

## Microsoft Surface Go: Where great user experience, performance, price, and fast battery charge converge\*

- Its keyboard, stylus, and large trackpad offered the most comfortable user experience of the bunch
- Get your money's worth by maximizing performance for your dollar
- Don't get stuck at a plug: charge and go faster

The search for the perfect device can feel overwhelming. You want something that is as mobile as you are, offers a comfortable user experience with stellar performance for everyday tasks, and ideally doesn't cost an arm and a leg. At Principled Technologies (PT), we gathered the facts about some popular tablet and laptop options to help you find your dream device. We compared the brand-new Microsoft® Surface® Go against five popular competitors in several areas, including user experience, performance per dollar, and battery charge rate.

In our opinion, the Microsoft Surface Go offered a great balance across these categories. For example, the Surface Go offered the same performance per dollar as the Apple® iPad®, charged its battery more than twice as quickly, and came out on top in features and user experience. Compared to the other devices we tested, the Surface Go delivered up to 46 percent better performance per dollar, up to 58 percent faster battery charging, and again offered a wide range of features and the most comfortable user experience, according to our expert. If you're on the market for a new device, our test results and expert assessment show that the Microsoft Surface Go offers a compelling balance of user experience, price, performance, and fast battery charging that may just be what you're looking for.



**Get more value  
for your money**

Up to 46% better  
performance per dollar†



**Charge up and  
get going sooner**

Up to 53% more battery  
charge after 30 minutes  
plugged in

\*Compared to five competitor devices we tested †Using performance scores from our WebXPRT benchmark test

## Microsoft Surface Go at a glance

So, what's all the hype about the new Surface? The Microsoft Surface Go is a 10" device that's a laptop or a tablet, depending on how you want to use it. The Surface Go can run a full-featured version of Microsoft® Windows® 10 (ours arrived running Windows 10 S, but we took advantage of the free upgrade to Windows 10 Home). It combines the processing power of a laptop—with an Intel® Pentium® Gold 4415Y processor and up to 8GB RAM (the version we tested had 4GB)—with the portability of a tablet. At just 1.15 lbs., it's easy to tote the Surface Go with you wherever you go: around the house, from meeting to meeting, or in your bag for a quick trip to the coffee shop or a red-eye flight to make that conference you're attending.

The Surface Go has storage options ranging from 64GB to 128GB, so you can take your important documents, pictures, and music with you. Plus, the Surface Go has a microSD slot that gives you the flexibility to increase storage space that many other devices don't provide.

Folks who like touchscreens will be pleased to find the Surface Go has a 10" screen, but it also works with the Surface Go Signature Type Cover and the Surface Pen (which are available for an additional cost) so you can get a full laptop experience complete with keyboard and trackpad if you prefer. If you have other gadgets you'd like to connect, the Surface Go provides a USB-C 3.1 port, which is a convenience that two devices we tested lack. Another thing the Surface Go can do: Take pictures via its 5MP front and 8MP rear cameras. To learn more about the new Microsoft Surface Go, visit <https://www.microsoft.com/en-us/p/surface-go/8v9dp4lnksz>.



### How does the Surface Go compare to other devices on the market?

We're glad you asked. At PT, we assess technology day in and day out, and we compared the Surface Go to five popular devices to see how it stacked up in performance per dollar, battery charge rate, and general user experience. We checked out the following:

- Microsoft Surface Go
- Apple iPad Pro
- Lenovo™ Yoga™ Book
- Apple iPad
- HP x2 210 G2
- Samsung® Galaxy Tab S3®

We found that the Microsoft Surface Go offered the best performance per dollar of the systems we tested, had the second fastest battery charge rate, offered more options and versatility than the other devices, and provided a comfortable and enjoyable user experience.

## Get your money's worth with Microsoft Surface Go



Marla<sup>1</sup> is ready for a new device. She purchased her laptop five years ago and it's getting too slow to browse the web, create and edit the Microsoft Word documents she needs for work, and even pull up her stored pictures quickly. She's tired of lugging the heavy old thing around, too. She likes the idea of a tablet but worries that a small portable device won't be able to do everything she needs, particularly for work tasks that go quicker with a keyboard. Price is another concern for Marla: she doesn't have the biggest budget, but still needs something that can handle all the tasks she does.

Customers like Marla could find their answer in the Microsoft Surface Go. It's lightweight and portable; offers the option of a full keyboard complete with trackpad, attractive for tasks like creating Microsoft Office documents; performs well; and costs less than many competitors. In fact, the Surface Go offers a strong performance per dollar ratio, which means that Marla would indeed get significant bang for her buck.

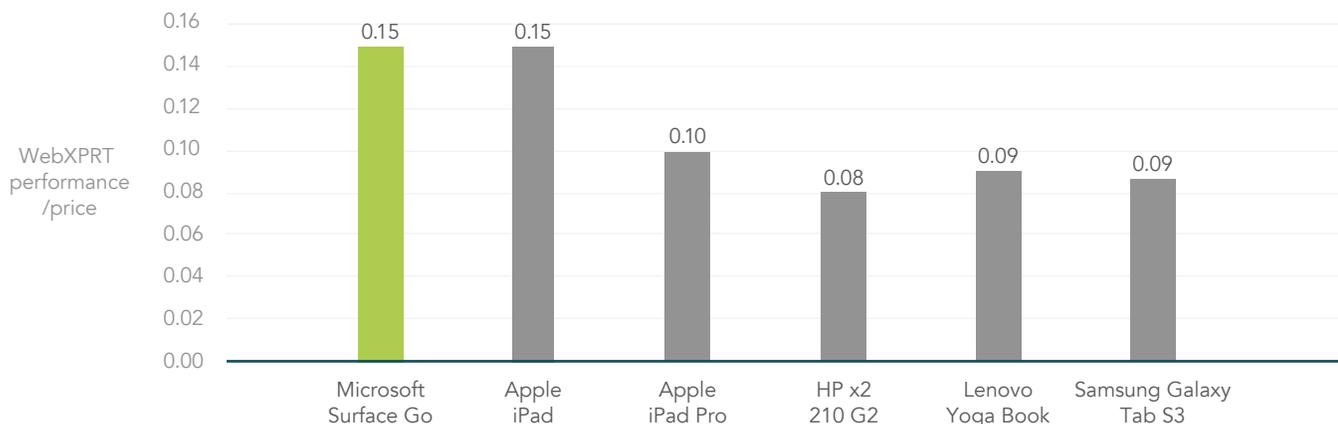
Tablets and laptops are like cars—there's something out there for every need and budget. Ferraris are available, but most drivers don't need that kind of speed and they can't or don't want to spend the cash to get one. Like the average consumer car, the Surface Go isn't the fastest device on the market, but it doesn't need to be. What the Surface Go offers is a superb balance between performance and cost that make it attractive to a wide range of users.

We assessed the devices using three industry-standard benchmarks: WebXPRT 3, TabletMark 3.1, and Geekbench 4. Generally speaking, the Microsoft Surface Go performed on par with the iPad and outperformed the HP, Lenovo, and Samsung offerings, finishing behind only the much more expensive iPad Pro. (To see these results in detail, visit the [science behind the report](#).)

When you factor in the cost of each device, the story becomes clear: The Surface Go gives you your money's worth, providing up to 46 percent better performance/price than four of the competitors and offering similar value to the iPad. (To determine performance per dollar, we used the median WebXPRT benchmark score for each device and divided it by the price. We priced the systems as tested with a keyboard but without a pen.<sup>2</sup>)

Better performance per dollar means that you're getting more value for your money, something that any smart consumer looks for when making a new technology purchase.

Get your money's worth by maximizing performance/price



Device costs	Microsoft Surface Go	Apple iPad	Apple iPad Pro	HP x2 210 G2	Lenovo Yoga Book	Samsung Galaxy Tab S3
	\$528.99	\$528.00	\$958.00	\$563.47	\$579.99	\$679.98

## Can your tablet do it all?

A 2014 Gartner study found that by 2018, 50% of consumers would use a tablet or phone first for online activities. Research Vice President Van Baker noted: "The use pattern that has emerged for nearly all consumers, based on device accessibility, is the smartphone first as a device that is carried when mobile, followed by the tablet that is used for longer sessions, with the PC increasingly reserved for more-complex tasks."<sup>3</sup>

Because it can run full-featured Windows 10, the Microsoft Surface Go could eliminate the need to carry it alongside a PC, as it's equipped to handle many common user tasks.

## Double your charge rate (and then some) vs. Apple iPad with Microsoft Surface Go

Waiting for your battery to charge when you have a long meeting or flight coming up can be frustrating. You want the battery to charge as quickly as possible during your brief layover, so you can use it without plugging in. By selecting a device with a quick battery charge rate, you can avoid obsessively checking the number in the corner of the screen.

We found that the Microsoft Surface Go charged 10.26 watt hours in 30 minutes, which was faster than all other systems except for the HP x2, and achieved an impressive 53 percent more battery charge in 30 minutes than the iPad, which was priced similarly and performed comparably. This means that the Surface Go can get you back in business if you're frequently on the go, charging your battery quickly so your device will last on your latest endeavor.

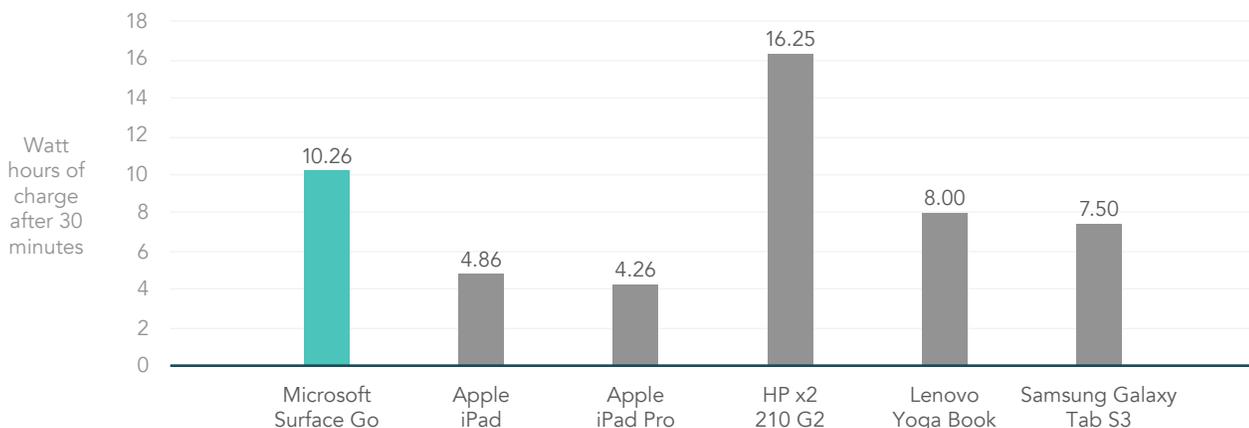
*Note: We compare watt hours charged rather than percent charged, because the batteries were different sizes. We ran down all batteries to 0% and then plugged them in, recording the charge after 30 minutes and determining the watt hours charged based on each battery capacity.*



Ethan is always moving. He travels weekly for business and often needs to edit Microsoft Excel® spreadsheets from airports, coffee shops, and hotel rooms. He hops from conference room to conference room taking meetings, sometimes connecting with remote coworkers via Skype® when he's at his company headquarters. That's why battery charge rate is important to him—it's frequently difficult to find a spot to plug in, so he needs a device that can recharge quickly in between meetings or flights.

Buyers like Ethan should find the portability and quick charge rate of the Microsoft Surface Go an attractive addition to its stellar performance per dollar ratio. With the Surface Go, Ethan could remove one stressor from his day if he doesn't have to watch his battery like a hawk.

Faster charge rate lets you unplug and go



## Microsoft Surface Go delivered more options and a better user experience



Gabe uses his current system for all the basics: music and pictures, web browsing, and light gaming, but he also authors an increasingly popular webcomic. He'd like a system that's versatile—so he can map out storylines and collect links in Microsoft OneNote® from the couch or use it at a desk for writing—that comes with an array of features and options to help him take his creativity on the go. The overall feel and experience of a device is important to Gabe, because something that's a joy to use makes work tasks seem like less of a chore to him.

Creators like Gabe take note: The Microsoft Surface Go has the versatility and portability of a tablet but can also be set up at a desk with a full keyboard with trackpad. A Surface Pen is another option that would let Gabe take his creativity anywhere, even the couch in his living room to sketch out a few comic ideas.

Based on our findings we've presented, the Microsoft Surface Go has an edge on its competitors—it offers better performance for the price than the other devices we tested, though it's on par with the performance per dollar for the regular iPad. Listed from best performance per dollar to worst (see the color coding in the table below), here are what the devices we tested have to offer in terms of features. With a compelling combination of peripheral options (keyboard with full trackpad, pen, and mouse support), a USB port for convenience, and expandable storage, the Surface Go has a variety of usable features in addition to its strong performance and relatively low cost.

System	Microsoft Surface Go	Apple iPad	Apple iPad Pro	Samsung Galaxy Tab S3	Lenovo Yoga Book	HP x2 210 G2
Keyboard	✓	✗	✓	✓	✓	✓
Trackpad	✓	✗	✗	✗	✓	✓
Mouse support	✓	✗	✗	✓	✓	✓
Expandable storage	✓	✗	✗	✓	✗	✓
USB port	✓	✗	✗	✓	✓	✓

Columns arranged based on performance per price ranking, ordered best to worst.

### Not only agile, but versatile too

Just because a device is portable doesn't mean you're necessarily able to use it how you would prefer. Our PT expert found that the Surface Go was incredibly comfortable to use because you can move the kickstand to any angle you want, from near-vertical to practically flat. This lets you decide how and where to use the Surface Go—purely as a tablet, sitting in your lap as you lounge in your living room, or set up with a keyboard at a desk for a more traditional computing experience focused on productivity. You can use the keyboard flat or have it tilted up, depending on the typing experience you find most comfortable.

The Lenovo Yoga Book was also versatile, with a 360-degree hinge that made it comfortable to use. The HP x2 was incredibly top heavy; enough so that if you remove your hand from the keyboard, it topples over. While portable, the iPad, iPad Pro, and Samsung Galaxy Tab S3 offered only a single standing position while using a keyboard, which could make them uncomfortable for some users.

### Typing in style and comfort for increased productivity

A quick look around the internet will tell you: keyboard preferences are incredibly subjective. Some users demand a full mechanical keyboard for typing, while others are content to use a touchscreen keyboard.



According to our PT expert, typing on the Microsoft Surface Go keyboard felt more like using a full keyboard than the competitor keyboards we examined. Its superior key travel led to a smoother tactile experience, which only the HP x2 210 G2 came close to matching. The suede-like Alcantara® covering on the Surface Go Signature Type Cover, paired with its full-sized trackpad, added even more comfort during keyboard use. Our expert concluded that the Surface Go keyboard, with its better tactile feel, could improve typing accuracy and productivity.

In contrast, the Galaxy Tab S3 keyboard was smaller than most, making it harder to press certain keys, including numbers and backspace. The Yoga Book keyboard was difficult to use as it was essentially a touchscreen, and the iPad Pro Smart Cover keyboard offered very little keyclick feedback and offered a poorer tactile experience that our expert did not enjoy. Apple does not make an Apple-branded keyboard for the standard iPad, so users must purchase a third-party offering if they want to use a keyboard with it.

## A trackpad on a 10" device keyboard?

Touchscreens aren't always the preferred method of navigating a device—sometimes, with a keyboard setup, a trackpad or a mouse can improve a user's experience and increase productivity. It really depends on what you prefer, so it's nice to have many options.



The trackpad experience with the Surface Go keyboard impressed our PT expert, who noted that it had less friction and provided greater accuracy and navigation speeds versus the other devices with trackpads we tested: the HP x2 210 G2 and Lenovo Yoga Book. Greater accuracy and speed can improve productivity and lessen frustration as users get where they're going the first time more often, without the need to stop and correct. The iPad, iPad Pro, and Galaxy Tab S3 don't offer a trackpad at all, which some users may find disappointing and limiting. The Apple devices we tested notably lack the trackpad and mouse support, leaving the touchscreen or pen as the only methods for interacting with these devices, which may make it harder to do some kinds of tasks on them.

## Microsoft Surface Go offers a compelling balance of performance, price, battery charging, features, and user experience

There may be no one perfect computing device, but there is one that can meet the criteria you're looking for. The challenge is to find it. At Principled Technologies, we compared the new Microsoft Surface Go to the Apple iPad and iPad Pro and three popular Windows-based devices in performance per dollar, battery charge rates, and overall features and user experience. We found that by offering up to 46 percent better performance per dollar, fast battery charging, and a wide range of convenient features, impressive versatility, and a comfortable user experience, the Microsoft Surface Go offers a compelling balance that will likely make it the right device for a number of people. If you want a full-featured Windows experience in a portable 10" form factor that performs well and offers an enjoyable user experience—all at an affordable price—check out the Microsoft Surface Go. It might offer just the balance of features you're looking for in a device.

- 1 Marla and her counterparts in our other scenarios aren't real people, but the choices they face represent those of real-life consumers looking to buy a new computing device.
- 2 Note: The Lenovo Yoga Book comes with a pen, so this price does include the tool.
- 3 "Gartner Says By 2018, More Than 50 Percent of Users Will Use a Tablet or Smartphone First for All Online Activities," accessed August 12, 2018, <https://www.gartner.com/newsroom/id/2939217>.

Read the science behind this report at <http://facts.pt/9p671c> ►



Facts matter.®