

Pick Your Winner: 2023 Smartphone Lineup

This is the ninth annual State Bar of Wisconsin summary of the best currently available smartphones. This year's lineup reveals a focus on camera quality, larger screens, better battery life, and a shift away from offering free phones.

As is true every year for phones, some things change and other things remain the same. Changes for 2023 include foldable screens, increased durability, and new safety and security features. Camera quality and features are even more impressive this year. All carriers advertise 5G phones and service in 2023; in the past, the 5G infrastructure was still young, and buying a phone with 5G capabilities cost extra. For 2023, 5G is the default.

Screens

Flip, fold, or grow are three ways manufacturers offer larger screens. As smartphones increasingly are used for tasks previously only done on a laptop, tablet, or PC, such as gaming, streaming movies, and working from home, manufacturers are constantly looking for ways to increase the screen size to accommodate ubiquitous usage.

Apple has chosen to increase the phone's overall size, reaching the current common maximum screen size of 6.7 inches.

Meanwhile, Samsung offers both flip and foldable screens. The Samsung Galaxy Z Flip and the Samsung Galaxy Fold offer larger screens when open. The Galaxy Z Flip is a flip-phone style with a 6.7-inch display, while the Samsung Galaxy Fold has a 7.6-inch foldable display when opened fully flat. If you're interested in screen size, then the products from Samsung are worth considering.

If you're looking for a compact yet still usable smartphone, the OnePlus 10 models have a 6.7-inch screen, and the Motorola Razr has a 6.2-inch foldable

screen. The Motorola Razr more closely resembles an old flip phone if that's your preference.

Camera Quality

Camera functionality and quality have been a significant part of the manufacturer's marketing efforts for the past few years. There seems to be a competition among manufacturers as to which can include the highest-quality photo and video capabilities. Apple goes so far as to advertise that its cameras are near professional quality.

The front-facing or "selfie" cameras also continue to improve, but the overall quality of images taken from the front camera has increased significantly. Improvements include handling lighting, telephoto, and up to 4K videos with motion stabilization.

BY JAMES PEARSON

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James Pearson owns The Computer Center, Janesville. He is a Microsoft Certified Professional and a frequent author and speaker on cybersecurity and safety topics. Access the digital article at www.wisbar.org/wl.
james.pearson@computer-center.com
www.computer-center.com



Pick Your Winning Smartphone Model ...

Phone	Release Date (U.S.)	Display Size (in.)	Size (mm)	Weight (g)	Resolution (pixels)	Display Type	Processor
Apple iPhone 13 (standard)	9/24/21	6.1	146.7 x 71.5 x 7.7	174	1170 x 2532 19.5:9 ratio	Super Retina XDR OLED	Hexa-core
Apple iPhone 13 Pro MAX	9/24/22	6.7	160.8 x 78.1 x 7.7	240	1284 x 2778	Super Retina XDR OLED, 120Hz	Hexa-core
Apple iPhone 14	9/16/22	6.1	146.7 x 71.5 x 7.8	172	1170 x 2532 19.5:9 ratio	Super Retina XDR OLED	Hexa-core
Apple iPhone 14 Pro	9/16/22	6.1	147.5 x 71.5 x 7.9	206	1179 x 2556 19.5:9 ratio	LTPO Super Retina XDR OLED	Hexa-core
Apple iPhone 14 Pro Max	9/16/22	6.7	160.7 x 77.6 x 7.9	240	1290 x 2796	LTPO Super Retina XDR OLED	
Google Pixel 6a	7/21/22	6.1	152.2 x 71.8 x 8.9	178	1080 x 2400 20:9 ratio	OLED, HDR	Octa-core
Google Pixel 7	10/13/22	6.3	155.6 x 73.2 x 8.7	197	1080 x 2400 20:9 ratio	AMOLED, 90Hz, HDR10+	Octa-core
Google Pixel 7 Pro	10/13/22	6.7	162.9 x 76.6 x 8.9	212	1440 x 3120	LTPO AMOLED	Octa-core
Motorola Edge - 2022	9/22/22	6.6	160.9 x 74.2 x 8	170	1080 x 2400	OLED, 1B colors	Octa-core
Motorola Edge 30 Pro	1/24/22	6.7	163.1 x 76 x 8.8	196	1080 x 2400	OLED	Octa-core
Motorola Moto G72	10/3/22	6.55	160.5 x 74.4 x 7.9	166	1080 x 2460	P-OLED	Octa-core
OnePlus 10 Pro	1/13/22	6.7	163 x 73.9 x 8.6	201	1440 x 3216	LTPO2 Fluid AMOLED	Octa-core
OnePlus 10T	8/6/22	6.7	163 x 75.4 x 8.8	204	1080 x 2412	Fluid AMOLED	Octa-core
Samsung Galaxy S22	2/25/22	6.1	146 x 70.6 x 7.6	167	1080 x 2340 19.5:9 ratio	Dynamic AMOLED 2X	Octa-core
Samsung Galaxy S22 Ultra	2/25/22	6.8	163.3 x 77.9 x 8.9	228	1440 x 3088	Dynamic AMOLED 2X	Octa-core
Samsung Galaxy S22+	2/25/22	6.6	157.4 x 75.8 x 7.6	195	1080 x 2340 19.5:9 ratio	Dynamic AMOLED 2X	Octa-core
Samsung Galaxy Z Flip4	8/25/22	6.7	Unfolded: 165.2 x 71.9 x 6.9	187	1080 x 2640	Foldable Dynamic AMOLED	Octa-core
Samsung Galaxy Z Fold3 5G	8/27/21	7.6	Unfolded: 158.2 x 128.1 x 6.4	271	1768 x 2208		Octa-core
Samsung Galaxy Z Fold4	8/25/22	7.6	Unfolded: 155.1 x 130.1 x 6.3	263	1812 x 2176	Foldable Dynamic AMOLED 2X	Octa-core

Storage GB/RAM GB	Battery (mAh)	Battery Life	Price (Retail)	5G	Rear Camera (MP)	Features
128/4, 256/4, 512/4	Li-Ion 3240 mAh	10hr 33min	\$729	Y	12	Face ID, accelerometer, gyro, proximity, compass, barometer - ultra wideband (UWB) support - emergency SOS via satellite (SMS sending and receiving)
128/6, 256/6	4352	12hr 16min	\$1,099		12	A solid choice in last year's model
128/6, 256/6, 512/6	Li-Ion 3279	9hr 28min	\$799	Y	12	Face ID, accelerometer, gyro, proximity, compass, barometer - ultra wideband (UWB) support - emergency SOS via satellite (SMS sending and receiving)
128/6, 256/6, 512/6, 1TB/6	Li-Ion 3200	9hr 28min	\$999	Y	48	Emergency SOS via satellite (SMS sending and receiving)
128/6, 256/6, 512/6, 1TB/6	4,323	13hr 39min	\$1,099	Y	48	Emergency SOS via satellite (SMS sending and receiving)
128/6	Li-Po 4410 mAh	24hr	\$598	Y	12.2	Fingerprint (under display, optical), accelerometer, gyro, proximity, compass, barometer
128/8, 256/8	Li-Ion 4355	72hr	\$1,343	Y	50	Fingerprint (under display, optical), accelerometer, gyro, proximity, compass, barometer
128/8, 256/8, 128/12, 256/12, 512/12	5,000	24hr	\$759	Y	50	Fingerprint (under display, optical), accelerometer, gyro, proximity, compass, barometer ultra wideband (UWB) support
128/6, 256/8	Li-Po 5000 mAh	8hr 24 min	\$350	Y	50	Fingerprint (under display, optical), accelerometer, gyro, proximity, compass, barometer
128/8, 256/8, 256/12, 512/8	4,800	4hr	\$989	Y	50	Up to 2 days battery life
128/6	5,000	14hr	\$300	Y	108	Fingerprint (under display, optical), accelerometer, proximity
128/8, 256/8, 256/12, 512/12	5,000	12hr	\$1,299	Y	50	A notable alternative to the other phones
128/8, 256/12, 256/16	4,800	6hr 53 min	\$599	Y	50	Fingerprint (under display, optical), accelerometer, gyro, proximity, compass, color spectrum
128/8, 256/8	Li-Ion 3700 mAh,	10hr	\$859	Y	50	Fingerprint (under display, ultrasonic), accelerometer, gyro, proximity, compass, barometer. Samsung DeX, Samsung Wireless DeX (desktop experience support). Bixby natural language commands and dictation. Samsung Pay (Visa, MasterCard certified). Ultra wideband (UWB) support
128/8, 256/12, 512/12, 1TB/12	5,000	10hr 30min	\$1,199	Y	108	One of the largest screens
128/8, 256/8	Li-Ion 4500 mAh	10hr 12min	\$1,109	Y	50	Fingerprint (under display, ultrasonic), accelerometer, gyro, proximity, compass, barometer. Samsung DeX, Samsung Wireless DeX (desktop experience support). Bixby natural language commands and dictation. Samsung Pay (Visa, MasterCard certified). Ultra wideband (UWB) support
128/8, 256/8, 512/8	Li-Po 3700 mAh	8hr 52min	\$995	Y	12	Fingerprint (side-mounted), accelerometer, gyro, proximity, compass, barometer Samsung Pay (Visa and MasterCard certified)
256/12, 512/12	Li-Po 4400 mAh	7hr 52min	\$1,099	Y	12	Fingerprint (side-mounted), accelerometer, gyro, proximity, compass, barometer Bixby natural language commands, and dictation.Ultra Wideband (UWB) support
256/12, 512/12, 1TB/12	4400	15hr	\$1,150	Y	50	Fingerprint (side-mounted), accelerometer, gyro, proximity, compass, barometer

Durability

Durability is a new category in the review this year. All the major manufacturers mention durability as a key feature, usually on their higher-end models. Google's Pixel 7 models have Gorilla glass and aluminum frames and are water resistant, and Apple's iPhone 14 is splash, water, and dust resistant.

Safety and Security

Smartphones have come a long way since the first iPhone was released in 2007. They are now essential tools for many people, used for communicating with others, working on the go, and many other tasks. As such, it's important that they be as safe and secure as possible. This year's lineup of smartphones includes several safety and security improvements.

Like desktop computers that are now shipping with TPM (trusted platform module) chips whose sole purpose is to assist with security such as encryption, phone manufacturers are including both hardware and software security features this year. For example, the Pixel Pro touts its Titan chip's built-in VPN and hardware security.

On the other hand, Apple's crash detection feature uses sudden speed shifts, directional changes, sounds, and cabin pressure changes to measure a crash. The iPhone 14 can detect severe car crashes and then automatically call 911 and notify the phone owner's emergency contacts.

Google has a feature similar to Apple's Emergency SOS via satellite and crash detection, but also uses ambient sound to help determine whether or not a crash happened. Google's personal safety app for crash detection also can call for help automatically. The service is included on all new phones for the first two years.

Apple's crash detection feature hit a few road bumps when emergency call centers began receiving automated calls from people riding roller coasters.¹ Apple released iOS 16.1.2 in December to specifically address this issue.²

Battery Life

The battery lives of this year's phone models vary considerably. The iPhone 14 can play videos for 20 hours straight, while the Google Pixel 7 needs to be charged only once every 31 hours. Motorola's Edge 30 Pro is also impressive; it can last 24 hours and has rapid-charge capabilities.

5G Coverage

All carriers advertise 5G phones and service this year; in the past, the 5G infrastructure was still young, and buying a phone with 5G capabilities cost extra. For 2023, 5G is the default. There are still non-5G phones available, especially if you're willing to consider an older model or lower-end phone.

Free or Discounted Phones

When I sold cell phones many years ago, it was common practice for phone service providers to include a free or discounted-cost phone with a service contract. But this option has nearly disappeared, even with extended contracts. Further, most service providers now offer monthly payments, with no interest, on phones, allowing customers to pay for the phone over time with no real disadvantage.

The Top Picks

Camera Quality

Apple iPhone 14 Pro Max (\$1,099) – Still “Hollywood in your pocket.”

Screen Size

Samsung Galaxy Z Fold4 (\$1,150) – Unfolds to have a 7.6-inch screen.

Safety

Apple's iPhone 14 series – Crash detection and SOS features.

Security

Google Pixel 6 Pro (\$899) – Includes the Titan M security chip and is a great camera for the price.

Budget Friendly

Google Pixel 6a (\$449) – An affordable phone that doesn't sacrifice speed or security.

Where to Get Product Specs

Go to the web pages listed below for product specifications. All web pages were last visited on Dec. 13, 2022.

Pixel Specs

Which Pixel Phone Is Right for You?, https://store.google.com/magazine/compare_pixel?hl=en-US; *The All-Pro Google Phone*, https://store.google.com/product/pixel_7_pro?hl=en-US

Apple iPhone 14 Specs

iPhone 14 Pro, www.apple.com/iphone-14-pro/specs

Apple iPhone 13 Specs

Buy iPhone 13, <https://www.apple.com/shop/buy-iphone/iphone-13>

Samsung

Galaxy Z Fold4, <https://www.samsung.com/us/smartphones/galaxy-z-fold4/>; *Galaxy Z Flip4*, <https://www.samsung.com/us/smartphones/galaxy-z-flip4/>

OnePlus

www.oneplus.com/phone/compare

Motorola

www.motorola.com/us/smartphones
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ENDNOTES

¹Use *Crash Detection in iPhone or Apple Watch to Call for Help in an Accident* (Nov. 15, 2022), <https://support.apple.com/en-us/HT213225>.

²HT Tech, *New Apple iOS 16 Update Optimizes Car Crash Detection Feature* (Dec. 2, 2022), <https://tech.hindustantimes.com/tech/news/new-ios-16-update-from-apple-brings-optimizes-car-crash-detection-feature-71669899949977.html>. **WL**