



## TOUGHBOOK 55 FAQs

### What is the TOUGHBOOK 55?

The TOUGHBOOK 55 is a semi rugged 14" laptop. It is engineered to meet the demands of the extraordinary.

### Can I detach the screen?

No, the TOUGHBOOK 55 is a laptop (sometimes referred to as a clamshell). If you are looking for a 2-in-1 detachable device, Panasonic offers the TOUGHBOOK 33 (12" fully rugged PC) and TOUGHBOOK 20 (10.1" fully rugged PC).

### Why did Panasonic build the TOUGHBOOK 55?

Customer feedback and understanding customer's workflow is an integral part on product development for TOUGHBOOK. By listening to customer feedback, understanding how they use devices today, we can develop a product that can address their challenges and provide a better solution. Customers constantly want more battery life, thinner/lighter devices, better performance and are concerned how to future proof their purchase. By listening to our customers, we can expand Panasonic's ability to meet the needs of our customers working in demanding environments and constantly changing needs.

### What modular areas on the TOUGHBOOK 55 are user-upgradeable?

The memory (RAM), storage (SSD) and even the keyboard are user-upgradeable. The storage drive has a quick-release latch for easy and fast removal. In addition, there are three other expansion areas that can accommodate dedicated graphics, optical drives, authentication readers as well as additional I/O, batteries and a second storage drive. This unparalleled customization enables companies and agencies the ability to help futureproof, simplify ordering, shorten lead times and decrease downtime.

### What are expansion areas, expansion pack and xPAK?

The expansion areas are the 3 modular areas on the TOUGHBOOK 55. The expansion packs (or xPAK's for short) are the accessories that fit into one of the three expansion areas.

### Can I buy an expansion pack (xPAK) post purchase or do I have to buy it at time of purchase of the laptop?

The xPAK's can be purchased as accessories (at purchase or post-purchase) and are user-upgradeable.

### How complicated is it to remove an xPAK? Do I need special training?

Panasonic designed the xPAK's to be easily inserted and removed. Most have a quick-release lever for easy insertion/removal. The xPAK's for the Rear Expansion Area and the AMD Dedicated Graphics require just a screwdriver and a handful of screws but was designed to also be very simple and straightforward and user-upgradeable.

### I don't want my users to be able to remove the xPAK's and SSD. Can I lock them down?

Yes, Panasonic designed the xPAK's as well as the main SSD so if an IT department wants to, they could be locked down by simply inserting a screw. Panasonic offers a SKU (FZ-VSW551U) with a bag of 9 interchangeable screws (mix of silver and black) that can be used to lock down the various expansion areas as well as replacements for the screws from the keyboard, AMD Dedicated Graphic xPAK and Rear xPAK's.

# Panasonic

## What screws are included in FZ-VSW551U?

There are 9 interchangeable screws (mix of silver and black) that can be used to lock down the various expansion areas as well as replacements for the screws from the keyboard, AMD Dedicated Graphic xPAK and Rear xPAK's.

## Is the SSD removable?

Yes, it is end-user removable and has a quick-release lever for easy detaching. If an IT department wants to, they can purchase an optional locking screw that will secure the battery and help it prevent from coming loose by accident. A set of 9 screws are including in sku # FZ-VSW551U.

## Are the batteries removable?

Yes, they are end-user removable and have a quick-release lever for easy detaching.

## What is the battery life? What is MobileMark 2014?

The TOUGHBOOK 55 has up to 20 hours of battery life, or up to 40 with the optional second battery. The battery results are based on the industry standard battery test called MobileMark 2014 using their Office Productivity scenario (which models productivity usage including word processing, spreadsheet data manipulation, email creation/management and web browsing connected to Wi-Fi). The screen brightness is tested at 150 nits and does not use cellular.

## How many batteries come standard?

The TOUGHBOOK 55 comes with one battery standard (on the left side) which provides up to 20 hours MobileMark 2014. An optional second battery (on the right side) doubles battery life to an amazing 40 hours MobileMark 2014. With the second battery, the TOUGHBOOK 55 allows the batteries to be hot-swapped. Both batteries are identical and the same SKU #.

## What is a hot-swappable battery?

A hot-swappable battery lets users swap one of the two batteries (2<sup>nd</sup> battery is optional) in the unit without needing to shut down or suspend the laptop first. Both batteries are identical and can go in either the left or right battery slot.

## What are some of the technology enhancements?

The TOUGHBOOK 55 is the thinnest and lightest in its class and offers the latest in technology and performance, including the latest Intel® 8th Gen quad-core i5 and i7 vPro™ processors, an optional 1000 nit touchscreen that can easily be read even in direct sunlight, optional AMD dedicated graphics, up to 64GB of RAM and 2TB of storage. RAID-1 mirroring (with optional 2<sup>nd</sup> storage drive) is also possible where data is saved automatically to both storage drives.

The TOUGHBOOK 55 is the first laptop with tetra-array microphones for unmatched speech recognition accuracy. The new infrared webcam supports facial recognition using Windows Hello and now has a privacy cover for peace of mind. The TOUGHBOOK 55 offers louder speakers, up to 2x faster Wi-Fi and Bluetooth®, enhanced keyboard, HDMI 2.0 port – which supports HDR and 60 FPS on a 4K monitor.

## What is the difference between 8th Gen processors?

While Intel designates both products formerly known as Kaby Lake Refresh and Whiskey Lake as 8<sup>th</sup> Gen, the Whiskey Lake processors are newer to provide improved performance. Kaby Lake Refresh processors end in a "0" while Whiskey Lake processors end in a "5".



### **What is Intel vPro™ technology?**

Essential for businesses and agencies, it allows remote management for IT departments and adds security including Intel® Hardware Shield

### **What are some of security and safety measures on the TOUGHBOOK 55?**

The state of the art security on the TOUGHBOOK 55 includes a combination TPM 2.0, NIST BIOS, Intel vPro™ including Intel Hardware Shield, Absolute Persistence® technology embedded in the BIOS, supports up to 256-bit AES Wi-Fi encryption, optional OPAL encrypted drives, optional insertable, contactless SmartCard CAC and fingerprint readers provide 2FA flexibility, and the combination of an infrared webcam and the Windows Hello application that allows customers to use facial recognition,

The TOUGHBOOK 55 also can be equipped with dual storage drives and a special BIOS that can support RAID-1 mirroring for backing up data to both drives simultaneously. The fan, color and magnesium alloy also allow the unit to dissipate heat better and be cooler to the touch. And the new TOUGHBOOK Smart Battery Technology helps to extend the useful life of the battery while offering class-leading battery safety.

### **What is RAID-1 mirroring?**

TOUGHBOOK 55 with the optional 2<sup>nd</sup> storage drive and a special BIOS can support RAID-1 mirroring. Units equipped with this will automatically save to both storage drives at the same time offering a convenient way to back up data.

### **What are the tetra-array microphones?**

The TOUGHBOOK 55 is the only rugged laptop with 4 microphones – all of the microphones help to improve the accuracy of the speech recognition so it can offer class leading accuracy whether in quiet room or noisy environment. Compared to the previous TOUGHBOOK 54, the TOUGHBOOK 55 offers up to 3x the accuracy in noisy environments thanks to the tetra-array microphones.

### **What is an infrared webcam? What is Microsoft Hello?**

The combination of an infrared (IR) webcam on TOUGHBOOK 55 and Windows Hello allows customers to use 3D facial recognition or fingerprint scanning (on units equipped with a fingerprint reader) for user authentication.

### **What is the maximum number of users that can set up their faces using Microsoft Hello?**

There is no theoretical maximum. Up to 99 has been tested. Each user will need to set their own account, but multiple users can set up their own account.

### **What are some of the keyboard enhancements?**

The TOUGHBOOK 55 is the first TOUGHBOOK with a color-selectable backlit keyboard. In addition, the keyboard is 3x brighter, has larger backspace/return/right shift/space bar keys, new airplane mode and disable touchpad Fn keys, doubled the number of user-definable keys, backlit keyboard icons for easier night viewing and a seamless touchpad that is also now 25% larger.

### **What color is the backlight on the keyboard?**

The TOUGHBOOK 55 has a color-selectable backlit keyboard letting users select from two preset colors as well as define their own custom colors.



### **What is Day/Night Mode? How is it different from Concealed Mode?**

Day/Night Mode is Panasonic's new application that can apply a screen effect to reduce night blindness, eye strain and neural stimulation by applying one of 12 screen effects (colors, inversion, grayscale, blue light reduction), keyboard color and brightness. It is triggered either manually, or automatically based on the time of day or the amount of light. Concealed Mode is also a Panasonic application that can dim or turn off the display when a combination of keys is pressed, along with some other settings include turning off the keyboard LED's and turning off the volume.

### **How loud are the speakers?**

The TOUGHBOOK 55 has crisp and loud 92db speakers so users can hear the TOUGHBOOK 55 even in loud environments. This is critical given that rugged users need to work on their laptops in all types of situations. For instance, the level of noise on a busy highway can be around 85db. And inside of a police vehicle with the sirens on, can range from 85db to the lower 90's depending on speed and if the windows are down or up.

### **Can I use the unit in the rain?**

Panasonic does not recommend using in rain – instead offers a fully rugged line up of products which are better suited for rain for maximum protection. However, the TOUGHBOOK 55 is IP53 certified to provide extra water protection compared to models that are only IP51 or IP52.

### **Which integrated options require the bump out?**

The TOUGHBOOK 55 has a flat bottom on all configurations. This was an area of improvement from the TOUGHBOOK 54 which required a bump out in certain configurations.

### **Does it come with a stylus pen and tether?**

Yes, the touchscreen model now comes standard with both of these, as well as a stylus holder and microfiber cleaning cloth. These are both improvements over the previous model based on feedback we heard from our customers.

### **Is it FirstNet Ready™ / does this support Band 14?**

Yes, the TOUGHBOOK 55 offers an optional EM7511 modem that is FirstNet Ready and supports Band14.

### **Can I use my old docks?**

Yes, the TOUGHBOOK 55 is 100% backwards compatible with TOUGHBOOK 54 desktop dock and vehicle docks from Gamber-Johnson and Havis. Just drop your new TOUGHBOOK 55 into one of the old docks and save the hassle and cost of replacing your old docks!

### **Can I reuse my old AC adapters from the TOUGHBOOK 54 and TOUGHBOOK 31?**

Yes!