

REVIEWS

SAMSUNG GALAXY S23

As per tradition, Samsung unveiled the Galaxy S23 series at its annual Unpacked event in February. The series comprises three models – the Galaxy S23, the larger Galaxy S23 Plus, and the Galaxy S23 Ultra, which resembles the Galaxy Note series. At first glance, it appears that Samsung has opted for an iterative approach as the three devices share similarities with their predecessors. The company seems to be following the adage, “If it ain’t broke, don’t fix it,” as there are few significant changes from the previous models.

Samsung has launched the Galaxy S23 series, which is the next generation of its flagship Android smartphone lineup. Those who want a top-of-the-line device will want to check out the Galaxy S23 Ultra, with its incredible 200MP camera and 10X optical zoom. But for everyone else, there are the Galaxy S23 and Galaxy S23 Plus. They’re practically the same, but if you prefer more base storage and a larger screen, opt for the S23 Plus instead of the standard S23.

SAMSUNG GALAXY S23: DETAILED REVIEW

Compact phone lovers can rejoice with the launch of the new Samsung Galaxy S23, packed with a new SoC, a larger battery, and a revamped design. Being the smallest among the three Galaxy devices that launched recently, the Samsung Galaxy S23 can sometimes go under a few phone buffs’ radar, especially if they’re not invested in compact phones. However, Samsung has refined this phone quite a bit – and there are some notable changes in comparison to its predecessor, the Samsung Galaxy S22. Starting at ₹74,999, the Galaxy S23 is still not easy on anyone’s wallet, but the promise of speedier performance courtesy of the new chipset, better camera performance, and longer battery life does make it seem enticing enough on paper. Is the Samsung Galaxy S23 worth its hefty price tag

though? Or does it lose ground to the Pixel 7 (review) and the iPhone 14 (review)? Let's find out in our detailed review.

Seen in a vacuum, the Samsung Galaxy S23 is an excellent, near-perfectly proportioned Android handset that meets or exceeds expectations.

The mobile phone market, though, is not a vacuum, and the Galaxy S23 is inevitably judged against all the best smartphones, including its stellar sibling, the big and bold Samsung Galaxy S23 Ultra, and its nearest Apple competitor, the iPhone 14 Pro.

In that light, Samsung's latest flagship acquits itself nicely, with an excellent camera array, the most powerful Qualcomm SoC yet, a gorgeous screen, and a multitude of other capabilities. But it does not outshine the S23 Ultra or the iPhone 14 Pro. In some instances, I found the S23 equal to anything Apple threw at it. In others, I wondered why the Galaxy S23 was – leaving aside the refined design – so similar to the Galaxy S22 and lacking compared to the beast-like Galaxy S23 Ultra.

At the very least, Samsung could've equipped the Galaxy S23 with last year's S22 Ultra 108MP main camera sensor. Instead, it chose to leave the cameras (save the selfie cam) untouched. Don't get me wrong, the S23 takes lovely photos but Samsung could've left the battery life untouched (200mAh more is not that exciting), added a 10MP periscope zoom, and radically improved the handset's Space Zoom capabilities too.

Naturally, it's hard to recommend that someone who owns the still-stellar Samsung Galaxy S22 upgrade to the S23, because it's not much of an upgrade. That said, newcomers to Samsung or the Android space (as well as users of much older Galaxy S models) will be hard-pressed to find a better mix of design, size, power, utility, communication, battery life, and photographic performance.

6.1 inches turns out to be a lovely mid-spot for most hands and makes you wonder why the 6.7-inch S23 Plus – which offers only a bigger battery and larger heat-damping vapor chamber – exists. For comparison's sake,

though, I suggest you read our complete Samsung Galaxy S23 Plus review and Alex Todd-Walker's extensive Samsung Galaxy S23 Ultra review.

Whichever S23 handset you choose, you'll get the same performance, powered by the new Qualcomm 'Snapdragon 8 Gen 2 Mobile Platform for Galaxy'. GeekBench 5 tests put the mobile SoC within shooting distance of Apple's industry-leading A16 Bionic but the reality is that numbers do not tell the full story. There's scarcely a place where the Galaxy S23 can't hold its own against an iPhone 14 Pro.

The phone's cameras can shoot up to 3x optical zoom and image-processor-enhanced 30x Space Zoom. It can also shoot 8K video, which you can do light editing on in the phone's camera app. It's an able gaming system, content consumption, and productivity handset, with solid 5G support thanks to – in my case – the T-Mobile network.

If you liked the camera array on the S22, you'd be similarly pleased with the Galaxy S23. It's just as good as the former but with the added benefit of better image processing and new Camera app tricks for night and astrophotography.

At least the front-facing camera got a nice 2MP bump to 12MP and takes some impressive standard and portrait selfie photos.

The flat 6.1-inch Dynamic AMOLED 2X Infinity-O FHD+ display (which has a perfectly round hole-punch at the top, center for the selfie camera) is, mostly, a replica of the S22's but with improved variable refresh rates of between 48Hz and 120Hz, and a new Gorilla Glass Victus 2 covering on the front (the brushed glass on the back is made of the same material).

Aside from the redesigned back that loses the awkward, raised contour around the cameras, the dimensions are virtually unchanged from the Galaxy S22. It still feels solid and comfortable to hold. I like the brushed glass back because it makes the handset feel a little less slip-prone. As

before, the phone is IP68 rated for dust protection and drops in up to 1.5 meters of fresh water for up to 30 minutes.

This is unquestionably one of the best smartphones of 2023, but it still might not offer enough reasons to upgrade from your also-excellent Galaxy S22.

Samsung Galaxy S23: Design and display

A side-by-side comparison of the Galaxy S23 and the Galaxy S22 reveals only one significant change: the rear camera housing on the newer model has disappeared. Instead, you get three standalone camera rings on the back panel of the Galaxy S23, which gives it a minimalistic look. The Galaxy S23 looks cleaner and more refined for sure, but one might argue that the metal camera bump on the Galaxy S22 added some character to its design.

That said, everything else about the Galaxy S23's design simply works. Its compact form factor makes it ideal for one-handed use. In a sea of large-screened phones, the Galaxy S23 and the iPhone 14 are perhaps the only choices for anyone looking for a smaller phone. The matte finish on the rear glass is soft to the touch and ensures you don't leave any fingerprints or smudges on it. This made the Lavender color look particularly fresh and attractive throughout the review period. It's easily my favorite color option, though the Green one looks good in pictures too.

Structurally, the Galaxy S23 has a solid build quality. Structurally, the Galaxy S23 has a solid build quality. The smartphone is still lightweight, weighing merely 1 g more than its predecessor, while still being lighter than the iPhone 14. It is also thinner than Apple's iPhone 14. This, combined with the rounded-off edges, gives the phone a very pleasant and ergonomic in-hand feel. The metal frame is thick enough to offer a good grip. Due to the phone's compact design, the power and volume buttons are easy to reach with your thumb. The device is IP68 rated for dust and water resistance. The flat 6.1-inch display on the Galaxy S23 is small but not iPhone SE-level small. It is smaller than what you get on most Android phones today and about the same size as the one on the iPhone 14.

Screen size aside, every other aspect of the display is nearly identical to what you'll find on the Galaxy S23 Plus. It is an OLED panel with a 2340×1080 FHD+ resolution, HDR support, and up to 120Hz adaptive refresh rate. Samsung is in its comfort zone when it comes to OLED displays, so be rest assured that the Galaxy S23 will deliver vibrant colors and deep blacks here.

Peak brightness has been bumped up to 1750 nits from 1300 nits. Even at less than max brightness, you will be able to see the screen outdoors under direct sunlight.

Despite that, the Samsung Galaxy S23's display is fantastic with rich, vibrant colors, deep blacks, and really good viewing angles. With a PPI count of 425, everything looks super crisp and detailed as well, so viewing content on this screen will still be a treat. The display also has a 120 Hz Adaptive Refresh Rate and refreshes in steps starting from 10 Hz, 24 Hz, 30 Hz... to 120 Hz according to the content on the screen. However, we didn't witness it going below 24 Hz even on the Always-On display.

Samsung Galaxy S23: Performance and software

Samsung took fans by surprise when they announced that their Galaxy S23 series of phones would be powered by a customized version of the SD8G2 dubbed the Qualcomm Snapdragon 8 Gen 2 for Galaxy. This is essentially a Snapdragon 8 Gen 2 chipset that has an overclocked CPU and GPU. This chipset promises 35 percent improved performance and 40 percent improved efficiency for the CPU, 25 percent performance improvement and 45 percent efficiency improved on the GPU front, and support for faster memory compared to the SD 8 Gen 1 SoC. This combination is enough to effortlessly run through most of the apps available on the Play Store. Internal storage is capped at 256GB on the vanilla S23, while you can get up to 512GB on the S23 Plus and 1TB on the S23 Ultra.

You are greeted with Android 13-based OneUI 5.1 out of the box. Samsung's UI is instantly familiar to anyone who has used a Samsung phone before. It is a rather easy UI to navigate through and you get a few pre-loaded apps from Samsung, Microsoft, and Google to help you get started.

The core configuration has been reworked with this Samsung-exclusive version flaunting 1x3.36 GHz Cortex-X3 core, 2x2.8 GHz Cortex-A715 cores, 2x2.8 GHz Cortex A710 cores, and 3x2.0 GHz Cortex-A510 cores. In this case, the prime Cortex-X3 core is the overclocked one. One area of disappointment is the memory, while this chipset is capable of supporting newer and faster memory technologies such as LPDDR5X RAM and UFS 4.0 storage, the 128 GB entry-level variant comes with 8 GB LPDDR5 RAM and 128 GB UFS 3.1 storage. So those who opt for the base variant will lose out on faster memory speeds. Fortunately, the 256 GB variant is available at the same price point as the 128 GB S23 during the pre-order phase, so those who are buying early can avail of the benefit and get the variant with faster memory speeds.

Consider Geekbench, which rates the A16 Bionic in the iPhone 14 Pro models as the fastest chip. The Snapdragon 8 Gen 2 for Galaxy doesn't change that, but it does get the Galaxy S23 much closer to the iPhone's Geekbench score than we've seen previously.

Phone	CPU	Geekbench 5.5 single-core	Geekbench 5.5 multicore
Samsung Galaxy S23	Snapdragon 8 Gen 2 for Galaxy	1,582	4,876
iPhone 14	A15 Bionic	1,727	4,553
iPhone 14 Pro	A16 Bionic	1,891	5,469
Google Pixel 7	Tensor G2	1,054	3,021
OnePlus 11	Snapdragon 8 Gen 2	1,166	4,962

With a multicore score of 4,876, the Galaxy S23 isn't anywhere as fast as the iPhone 14 Pro (5,469) or iPhone 14 Pro Max (5,333). But it does come a lot closer to those scores than the 3,348 multicore results posted by last year's Galaxy S22. More significantly, the Galaxy S23 topped the A15 Bionic-powered iPhone 14's multicore score of 4,553, even if Apple's entry-level flagship still has a better single-core result.

Phone	CPU	Wild Unlimited (FPS)	Life Unlimited (FPS)	Wild Life Extreme Unlimited (FPS)
Samsung Galaxy S23	Snapdragon 8 Gen 2 for Galaxy	87.3		22.9
iPhone 14	A15 Bionic	69.1		15.5
iPhone 14 Pro	A16 Bionic	74		19
Google Pixel 7	Tensor G2	40.3		10.5
OnePlus 11	Snapdragon 8 Gen 2	84		22

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iPhone 14 Pro	A16 Bionic	74	19
Google Pixel 7	Tensor G2	40.3	10.5
OnePlus 11	Snapdragon 8 Gen 2	84	22

We also test phones by having them transcode a 4K video using Adobe Premiere Rush and timing the results. The iPhone has traditionally dominated this test, and that continues here. But the Galaxy S23 has posted the best time of any Android phone we've tested, taking 39 seconds to transcode the video. That's not as good as the iPhone 14's 28-second time, but it is a second better than the Galaxy S23 Ultra.

If you value performance but despair at the gap between Android devices and the iPhone, the Galaxy S23 is the phone you've been waiting for.

For now, Samsung does not stand on equal footing with Apple when it comes to Satellite connectivity. The latter launched Emergency SOS via Satellite with the iPhone 14 line and Qualcomm showed how a Snapdragon 8 Gen 2-equipped demo device could send and receive texts over satellite at CES 2023. Both the S23 and S23 Plus pair the Snapdragon 8 Gen 2 with the X70 5G modem, the same one Qualcomm told me is capable of satellite communications but the capability is not enabled and there is no timeline for turning it on.

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SAMSUNG GALAXY S23: CAMERA

The Samsung Galaxy S23 features an identical rear camera setup as the Galaxy S22 but you do get a new selfie camera with a higher-resolution lens. The phone comes equipped with a 50 MP Samsung S5KGN3 primary camera with OIS and dual-pixel PDAF, a 10 MP telephoto camera with 3x optical zoom and OIS and PDAF support, and finally, a 12 MP Sony IMX564 ultrawide shooter. The new selfie camera is a 12 MP Samsung S5K3LU sensor with dual-pixel PDAF as well.

The 50 MP main lens captures quad-binned photos at 12 MP (instead of 12.5 MP for some reason) but you can also click full 50 MP resolution shots. Samsung has also retained Expert RAW mode from last year, which is now built into the main camera app and unlocks full manual control and RAW image data.

Now, moving on to photo quality, the main camera provides excellent shots in daylight with good detail, sharpness, and vivid colours. The dynamic range is also top-notch in daylight, with the phone exposing highlights and shadows in a pleasing and natural manner. In tricky lighting conditions, you can see some noise creep in the shadows when you pixel peep, but it's not too jarring. There's good natural background blur as well owing to the large 50 MP sensor. Full 50 MP shooting mode is available, as mentioned before, which provides higher levels of detail and accurate colours, however, the shots are slightly noisier than the standard binned images. Here are some shots, do note that these are compressed for the web.

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Portrait shots from the main camera are excellent with great subject separation and detail – however, the default blur levels are a bit too extreme, and the Pixel 7 and iPhone 14 have much more natural levels of blur. But you can always edit the blur level of a photo clicked in the Gallery after the fact. The 3x portraits are also surprisingly good with impressive background-foreground separation and good colour.

The selfie camera, with its new HDR abilities, offers great dynamic range. The detail is good enough and there's not too much oversharpening either. Colours are natural and noise is minimal as well, the same goes for low-light photography. All cameras come with Auto Night Mode, so most of the shots taken have excellent detail with plentiful light, but remember to keep your hand steady to avoid blur.

Low-light shots on the main camera offer great levels of detail, nice exposure and good colours. The dynamic range is decent as well. Even in extreme low-light situations, the phone manages to somewhat light the subject up convincingly. There are some instances when Night Mode does blow out the highlights. Shots with Night Mode off are far noisier though but they tend to keep the highlights in check. However, that's us nitpicking, and for the most part, the Samsung S23 will provide you with consistently good photos.

As for video, the S23 can record 8K at 30 fps on the primary camera, up from 8K at 24 fps on the Samsung Galaxy S22. You also get 4K at 60 fps across all four cameras, which is great. Video from the primary and telephoto lens has great stability due to OIS but you can also enable electronic stabilisation across all cameras to get stable video across the board. There's also Super Steady mode at 1440p resolution, an improvement over last year's 1080p limitation.

8K video on the S23 is surprisingly good in daylight, with good colours and dynamic range. The detail is decent as well, slightly like upscaled 4K content. 4K video clips look outstanding, a real improvement from last year, with great detail, accurate colours, and likeable dynamic range. Low light footage from the main camera is decent, however, you will find noise creeping in. However, low light from the telephoto is quite noisy and not very usable. The ultrawide camera though still pulls up usable detailed low-light video clips with good exposure and minimal noise.

SAMSUNG GALAXY S23 REVIEW: BATTERY LIFE

Powered by a larger 3,900 mAh battery, the Samsung Galaxy S23 provides excellent battery life for its diminutive size. The chipset also provides improved efficiency which is one of the reasons the battery life has improved drastically. We got over 17 hours of runtime in our 4K video loop test, which is an excellent performance. The performance is definitely vastly improved compared to the Galaxy S22 which ran for merely 10 hours in our 4K video loop test.

One of my biggest gripes about the Galaxy S22 was battery life, and I'm happy to report that the mere 200mAh bump in battery capacity has made a world of difference. I can actually get through an entire workday without needing to charge the phone, which is impressive since I usually start my day at 5 am. In my week of use, I typically average about a full day and am only regulated to charge the phone before going to bed around 10 pm.

In my charge tests, I charged more than 50% in 30 minutes using a 25W charger, which is basically in line with our lab tests, where we found we could charge to 55% in 30 minutes.

With the slight battery increase and more efficient chipset, Samsung and Qualcomm worked wonders with the Galaxy S23, giving it the power and longevity one might not expect from a small phone. And thanks to their partnership, the phone ships globally with the Snapdragon 8 Gen 2 for

Galaxy, so everyone gets to experience the best that Snapdragon has to offer on the Galaxy S23.

We also ran other battery tests, where 30 minutes of streaming Netflix dropped the battery by 3 percent (from 85 to 82), 15 minutes of Call of Duty: Mobile dropped the battery by 3 percent (from 62 to 59) and 1 hour of GPS navigation took 5 percent off the board (from 18 to 13).

As for charging, while the S23+ and S23 Ultra support 45 W wired charging, the Galaxy S23 is limited to 25 W charging. The phone tops up from zero to full in about 65 minutes but this still feels laboriously slow on a pricey phone in 2023. However, the 45 W charging brick from last year was merely a few minutes quicker to charge to full than the 25 W one, so keep that in mind as well. Nevertheless, Samsung really needs to up its charging game, to compete with brands such as Xiaomi, iQOO, OPPO, and others.

SAMSUNG GALAXY S23 REVIEW: VERDICT

As the current smartphone landscape goes, we can say without a doubt, the Samsung Galaxy S23 is the best compact Android phone we've ever tested. Despite its compact form factor, the phone manages to win you over with not just its premium build and design but also its speedy performance, refined UI, fantastic battery life, and superb camera. It is a well-rounded phone in every sense of the word that offers flagship-grade performance without the premium of spending over a lakh. While iPhone users may still prefer the iPhone 14, this phone will give compact iPhone users tethering the edge a real reason to make the switch, especially due to the higher refresh rate screen and the presence of optical zoom. However, we'd urge everyone to go for the 256 GB variant of the phone over the base variant to leverage faster memory speeds across the board. That aside, Samsung has made a truly commendable compact flagship that excels in almost every aspect of a smartphone.

You should buy this if...

- You prefer smaller phones
- You want a phone that will get you through the day

- You prefer vibrant, colorful photos

You shouldn't buy this if...

- You already have the Galaxy S22
- You want super-fast wired charging
- You're looking for an inexpensive phone

There's no such thing as a perfect phone, but every year, Samsung gets even close to hitting the mark with its baby flagship. Last year, the company had some hurdles to overcome, but the company proved that it was listening to user feedback and gave us the improvements we were hoping for.

The Galaxy S23 crams a lot of power into a small body, and it manages that power quite well. Performance is stellar and battery life is much improved. There's a lot to like about the Galaxy S23, so much so that I'm disappointed we didn't get the same level of improvements with the Galaxy S22.

I'm not a huge fan of the cameras, but they're still good and definitely not a deal-breaker in my eyes. And there's definitely plenty more I would like to see in future models, like faster charging and a bolder design, but the Galaxy S23 is a step in the right direction and a return to form for Samsung's baby flagship.

If you're rocking the Galaxy S22, it may not be worth upgrading, unless you *really* need that extra battery life. Otherwise, this is a phone I would recommend to anyone looking for a pocketable flagship. That is, if you're not put off by the price tag.

Samsung S23 Plus

It can be easy to forget that the Galaxy S23 Plus even exists, overshadowed as it is by the more premium and feature-rich **Galaxy S23 Ultra**. And those looking for a cheaper flagship smartphone might gravitate toward the cute little **Galaxy S23**. There's no reason to ignore this phone, though — the S23 Plus shares most of its features with the rest of the S23 family, including an overclocked Snapdragon 8 Gen 2 chip, a fantastic OLED screen, and Samsung's class-leading update guarantee. Most smartphone OEMs don't have the scale to release three different versions of the same phone, but Samsung does. That means you can play Goldilocks and skip the phone that's too big, ignore the one that's too small, and settle in with one that might be just right for you.

The Samsung Galaxy S23 Plus again treads that tightrope, but its excellent small-scale sibling – the Samsung Galaxy S23 – delivers enough in the way of impressive style, performance and camera credentials to make this year's Plus edition seem much more appealing than it otherwise might do (read our Samsung Galaxy S23 review and Samsung Galaxy S23 Ultra review for our full verdicts on the other two phones in the S23 lineup).

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Most mobile CPUs – including Qualcomm's standard Snapdragon 8 Gen 2 and the formidable A16 Bionic inside the Pro members of Apple's iPhone 14 line – are fast enough for the vast majority of users. That said, the extra bit of juice that Samsung and Qualcomm have coaxed out of the 8 Gen 2 in these devices means *slightly* better video capture at the highest resolution, *slightly* smoother gaming, and *slightly* more powerful CPU-intensive

operations, like 8K video editing. The improvements, however, are more negligible than groundbreaking.

That bespoke processor is also important to bear in mind when you look at the S23 Plus' largely unchanged camera array (versus the Samsung Galaxy S22 Plus). The phone rocks a 50MP wide, 12MP ultrawide, and 10MP optically-stabilized 3x telephoto zoom setup, though the front camera is now 12MP, up from 10MP on the Galaxy S22 Plus (which is a change consistent across the whole S23 range). Tangible improvements to photography instead come from the S23 Plus' upgraded chipset and more powerful AI features.

Samsung hasn't messed around with a winning formula when it comes to the phone's 6.6-inch AMOLED display. There's still an ultrasonic fingerprint reader underneath it, and a punch hole selfie camera near the top. Everything looks suitably bright and colorful, while motion is governed by an adaptive refresh rate that, once again, scales between 48Hz and a buttery-smooth 120Hz.

Samsung has likewise kept the phone's dimensions virtually unchanged from the Galaxy S22 Plus, but compared to the S23, this year's Plus is a larger phone that feels more substantial. Its larger Gorilla Glass Victus 2 and Armor Aluminum-clad body leaves room for a bigger 4,700mAh battery (200mAh larger than the one in the previous Plus) – as well as a larger cooling chamber – though the phone manages to maintain its sibling's exceptionally handsome looks, despite its beefier bodykit.

In all, then, the Samsung Galaxy S23 Plus is an excellent like-for-like alternative to the standard S23, but its significantly higher price makes it a hard sell to anyone content with its smaller sibling's much more compact size (which we described as “perfect” in our review).

What's more, since there aren't too many notable upgrades over the Galaxy S22 Plus to be found here beyond processing power, battery life and more storage options, this is probably a phone best suited to Galaxy

newcomers – or those who just aren't able to shell out on the eye-wateringly expensive S23 Ultra.

Samsung Galaxy S23 Plus: Design

Samsung kept a familiar design for the Galaxy S23 Plus, which, from the front, looks indistinguishable from the Galaxy S22 Plus. On the back, things appear a little different thanks to the new camera module layout.

Gone is the contour cut design introduced on the Galaxy S21 with individually stacked lenses replacing it. It looks akin to the Galaxy S23 Ultra, minus the second telephoto camera and laser autofocus. I welcome this shift since it adds some cohesion among the Galaxy S23 series.

Immediately upon picking it up, I thought the Galaxy S23 Plus felt extremely well-built. It's solid with a comfortable heft at 6.9 ounces (196 grams). I appreciate its sturdiness, which inspires a lot of confidence that it would survive an accidental drop.

For the 6.6-inch Galaxy S23 Plus, this means removing the iconic Contour Cut metalwork from around the camera array. Now, all three lenses float near the upper-left side of the phone's brushed glass Gorilla Victus 2 back (there's also glossy Victus 2 glass covering the display). It's a very clean look – in fact, this might well be my favorite-ever design for a Galaxy phone – but it also means the S series loses some of its individuality, which may grate on diehard Samsung fans.

Despite removing the bit of Armor Aluminum, the dimensions of the Galaxy S23 Plus are almost exactly the same as those of the Galaxy S22 Plus. Its 76.2 x 157.73 x 7.62mm frame – which weighs 195g – was a touch on the large size for my slender hands; the S23 Plus is slightly bigger than the iPhone 14 Pro, but a little smaller than the 6.7-inch iPhone 14 Pro Max – though the phone was far from uncomfortable to use. The curved metal

band surrounding the device, for instance, felt cool and smooth to the touch.

There are a few other design alterations. The power and volume buttons have been moved down a little on the edge of the device, and some antenna bands have been repositioned. Personally, I'd have liked to see Samsung move the volume button to the left-hand side of the phone to avoid my frequent misclicking of the power button, though this is likely something I'd eventually get used to. The bottom edge speaker-grille holes – which are next to the USB-C port, mic holes, and SIM slot – are slightly larger, too.

Select elements on these phones are made from recycled materials, including the volume and power buttons, and the speaker grille at the very top of the display. In addition, the Gorilla Glass Victus 2 uses 22% recycled materials, and some of the phone's packaging is recycled, too. Even the plastic cover you'll peel off the screen when unboxing it is partially recycled.

There's a nice selection of colors to choose from. I handled the Cotton and green models for this review, with black and Lilac being the other two standard variants. As is nowadays the case, there are also additional colors – like Lime and Graphite – which are only available through Samsung.com.

Every Galaxy S23 device is IP68-protected against a drop in water or a roll in dirt, so neither should bother any of them as a result.

In short, the Galaxy S23 Plus is, on paper, one of the most durable phones you can buy today.

Samsung streamlined the color options this year, keeping them the same across all three Galaxy S23 models. That means the Galaxy S23 Plus comes in Phantom Black, Cream, Lavender, and Green, the latter of which I received for review. I'm quite partial to the dark forest vibe, similar to the iPhone 11 Pro. It has a clean and sophisticated look.

Samsung Galaxy S23 Plus: Display

As with most other Galaxy S23 line aspects, the AMOLED display hasn't changed much since the S22 line.

The Samsung Galaxy S23 Plus' 6.6-inch, 2316 x 1080-pixel screen is big, bright, and responsive. To preserve battery, the optional adaptive refresh rate tunes the screen depending on what you're doing, down to 48Hz. In my experience, this still allowed for phenomenally smooth scrolling, with motion-heavy footage in high-resolution YouTube videos appearing similarly silky. The phone also still supports 240Hz touch-sampling for speedy gaming responses.

As with Galaxy S devices in the past, the display makes the Galaxy S23 Plus truly stand out from its Android competition. Featuring a max rated brightness of 1,750 nits (up from 1,300 nits on the Galaxy S22 Plus), the latest Galaxy middle child's screen knocked my socks off.

In terms of brightness, the S23 Plus had no trouble beating back the bright light set up for our product photography. That's likely thanks to its 1,750nit peak brightness, although typically the screen will run at 1,200nits.

The phone's adaptive brightness system also now includes more steps to properly adjust for your various viewing environments, and it always felt as though Samsung had the well-being of my eyeballs in mind during my testing of the S23 Plus.

However, Samsung proved more color accurate with its Delta-E score of 0.23 — where zero is perfect — in the Natural mode versus the iPhone 14 Pro's 0.25. If you opt for the default Vivid setting, you'll enjoy some vibrant colors, as evidenced by the performance in the sRGB and DCI-P3 gamuts.

At 6.6 inches, the Galaxy S23 Plus strikes a nice balance between the smaller Galaxy S23 (6.1 inches) and the massive Galaxy S23 Ultra (6.8 inches). My biggest disappointment with the display, however, comes down to its refresh rate.

To test a display, my favorite thing to do during a smartphone review is to watch my favorite scenes from Blade Runner 2049 and play Genshin Impact.

For the former, the film has the typical bright neons of a dystopian cyberpunk future, but then it radically shifts to the harsh orange tones of an abandoned wasteland. The Galaxy S23 Plus handled both elements exceedingly well, especially in the Vivid mode. The neons stunned me, as did the orange and darker parts throughout the rest of the movie.

Genshin Impact uses a supersaturated anime-style aesthetic that shines on the Galaxy S23 Plus. The scenery, particle effects, and character models all look fantastic. When combined with the phone's best-in-class gaming performance, which we'll get to in a minute, the Galaxy S23 Plus is one of the best places to play this game.

Sure, it can ramp up to 120Hz for the kind of smoothness we expect from flagship smartphones nowadays, but it can only clock down to 48Hz. Other phones like the OnePlus 11 can downclock to 1Hz for added power efficiency. Even the Pixel 7 Pro supports a range of 10-120Hz. While the Galaxy S23 Plus does sport much better battery life than its predecessors, I think a lower range could have improved things even more.

Samsung Galaxy S23 Plus: Performance

The entire Galaxy S23 lineup uses the same processor, Qualcomm's Snapdragon 8 Gen 2 for Galaxy. That last part -- the "for Galaxy" -- is key.

It comes from a partnership between the tech giants to optimize Qualcomm's latest chip for Samsung's phones.

Effectively, it's an overclocked version of the standard Snapdragon 8 Gen 2 processor, giving Samsung access to its max 3.36GHz processing speed.

Not only does the entire Samsung Galaxy S23 line get the best Qualcomm has to offer in mobile chipsets, the phones even get their own special edition of that offering.

The Samsung Galaxy S23 Plus (and all S23 devices) are running the Qualcomm Snapdragon 8 Gen 2 Mobile Platform for Galaxy. What this boils down to is a little more juice under the hood, with the CPU running at 3.36GHz (up from 3.2GHz). That's a lot of power for a little smartphone.

In practice, the Galaxy S23 Plus delivers on its promise of superior performance, comfortably outpacing – or at least matching – the best Android phones for speed. Whether you're rapidly swiping across its home screen, multitasking with various apps or photographing using one of its power-hungry camera modes, the S23 Plus is near-flawlessly responsive.

The phone – or its smaller sibling, at least – may yet earn a place on our list of best gaming phones, too. It loads titles quickly, doesn't stutter during heavy sessions, and comfortably copes with demanding graphical settings. As expected, the S23 Ultra can juggle more applications and games for longer without noticeable slowdown or temperature increases, but it was still a challenge to make the S23 Plus heat up in the hand. I spent an hour or so with FIFA Mobile on the S23 Plus, and only noticed the growing warmth of the phone after around 30 mins of gameplay.

Like its siblings, the Galaxy S23 Plus offers decent stereo sound that's sharp and clear, though the lack of any real bass means you'll probably want to plug headphones in to get the best viewing (or listening) experience.

I ran a quick benchmark test using Geekbench 6, which simulates common tasks and workloads, on the S23 Plus to get a general idea of its performance. The S23 Plus' average single-core score average was 1,961, and its average multi-core score was 5,207, practically matching the S23 Ultra's scores in the same test. Incredibly, Qualcomm's Adreno 740 GPU outmuscles the A16 Bionic's in both of the 3DMark Wild Life benchmarks we ran. 13 frames per second in Unlimited is no small difference, even

though the Extreme Unlimited results aren't too far off from each other. Apple once again asserts its dominance in the Adobe Premiere Rush test, where it completed the transcode 13 seconds faster than the Galaxy S23 Plus.

All the Galaxy S23 phones are 5G-capable, and, yes, they still include physical SIM slots. One thing Samsung is not currently touting is any kind of satellite connectivity, which, given the current competitive environment, is a little surprising. Apple, for instance, introduced Emergency SOS via Satellite with the iPhone 14 line, and Qualcomm showed at CES 2023 how a Snapdragon 8 Gen 2-equipped demo device could send and receive texts over satellite, so it's a little disappointing to see this functionality absent from the S23 line.

However, both the S23 and S23 Plus pair the Snapdragon 8 Gen 2 with the X70 5G modem, the same one Qualcomm told us *is capable* of satellite communications; so conceivably, Samsung and its carrier partners could turn on this feature later.

In real-world use, the Galaxy S23 Plus is a powerhouse. The Snapdragon 8 Gen 2 for Galaxy is a special overclocked version of the regular chip exclusive to the Galaxy S23 series (for now). It shows in all aspects, especially gaming. Achieving a steady 60 fps at max settings on Genshin Impact was no problem, and I couldn't find any other game in my library that could make the S23 Plus trip.

Make no mistake, the Galaxy S23 Plus means business and can handle whatever you throw at it, even the most demanding games.

Samsung Galaxy S23 Plus: Software

The entire Samsung Galaxy S23 line ships with Android 13 and Samsung's One UI 5.1 overlay. Samsung is promising four generations of OS upgrades and five years of security upgrades.

Being virtually unchanged from the S22 line, the software experience on the S23 Plus is extremely familiar, so existing Samsung fans shouldn't encounter any red flags in the user experience department.

Though small, the upgrades remain notable. For example, the Bixby Text Call grabbed my attention immediately, as no other phone maker has come close to replicating Google's impressive Pixel-exclusive Call Assist suite. Basically, this feature has Bixby, Samsung's virtual assistant, answer phone calls for you with text messages. These messages will get converted into audio for the caller, similar to how Google's Call Screen works. That said, Samsung has introduced a number of new software features including better Samsung Notes (there are now co-create features), co-watching in Google Meet, and enhanced security features. The latter adds the ability to set your S23 Plus in Maintenance Mode (added in One UI 5.0), so all your data is protected while someone works on your phone. There's also a refined privacy dashboard. These are all neat – if not groundbreaking – additions to an already solid software experience.

There are quite a few more lesser features which you can read about in our [One UI 5.1 feature breakdown](#). For my purposes, the Galaxy S23 Plus' software is a solid experience offering useful additions to Google's Android 13 base. The best part is that navigating the S23 Plus is a breeze if you're used to Samsung phones already, even if you're coming from something older like the [Galaxy S20 Plus](#).

Finally, I think you should pay attention to what Samsung does with updates. It currently has the best update policy in the Android world, besting even Google at its own game. The Korean phone maker promises four years of platform updates, meaning the Galaxy S23 Plus will continue to get the latest Android version into 2027. Samsung also promises five years of security patches, making the Galaxy S23 Plus more secure well into 2028.

I place a huge emphasis on updates because it means that you can — at least from a software perspective — keep your phone longer before you need to replace it. Having an up-to-date and secure device is extremely important, so I applaud Samsung for going for the sustainability route and helping people save money.

Samsung Galaxy S23 Plus: Camera

The Galaxy S23 Plus features the same rear cameras as the Galaxy S22 Plus, namely a 50MP main sensor with a 12MP ultrawide and 10MP telephoto (3x optical zoom) alongside it. The upgrade comes in the form of the 12MP front camera, which is a bump from last year's 10MP.

Thanks to the removal of the raised metal Contour Cut element around the camera system, all three lenses look a little larger, but this is essentially the same hardware setup as on the Galaxy S22 and S22 Plus. The big differences in image capture performance are driven, naturally, by the Qualcomm Snapdragon 8 Gen 2 that backs them up.

It's a shame that the Galaxy S23 and S23 Plus didn't adopt the Galaxy S22 Ultra's camera array, with its 108MP sensor and that amazing 100x Space Zoom. Still, this setup — with its upgraded image sensor and image processing — is nothing to sneeze at.

Images snapped in the phone's default "pixel-binned" mode are sufficiently detailed and colorful, with little quality disparity between those taken in day or night environments. Low-light scenarios do seem to yield a slightly warmer hue, but HDR is implemented to exceptional effect when things get properly dark.

When it comes to everyday photos, the S23 Plus nails it in traditional Samsung fashion. What I mean by that is that Samsung is known for upping the saturation levels of its photos, giving it a pop of color many prefer.

Both in regular lighting settings and in low-light environments, the S23 Plus' photos are vibrant and have a sharpness to them that just looks good.

Despite the absence of the S22 (and S23) Ultra's 100x Space Zoom feature on the S23 Plus, the latter's 30x maximum digital zoom is still impressive. Images begin to muddy around the 10x mark, but you'll still be able to capture crisp shots of objects around 50m away.

Samsung's iPhone-beating Portrait mode returns from the S22 Plus, too, while new camera features include Astrophoto, Astro Hyperlapse, Super HDR selfie video at 60fps and more accurate skin tone capture.

The Plus also gets the same video capabilities as the S23 and S23 Ultra. You can shoot in up to 8K at 30fps, though the lack of image stabilization on all three phones means you're probably better off recording in fully stabilized 4K at 60fps. Nonetheless, this is a highly capable handset for video capture.

The S23 Plus leapfrogs its predecessor in the front-facing camera department, replacing the latter's 10MP sensor with a new 12MP one. Sure, 12MP isn't exactly world-beating, but other phones in this price range – including the iPhone 14 Pro – rock similar front-facing setups. The front-facing camera took smooth, and sometimes too smooth, selfie photos. That's long been a complaint of mine about Samsung's selfie cams -- they're far too aggressive trying to smooth out my skin and it results in an almost fake-looking photo.

It's natural to have some megapixel envy when comparing the S23 Plus and the S23 Ultra and feel tempted to spend more money on the Ultra just for its camera setup, but having used both phones, I can say that while the Ultra's camera is impressive, the Plus is no slouch, and I'd wager most people will be just as happy with it.

Samsung Galaxy S23 Plus: Battery Life

One of the reasons you buy a bigger phone is for the bigger battery. The Galaxy S23 Plus has a 4,700mAh battery, which is 200mAh larger than the one in the Galaxy S22 Plus and 800mAh larger than the battery in the standard Galaxy S23. The Galaxy S23 Ultra, on the other hand, boasts a whopping 5,000mAh battery.

The Galaxy S23 Plus comes equipped with a 4,700 mAh battery, up from 4,500 mAh in the Galaxy S22 Plus. Coupled with the more efficient Snapdragon 8 Gen 2 silicon and the S23 Plus nets an excellent battery life result in our testing.

That beats both the iPhone 14 Pro and Pixel 7 Pro, the Galaxy S23 Plus' biggest competitors — almost three and a half hours in the latter's case. That's an excellent change of pace for Samsung, since the Galaxy S22 Plus went for a much lower 9 hours and 27 minutes in the same test.

During testing, I was able to comfortably use the Galaxy S23 Plus for almost two days in a general day-to-day capacity before needing to juice it back up again, which is around half a day longer than the standard S23 offers. My device dropped to 60% at midnight after the first day of normal use, before dropping to 1% at around 7pm the following day.

The S23 Plus' Snapdragon 8 Gen 2 chipset also means that heavy gaming or streaming sessions don't drain its battery as much as equivalent sessions do on the S22 Plus. An hour of 1080p YouTube streaming on full brightness, for instance, only ate up around 5% charge, while a similarly long FIFA Mobile gaming session only knocked around 10% off the phone's battery life.

The S23 Plus supports 45W wired fast charging – the same as the S22 Plus – where its smaller sibling only supports 25W. In practice, though, the difference between the two charging speeds is pretty inconsequential. The latter charged to 55% in 30 minutes during testing, while the S23 Plus managed a slightly better 62% (though I used a non-Samsung 45W charger for the Plus test). There's also wireless and reverse wireless charging on the S23 Plus, too. And with 45W charging (charger not

included), the Galaxy S23 Plus can regain about 70% of its battery in 30 minutes. That bests both the iPhone 14 Pro (20W) and Pixel 7 Pro, though we only had a 20W charger at hand for the latter. (The Pixel 7 Pro supports up to 23W charging.)

Oh, and it's worth noting that – as with the standard S23 and S23 Ultra – you won't get a charger included in the box with the S23 Plus.

Samsung Galaxy S23 Plus: Verdict

The Samsung Galaxy S23+ is in sort of a weird spot. It's a large, high-quality, thousand-dollar flagship, but it's not Samsung's *flagship* flagship. If the Samsung Galaxy S23 Ultra is a phone for enthusiasts, though, the Galaxy S23+ is for slightly more casual smartphone users who still want a big, premium device, but don't necessarily need every single feature they can stuff in their pocket. For those buyers, the S23+ is almost ideal.

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Samsung S23 Ultra

The Galaxy S23 Ultra offers up a familiar face that, at a glance, looks identical to its predecessor. The changes are there though, they're just not as big as those you'll find on the Galaxy S23 and S23 Plus. (You can read our Complete Samsung Galaxy S23 review and our thorough Samsung S23 Plus review for more on those two phones).

A familiar squared design plays host to a tweaked display that offers a greater flat surface area, giving the S Pen stylus more room to work with. The front and back now sport the latest and most resilient Gorilla Glass Victus 2, and all the mod-cons from its predecessor – including IP68 dust and water resistance, and 45W wired charging – remain.

Samsung has also worked to integrate more recycled materials into the phone's design, with the likes of recycled fishing nets going into the construction of the S Pen's inner cover and the speaker module, for example.

Some elements – like the 6.8-inch 1Hz to 120Hz adaptive Dynamic AMOLED 2X display and the 5,000mAh battery – have received seemingly minor tweaks (greater color accuracy and 20% improved efficiency, in the case of the above examples, respectively).

On the inside, however, there are some bigger changes, like the new 'Snapdragon 8 Gen 2 Mobile Platform for Galaxy' that Samsung and Qualcomm have collaborated on; purpose-built to offer rival-beating performance (51% better NPU performance, 41% better GPU performance and 33% greater CPU performance than previously, according to Samsung). The Ultra – along with the Galaxy S23 and Galaxy S23 Plus – is also one of the first phones out there to boast faster and more efficient LPDDR5X RAM and UFS 4.0 storage.

A familiar-looking rear four-camera rear array hides a new 200MP lead sensor that offers 16-to-1 pixel-binning, with the aim of advancing the S23 Ultra's 'Nightography' abilities for everything from general snaps, to portrait photography, to videos of the night sky using the new Astro Hyperlapse mode and in practice, although imperfect, you'll be hard-pressed to find an alternative phone with the same level of consistency, quality and confidence across its various sensors.

Those who want to shoot with greater control now also benefit from enhanced editing control too, with the ability to work with shots at up to 50MP captured in Expert RAW mode.

You still get a 12MP ultrawide and dual telephoto lenses at 3x and 10x (periscopic) zoom, respectively, granting the S23 Ultra the same degree of class-leading camera versatility offered up by the last couple of generations of Ultra.

Samsung has also renewed its commitment to offering up to four years of OS updates and five years of security updates, across the Galaxy S23 series. All three arrive with One UI 5.1 atop Android 13, which folds in better collaborative working in Samsung Notes and an enhanced Privacy Dashboard, among other things.

While the starting price (in the US, at least) remains consistent with the Galaxy S22 Ultra's base price, Samsung has doubled the entry-level storage to 256GB, while the top-tier model can be had with 12GB of RAM (up from 8GB on the base version) and a whopping 1TB of storage.

For a deeper dive, head on to the full in-depth review below, but know that, provided you're comfortable with the Ultra's high asking price, there's little to be disappointed by here.

Samsung Galaxy S23 Ultra: Design

The promotional images had me convinced that the S23 Ultra is physically unchanged from last year's Galaxy S22 Ultra, but holding the phone in my hand for the first time surprised me. The S23 Ultra, while featuring identical physical dimensions to its predecessor, now has slightly flattened side rails compared to last year. This seemingly small change makes the phone feel more comfortable to hold and allows for a more secure grip.

I use the word "comfortable" only in a relative term, as this is still a chunky boi that might feel too unwieldy for you, especially if you haven't handled an Ultra flagship in the last 2-3 years. I would have liked it if it was slightly narrower, but at least Samsung did a good job balancing its 234 grams of weight.

The S22 Ultra was the first of Samsung's phones to truly fuse Galaxy S and Galaxy Note sensibilities together, and in doing so it shrugged off the contour-cut camera-led aesthetics of its predecessor and its launch siblings. Instead, it favored a cleaner and more squared form; partly as a means of further differentiating itself from the standard S22 and S22 Plus, but also in order to physically accommodate an integrated S Pen stylus.

For the S23 series, the standard and Plus models have played catch-up in the design department, while the S23 Ultra offers only subtle refinements that, to the eye, will be almost impossible to spot for those familiar with the S22 Ultra.

There's a similar pill-shaped top-down profile, with curved front and back glass feeding into a metal frame, although one change S22 Ultra users might notice when they pick up the S23 Ultra, is the reduced the radius of the curved edges of the display, giving you a greater flat surface area on which to use the integrated S Pen; a subtle but welcome tweak, functionally speaking.

I'd argue this small change makes the phone harder to pick up off a flat surface but the difference is negligible. Its squared silhouette will be more divisive, however, making it trickier to pocket than the [Galaxy S21 Ultra](#) – with its rounded corners. It remains an undeniably good looking device that's becoming of its premium standing and promised power, though.

With launch [S23 colors](#) consistent across the whole range this year, you can pick the Ultra up in one of four finishes – Phantom Black, cream, green and lavender – in most places. As in previous years though, there are also a handful of colors exclusive to Samsung.com, including Sky Blue, Graphite, Lime and red (my personal favorite, offset against a black frame).

While the cap of the S Pen matches the body color of your choosing, the rest of the stylus is black, regardless of your preferred finish.

In a not dissimilar fashion to the recent Hazel [Google Pixel 7 Pro](#) or the brand-new Eternal Green [OnePlus 11](#), the green finish of the S23 Ultra review sample I've been testing is distinctly muted, particularly when viewed in artificial light. To some, this will come across as subtle and tasteful, to others it'll just look bland; so if you get the chance, try and get hands-on with your chosen finish before laying down any cash (assuming you don't plan on sticking it in one of the [best Samsung Galaxy S23 Ultra cases](#) from the get-go).

The company's excellent efforts in durability persist too, with IP68-certified dust and water ingress protection, a resilient Armor Aluminum alloy frame and – for the first time on any phone, the latest [Gorilla Glass Victus 2](#) – from Corning. It's a good thing too, as the rounded edges (even if they are slightly less rounded this year), paired with that smooth front and back, and the sheer size of the phone make it tricky to wield one-handed, especially when compared to its smaller, flat-fronted S23 siblings.

For all the advanced technology that Samsung has managed to pack into the S23 series, it's also tried to up the ante in terms of environmentally-friendly materials, with the Ultra being the real champion of this initiative. 80% of the deco film used in the construction of the phone's back is recycled, as is 22% of the glass used across its body, along with 20% of the S Pen's inner cover – reportedly hewn, in part, from ocean-bound polyamide.

Samsung claims that other recycled materials that have been hammered into the shape of the S23 Ultra include discarded fishing nets, water barrels, PET bottles and pre-consumer recycled aluminum, which have contributed to the construction of components (12 in all – double that of the S22 Ultra) like the volume keys and SIM tray, speaker arrangement, 5G antenna arrangement and more.

While Samsung isn't alone in working to improve the the green credentials of its phones (the iPhone comes to mind), this is certainly the most vocal we've seen the company about a particular handset in this regards and it

represents a push that will hopefully catch on with rival phone makers going forward.

Samsung S23 Ultra: Display

Aside from that reduced curvature along its edges and greater protection thanks to that new Gorilla Glass Victus 2, the S23 Ultra's display offers a familiar viewing experience to its predecessor.

As on last year's Ultra, you get a 6.8-inch Dynamic AMOLED 2X panel, with a resolution of 1440 x 3088 and a dynamic refresh rate that can scale between 1Hz and 120Hz, automatically shifting to prioritize power efficiency or visual fluidity as needed. By having the display rate displayed on-screen using developer options, I was able to see the screen switch between 24Hz, 48Hz, 60Hz and 120Hz, which is a wider array of frequencies than I've seen from any other Android phone boasting a dynamic refresh rate, supporting Samsung's claims of greater power efficiency this generation.

It is well-known that Samsung's flagships have some of the best displays in the smartphone market. The Galaxy S23 Ultra features a display that's basically unchanged from last year, but it can still claim to be the best. It's super bright, with 1200 nits of brightness in regular scenarios and up to 1750 nits of peak brightness in HDR content. I took the phone out during bright sunny California outings, and the screen was perfectly legible even in direct sunlight.

While it supports a native resolution of 1440p, you can dial down the screen resolution to 1080p, which is how I used the phone mostly. Even at 1080p, the screen looks fantastic, with punchy colors and deep blacks. You get support for HDR across streaming apps, and consuming multimedia on this display is a treat. The tiny punch-hole camera cutout at the top doesn't get in the way a lot, and the tall 19.5:9 aspect ratio is perfect for almost everything from watching wide format videos on YouTube to scrolling through vertical social media feeds.

The screen also features an adaptive refresh rate of up to 120Hz, giving you a silky-smooth scrolling experience across apps while also dialing it down to 24Hz to save battery when you're not touching the screen. One big letdown with the display, though, is that Samsung has opted for a low PWM flicker rate for its premium flagships, and this is no exception with the S23 Ultra. While this may not be a concern for most users, if you are particularly sensitive to screen flicker or frequently use your phone in low-light environments, this may pose a challenge.

Max brightness still doesn't compare to the [iPhone 14 Pro](#)'s impressive 2,000 nit peak (the S23 range all tops out at 1,750 nits), but in real-world viewing, movies, games and other visuals look exceptional. Meanwhile, Samsung isn't making any new claims of further-reduced S Pen latency or additional Air Gesture functionality this time around, but it's already impressively responsive (Wacom-supported tech that allows for 2.8ms latency) and the user experience has been augmented in other ways that appeal to productivity.

It's worth mentioning that even the latest iPhones share this characteristic. In contrast, some recent Android phones from brands like Realme and Motorola have transitioned to higher PWM displays, addressing this concern.

The high-quality vibration motor under the display adds haptic feedback to your screen interactions. However, it's worth noting that iPhones and even some of the latest Xiaomi flagships offer haptics that feel even more refined and premium. The ultrasonic fingerprint scanner works reliably well to provide secure biometric unlocking.

Finally, the speaker setup here is better than ever, with the top earpiece working in tandem with the speaker at the bottom to provide clear, rich audio with even hints of some actual bass. Top quality stuff!

Samsung Galaxy S23 Plus: Performance

Unlike previous years, the entire S23 series is powered by the same chip globally, namely the Snapdragon 8 Gen 2 for Galaxy. Here's what the "for Galaxy" part means, but what you need to know is that this is undoubtedly the slickest, most responsive Samsung phone to date. Helped by the fact that the Galaxy S23 Ultra packs in the latest UFS 4.0 storage, this phone flies through daily tasks. Whether launching heavy apps, switching between apps for multi-tasking, or just keeping your apps suspended in memory, the S23 Ultra can do it all without breaking a sweat.

It's not really a secret that Samsung has connections in high places, building Wear OS 3 with Google and having co-developed the last few generations of its own flagship chips in conjunction with Qualcomm, but that partnership has matured into something exceptional for 2023.

Whereas previously, users in different markets could expect Galaxy S devices powered by *either* Samsung Exynos or Qualcomm Snapdragon silicon, the Galaxy S23 series gains Qualcomm's latest and greatest Snapdragon 8 Gen 2 chip worldwide.

This eliminates performance discrepancies that previously left users of Exynos-powered Galaxy S phones feeling behind the curve and also helps with aspects like camera processing (thanks to the use of the same ISP across regions) and battery life consistency.

Not only has the 8 Gen 2 already shown its capabilities (our [OnePlus 11 review](#) already offers first-hand insight into how the chip performs) but Samsung has managed to gain access to an exclusive tuned variant of the SoC, dubbed the 'Snapdragon 8 Gen 2 Mobile Platform for Galaxy'. In a nutshell, the prime Cortex-X3 core inside the chipset has been overclocked to 3.36GHz (rather than 3.2GHz, as is standard); without compromising efficiency or battery longevity.

Talking about gaming, the Galaxy S23 Ultra can run all of the heaviest games available on the Android ecosystem at their highest settings, although it's missing the option to run games like PUBG and Call of Duty

Mobile at 120fps. Despite not being a gaming-centric smartphone, it can hold its own during long gaming sessions, not showing any significant thermal throttling or frame-drop issues.

As Samsung's Nick Porter pointed out during a one-on-one interview with TechRadar ahead of the phone's launch, the vapor chamber is "2.7x bigger on average across the whole S23 series" this year, helping with thermal efficiency, while the use of faster and more efficient LPDDR5X memory and UFS 4.0 storage, lend themselves to greater performance and quality of life too.

In testing, artificial benchmarks reveal what I suspected ahead of time: the S23 Ultra gains a slight edge over the [OnePlus 11](#) – with its similar-but-technically-lesser chip – based on the numbers, but the Ultra's lead is so slight that you're unlikely to feel any real-world benefit. As such, that higher prime-core clock speed is far more beneficial for Samsung Galaxy S23 series marketing campaign than it is the end user, but regardless you're getting one of the most powerful, if not *the* most powerful phone on the market.

In real-world use, the pairing of the new chipset, RAM and storage collectively deliver performance that – as you'd hope for a device with the S23 Ultra's standing and price tag – feels rock-solid. The most demanding task the Ultra faced during review was running the graphically demanding game Genshin Impact, with settings intentionally set to their upmost limits. Everything ran smoothly for the 20 minutes of play time, but the phone did get noticeably hot, to the point where I'd suggest sticking with the title's default settings (at which it still looks and runs fantastically).

Samsung Galaxy S23 Ultra: Software

Samsung is class-leading, when it comes to making the [best Android phones](#) for update support, promising four years of OS updates and five years of security updates across the Galaxy S23 series; with all three

devices running on the latest Android 13 – dressed in the company's own One UI 5.1 – out of the box.

It should feel like a familiar experience for existing Samsung Galaxy owners, with squircle icons and a generally flat graphical style as standard, dressed with a few new additions that appear to focus on collaboration, convenience and security.

The software suite is packed with useful functionalities, such as the **Secure Folder** for protecting sensitive files, the Game Launcher for an enhanced gaming experience, and the Bixby virtual assistant for voice-activated convenience. From the Edge Panel, which provides quick access to your favorite apps and tools, to **Samsung Dex**, which can project a Windows PC-like interface to an external display via USB or even wirelessly, the Galaxy S23 Ultra packs in more features than you'll ever need.

With so many features crammed in, it's no wonder that right out of the box, the phone comes with ~50GB of its onboard storage already utilized. Samsung's insistence on bundling in duplicate apps for every default Google app (Calendar, Mail, Messages, Internet browser, etc.) also adds to the pre-installed bloat, along with a plethora of other Samsung apps. While disabling or hiding these apps is possible, it would be more convenient if Samsung streamlined its software experience by eliminating the need for duplicate apps.

Samsung Notes now allows for simultaneous creators to work within a single document collaboratively, routines and modes can be set to suit different scenarios – adjusting settings accordingly and an upgraded privacy dashboard should dispel ambiguity around how secure your device is.

Air Command and Air Gestures remain in place as part of the S Pen experience, offering the ability to control the camera, translate text and cut and paste on-screen content instantly, with simple stylus-driven actions, although camera controls in particular take a little getting used to.

My only gripe with Samsung software in the past has been the sluggishness that One UI operates with, but as I mentioned above, this phone flies. But that's not all---Samsung has also made significant strides in its software support. With the S23 Ultra, you can rest easy knowing that you'll be treated to a guaranteed four years of OS updates and even longer support for security updates.

Of course, the long-term performance of Samsung phones has been a topic of debate, and only time will tell how the Galaxy S23 Ultra fares. But with the leaps and bounds made in software optimization and support, it's clear that Samsung is determined to change the narrative.

While One UI won't be to everyone's tastes, it's unique, fairly customizable and displays a level of polish that's evident from initial setup to everyday use, and which you'll be hard-pressed to find elsewhere. Want to scan a QR code to connect to Wi-Fi during setup, instead of having to type out your password? Done. Want your device to auto-restart when it senses performance degradation? There's a toggle for that. Want to run two instances of the same messaging app logged into different accounts simultaneously? There's an option for that too.

Samsung Galaxy S23 Ultra: Camera

This year's major marketing push for the Galaxy S23 Ultra has been the brand-new 200MP sensor for its primary rear camera. The other three rear cameras remain unchanged, while the selfie camera gets a downgraded 12MP resolution but an upgraded sensor that also supports autofocus. Let's break down the real-life camera performance one by one.

Cameras are one area where the Ultra has always stood out when looking at the best Samsung phones available and the multi-sensor setup that the company's been using for the last few generations has consistently ensured that these devices find a place up at or near the top of our best camera phones roundup year after year.

While the 12MP ultrawide and dual 3x and 10x 10MP telephoto sensors on the back of the S23 Ultra feel decidedly familiar, the phone shrugs off the primary 108MP resolution sensor seen on previous entries in the series and replaces it – for the first time on a Samsung phone – with a whopping 200MP primary camera; thought to be the ISOCELL HP2 that TechRadar's cameras editor, Tim Coleman, dived into a few days prior to the S23 series' launch.

Such a change in hardware can sometimes result in a drop in quality for some manufacturers; with their camera teams needing time to retune their algorithms and color science to get the best from the new components (something that's happened with the likes of OnePlus in the past). But much as with Google's move to a new 50MP primary sensor on its Pixel 6 series and Apple's shift from a 12MP to a 48MP primary sensor the year after, with the iPhone 14 Pro line, it's clear that Samsung's camera team has ensured that the output from the S23 Ultra's new 200MP Adaptive Pixel Sensor offers just as consistent and impressive an experience as its predecessor, right out of the gate.

By default, the S23 Ultra's main camera pixel bins images by 16 to 1, down to 12.5MP (output as 12MP stills) that use all that additional pixel data to iron out image shake, while also taking in more light and retaining more color information. Speaking of which, low light photography is a big area of focus for the camera experience on this Ultra; with the promise of enhanced night shots across the board – including portraits – as well as a new astrophotography hyperlapse video mode.

Stabilization across stills and video has been improved too, with double the angle of movement now possible in the OIS (optical image stabilization) system, compared to last year's S22 Ultra (3-degrees on the S23 Ultra), along with improved VDIS (video digital image stabilization) and faster autofocus from the 'Super Quad Pixel' sensor, as Samsung has branded it.

For users who want to get more granular with the Ultra's photography experience, the Expert RAW mode – integrated into the camera UI – now supports an output of up to 50MP, rather than 12MP previously. The Ultra

also lets you snap 200MP stills (as jpegs), if you want to play with the full sensor's available detail.

In practice, while shooting in raw allows for greater fidelity and significantly more robust editing – letting you pull more data out of the darkest or lightest parts of an image – the S23 Ultra seems to consistently under expose in Expert RAW and results all come with a graded profile as standard, rather than a neutral image.

In the pursuit of switching up sensors, all three of the S23 series also gain a new 12MP front-facing snapper this generation, set into the display (Samsung hasn't yet been bold enough to import the Z Fold series' under display camera), which holds promise and brings more consistency to the experience of owning an S23, regardless of model.

Anecdotally, the 12MP front-facer feels like a faster sensor than the one found on its predecessor, offering up a nice overall image with impressive dynamic range, as selfie snappers go.

In side-by side selfie tests with the Google Pixel 7 Pro and the iPhone 14 Pro Max, the S23 Ultra most closely matches Apple's flagship and offers a surprisingly (for Samsung) natural-looking final image, with impressive detail and what often came across as pleasing, more natural skin tones than the Pixel, which was uncharacteristically out of step against both Samsung's and Apple's phones in testing.

Samsung also continues to work closely with big social brands like Snap, TikTok and Instagram to ensure phones like the S23 Ultra benefit from higher fidelity image and video quality, as well as tighter integration with creative features within each social app, something rival Android phone makers miss out on.

Samsung Galaxy S23 Ultra: Battery Life

The battery specs read the same as the S22 Ultra, with a 5,000mAh cell inside the S23 Ultra supporting 45W wired charging (along with wireless

and reverse wireless charging), however, Samsung claims that the collective effect of the new hardware efficiencies and tighter integration between hardware and software result in a 20% improvement that Porter claims delivers "the longest ever battery life on a Galaxy S smartphone;" and I'd be inclined to agree.

While the 100W charging speeds of OnePlus 11 and 125W speeds of the Motorola Edge 30 Ultra both leave the S23 Ultra in the dust, actual longevity on Samsung's new uber-flagship is greatly improved, despite the phone having the same-capacity battery as its predecessor.

What was a one-day phone at best now lasts a day and a half, in normal usage and will still see you through a full day, even if you plan on streaming Disney Plus with brightness pushed up or want to dive into an hour of CoD: Mobile or Wreckfest.

While the battery life is better than ever, Samsung's charging speeds still leave much to be desired. The Galaxy S23 Ultra supports 45W of wired charging, which, unfortunately, takes over an hour to charge the phone from 0 to 100% entirely. It's worth noting that achieving this charging speed requires the use of select PPS chargers, as most other USB PD chargers, including the 65W charger I utilize, can only charge the S23 Ultra at 25 Watts, extending the charging time to around 75-80 minutes for a full charge.

On a brighter note, wireless charging speeds are decently fast at 15 Watts, and the S23 Ultra even enables you to wirelessly charge other devices or TWS earbuds at up to 4.5 Watts.

In testing, the S23 also delivered some of the longest screen-on time per charge of any phone we've tested recently, at approximately eight hours; surpassing rival devices with similarly-capacious batteries by at least half an hour.

Samsung Galaxy S23 Ultra: Verdict

The Samsung Galaxy S23 Ultra provides unmatched reliability in terms of performance and battery life, arguably the most versatile set of cameras on a phone, and productivity features that no other phone currently offers. However, it is evident that Samsung has taken the iterative route here, not really trying to up the ante in any field.

I can think of plenty of features other Android flagships have that the S23 Ultra doesn't have: faux leather back panels, higher PWM displays, faster charging, 1-inch camera sensors, microscope lenses, and so on. Yet the truth is that the S23 Ultra will still win in every comparison with those phones because of its overall consistent goodness across the board. Granted, these phones are often limited to select markets, leaving Samsung as the go-to global option, allowing them to take a more relaxed approach to innovation. We witness a similar pattern with foldable, where Huawei, Xiaomi, and OPPO have released devices that seemingly address all the "problems" that Samsung's foldable continues to grapple with.

With the Galaxy S23 Ultra, there's nothing inherently wrong, which paradoxically diminishes the sense of uniqueness in its positive aspects. It reminds me of a quote: "You are never dedicated to something you have complete confidence in. No one is fanatically shouting that the sun is going to rise tomorrow." Come to think of it, there's only one other phone that can claim to be consistently good to the point of becoming mundane, and that's the iPhone. And we all know how that's going.

If you are someone who actually needs the gazillion practical benefits the Galaxy S23 Ultra provides, there is no other phone like it. If you won't use the S Pen or the ridiculous zooming capabilities, you could be happy with a Galaxy S23+ or a Pixel. And if you crave a more adventurous and cutting-edge experience, perhaps one of the foldable options should be on your radar. The S23 Ultra may not sport the flashiest gimmicks or push the boundaries of design, but it delivers where it truly matters---reliability and an exceptional user experience.

