iOS 10.3.1
Apple iPad Air =	9.7"	2048 x 1536	264	Oct-2013	iOS 9.3.5
Google Pixel ↑	5.0"	1080 x 1920	441	Oct-2016	Android 7.1.2
Samsung Galaxy S4 ↓	5.0"	1080 x 1920	440	April 2013	Android 5.0.1
Samsung Galaxy Tab A ↑	8.0"	768 x 1024	160	May-2015	Android 6.0.1
Apple iPhone 7 Plus ↑	5.5"	1080 x 1920	401	Sep-2016	iOS 10.3.1

Extended

Apple iPhone 6S Plus ↑	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Samsung Galaxy S6 Edge Plus ↑	5.7"	1440 x 2560	518	Aug-2015	Android 5.1.1
Google Pixel XL NEW	5.5"	1440 x 2560	534	Oct-2016	Android 7.1.2
Huawei Mate 9 NEW	5.9"	1080 x 1920	373	Dec-2016	Android 7.0
Sony Xperia XZ ↑	5.2"	1080 x 1920	424	Sep-2016	Android 6.0.1
Huawei P9 =	5.2"	1080 x 1920	423	Apr-2016	Android 6.0
HTC 10 =	5.2"	1440 x 2560	565	Apr-2016	Android 7.0



Essential

Device Name	Screen Size	Screen Resolution	PPI (Pixel Per Inch)	Release Date	Recommended OS Version
Oppo F1 ↑	5.0"	720 x 1280	294	Jan-2016	Android 5.1
Oppo F1S ↑	5.5"	720 x 1280	267	Aug-2016	Android 5.1
Huawei Honor 8 ↑	5.2"	1080 x 1920	423	Jul-2016	Android 6.0
Huawei P9 ↑	5.2"	1080 x 1920	423	Apr-2016	Android 6.0
Apple iPhone 6 ↑	4.7"	750 x 1334	326	Sep-2014	iOS 10.3.1
Vivo V3 NEW	5.0"	720 x 1280	294	Apr-2016	Android 5.1
Elephone P9000 ↑	5.5"	1080 x 1920	401	Apr-2016	Android 6.0
Apple iPhone 5S ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
OnePlus 3 ↑	5.5"	1080 x 1920	401	Jun-2016	Android 6.0.1
Huawei P8 ↓	5.0"	720 x 1280	428	May 2015	Android 5.0.2

Enhanced

OnePlus 2 ↓	5.5"	1080x1920	401	Aug-2015	Android 5.1
Google Nexus 6P [REF]	5.7"	1440 x 2560	518	Oct-2015	Android 7.1.2
Samsung Galaxy S6 ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
Huawei Honor 7 ↓	5.2"	1080x1920	424	Jul-2015	Android 5.0
Xiaomi Redmi Note 2 ↓	5.5"	1080x1920	403	Aug-2015	Android 5.0
Leeco Le Max 2 ↑	5.7"	1440 x 2560	515	May-2016	Android 6.0
Xiaomi Mi 5 ↑	5.15"	1080x1920	428	Apr-2016	Android 6.0
Xiaomi Redmi Note 3 ↑	5.5"	1080x1920	403	Feb-2016	Android 5.1.1
Meizu M3 NEW	5.0"	720 x 1280	294	May-2016	Android 5.1
Huawei Mate 8 ↓	6.0"	1080x1920	368	Nov-2015	Android 6.0
Meizu MX6 ↑	5.5"	1080 x 1920	403	Jul-2016	Android 6.0
Samsung Galaxy S7 Edge ↑	5.5"	1440 x 2560	534	Feb-2016	Android 7.0
Vivo Y51 NEW	5.0"	540 x 960	220	Dec-2015	Android 5.0.2
Apple iPhone 6 Plus ↓	5.5"	1080 x 1920	401	Sep-2014	iOS 10.3.1
Meizu Pro 5 ↑	5.7"	1080x1920	386	Oct-2015	Android 5.1

Extended

ZTE AXON 7 NEW	5.5"	1440 x 2560	538	Jun-2016	Android 6.0.1
Oppo A37 NEW	5.0"	720 x 1280	294	Jun-2016	Android 5.1
OnePlus 3T NEW	5.5"	1080 x 1920	441	Nov-2016	Android 7.0
Apple iPad Mini ↓	7.9"	1024 x 768	162	Nov-2012	iOS 9.3.5
Lenovo Zuk Z2 Pro NEW	5.2"	1080 x 1920	424	Jun-2016	Android 6.0.1
ZTE Nubia Z9 ↓	5.2"	1080x1920	424	Jun-2015	Android 5.0.2
Apple iPhone 7 NEW	4.7"	750 x 1334	326	Sep-2016	iOS 10.3.1



Essential

Device Name	Screen Size	Screen Resolution	PPI (Pixel Per Inch)	Release Date	Recommended OS Version
Xiaomi Redmi Note 3 ↑	5.5"	1080x1920	403	Feb-2016	Android 5.0.2
Samsung Galaxy J7 Prime NEW	5.5"	1080 x 1920	401	Sep-2016	Android 6.0.1
OnePlus 3 ↑	5.5"	1080 x 1920	401	Jun-2016	Android 6.0.1
Lenovo Vibe V5 Plus NEW	5.0"	1080 x 1920	441	Apr-2016	Android 5.1
Motorola Moto G4 Plus NEW	5.5"	1080 x 1920	401	May-2016	Android 7.0
Vivo V5 ↑	5.5"	720 x 1280	267	Nov-2016	Android 6.0
Samsung Galaxy A9 Pro (2016) NEW	6.0"	1080 x 1920	367	May-2016	Android 6.0.1
Samsung Galaxy J5 (2016) ↓	5.0"	720 x 1280	294	Apr-2016	Android 6.0.1
Apple iPhone SE ↑	4.0"	640 x 1136	326	Mar-2016	iOS 10.3.1
Google Nexus 6P = [REF]	5.7"	1440 x 2560	518	Oct-2015	Android 7.1.2

Enhanced

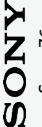
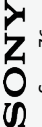
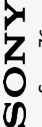
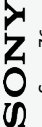
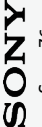
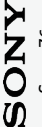
Oppo F1S ↑	5.5"	720 x 1280	267	Aug-2016	Android 5.1
Xiaomi Redmi 3S ↑	5.0"	720 x 1280	294	Jun-2016	Android 6.0.1
Apple iPhone 5S ↑	4.0"	640 x 1136	326	Sep-2013	iOS 10.3.1
Vivo V3 Max ↑	5.5"	1080 x 1920	401	Apr-2016	Android 5.1
Micromax Canvas Silver 5 Q450 ↑	4.8"	720 x 1280	306	Jul-2015	Android 5.0.2
Samsung Galaxy S6 Edge ↓	5.1"	1440 x 2560	515	Apr-2015	Android 6.0.1
OnePlus 2 ↑	5.5"	1080x1920	401	Aug-2015	Android 5.1
Leeco Le Max 2 NEW	5.7"	1440 x 2560	515	May-2016	Android 6.0
LeEco Le 2 NEW	5.5"	1080 x 1920	401	Apr-2016	Android 6.0
Xiaomi Mi 5 ↑	5.15"	1080 x 1920	428	Apr-2016	Android 6.0
Huawei Honor 6X ↑	5.5"	1080 x 1920	403	Oct-2016	Android 6.0
LeEco Le 1S ↑	5.5"	1080 x 1920	401	Feb-2016	Android 5.0
Samsung Galaxy S7 ↑	5.1"	1440 x 2560	577	Feb-2016	Android 6.0.1
Oppo F1 ↑	5.0"	720 x 1280	294	Feb-2016	Android 5.1
Samsung Galaxy On8 NEW	5.5"	1080 x 1920	401	Oct-2016	Android 6.0.1

Extended

ZTE Nubia Z11 Mini ↑	5.0"	1080 x 1920	441	May-2016	Android 5.1.1
Oppo A37 NEW	5.0"	720 x 1280	294	Jun-2016	Android 5.1
Apple iPhone 6S ↑	4.7"	750 x 1334	326	Sep-2015	iOS 10.3.1
Apple iPhone 7 NEW	4.7"	750 x 1334	326	Sep-2016	iOS 10.3.1
OnePlus 3T NEW	5.5"	1080 x 1920	441	Nov-2016	Android 7.0
Apple iPad 2 ↓	9.7"	1024 x 768	132	Mar-2011	iOS 9.3.5z
Vivo Y51L ↑	5.0"	540 x 960	220	Dec-2015	Android 5.0.2

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JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
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 Xiaomi Mi 5C	 ZTE AXON 7 Max	 Nokia 6	 Motorola Moto Z Style	 MOTOROLA Motorola Moto G5 /G5 Plus	 SONY Sony Z6	 LG G6	 NOKIA D1C C1	 htc U Ultra	 iPad Pro Mini (10.5") iPad Air 3	 BlackBerry Aurora	 iOS 10.3	 Android 7.1.2 Android 8 Preview	 Samsung GALAXY Galaxy Note 4 Android 7.0	 Samsung GALAXY Galaxy S7/edge Note 5 Android 7.0	 Android 7 2% share
 Xiaomi Mi 5C	 ZTE AXON 7 Max	 Nokia 6	 Motorola Moto Z Style	 MOTOROLA Motorola Moto G5 /G5 Plus	 SONY Sony Z6	 LG G6	 NOKIA D1C C1	 htc U Ultra	 iPad Pro Mini (10.5") iPad Air 3	 BlackBerry Aurora	 iOS 10.3	 Android 7.1.2 Android 8 Preview	 Samsung GALAXY Galaxy Note 4 Android 7.0	 Samsung GALAXY Galaxy S7/edge Note 5 Android 7.0	 Android 7 2% share
 Xiaomi Mi 5C	 ZTE AXON 7 Max	 Nokia 6	 Motorola Moto Z Style	 MOTOROLA Motorola Moto G5 /G5 Plus	 SONY Sony Z6	 LG G6	 NOKIA D1C C1	 htc U Ultra	 iPad Pro Mini (10.5") iPad Air 3	 BlackBerry Aurora	 iOS 10.3	 Android 7.1.2 Android 8 Preview	 Samsung GALAXY Galaxy Note 4 Android 7.0	 Samsung GALAXY Galaxy S7/edge Note 5 Android 7.0	 Android 7 2% share
 Xiaomi Mi 5C	 ZTE AXON 7 Max	 Nokia 6	 Motorola Moto Z Style	 MOTOROLA Motorola Moto G5 /G5 Plus	 SONY Sony Z6	 LG G6	 NOKIA D1C C1	 htc U Ultra	 iPad Pro Mini (10.5") iPad Air 3	 BlackBerry Aurora	 iOS 10.3	 Android 7.1.2 Android 8 Preview	 Samsung GALAXY Galaxy Note 4 Android 7.0	 Samsung GALAXY Galaxy S7/edge Note 5 Android 7.0	 Android 7 2% share
 Xiaomi Mi 5C	 ZTE AXON 7 Max	 Nokia 6	 Motorola Moto Z Style	 MOTOROLA Motorola Moto G5 /G5 Plus	 SONY Sony Z6	 LG G6	 NOKIA D1C C1	 htc U Ultra	 iPad Pro Mini (10.5") iPad Air 3	 BlackBerry Aurora	 iOS 10.3	 Android 7.1.2 Android 8 Preview	 Samsung GALAXY Galaxy Note 4 Android 7.0	 Samsung GALAXY Galaxy S7/edge Note 5 Android 7.0	 Android 7 2% share
 Xiaomi Mi 5C	 ZTE AXON 7 Max	 Nokia 6	 Motorola Moto Z Style	 MOTOROLA Motorola Moto G5 /G5 Plus	 SONY Sony Z6	 LG G6	 NOKIA D1C C1	 htc U Ultra	 iPad Pro Mini (10.5") iPad Air 3	 BlackBerry Aurora	 iOS 10.3	 Android 7.1.2 Android 8 Preview	 Samsung GALAXY Galaxy Note 4 Android 7.0	 Samsung GALAXY Galaxy S7/edge Note 5 Android 7.0	



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**PROJECTED
TYPICAL
ADOPTION OF
MAJOR OS**

Browser Calendar 2017

Be sure to plan ahead to get maximum test coverage.

JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
 56	 57 Beta	 57	 58	 59 Beta	 59	 60 Beta	 60	 61	 62	 63 Beta	 63
 52 Beta		 52 53 Beta	 53 54 Beta		 54 55 Beta		 55 56 Beta		 56 57 Beta	 57 58 Beta	

About Perfecto

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Phone Arena <http://www.phonearena.com/>

Open Signal <http://opensignal.com/reports/>

Apple <https://developer.apple.com/support/app-store/>

Android Developers <http://developer.android.com/about/dashboards/index.html>

App Annie <https://www.appannie.com/>

IHS <https://www.ihs.com/index.html>

Localytics <http://www.localytics.com>

