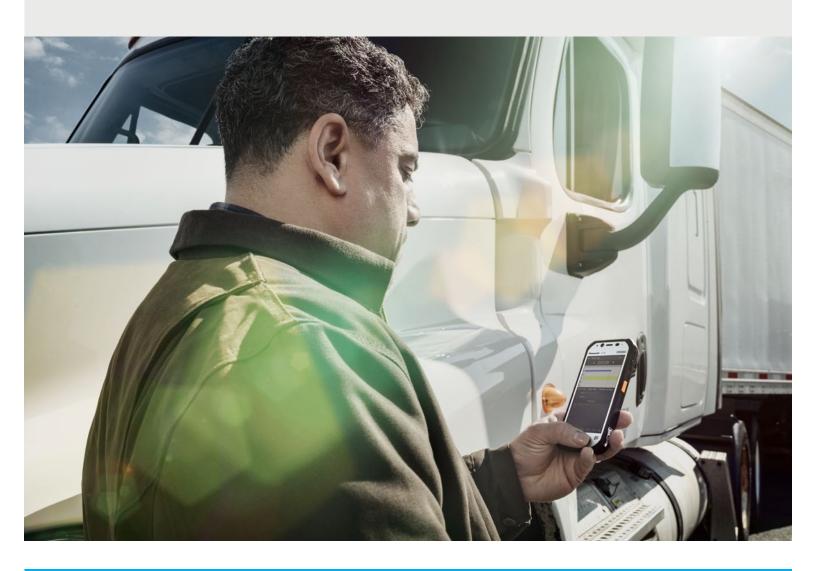
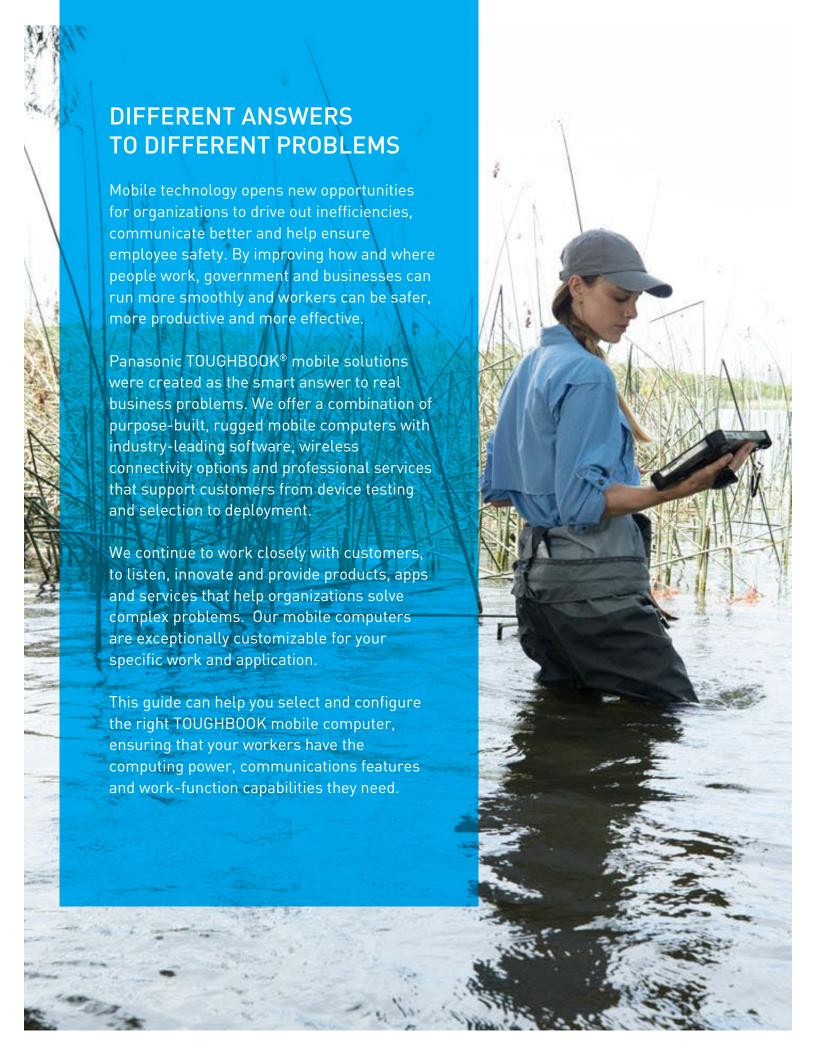
PLANNING GUIDE



CUSTOMIZING YOUR PANASONIC TOUGHBOOK RUGGED MOBILE COMPUTER





At Panasonic, our mobile solutions are "purpose-built" for use in harsh conditions and to meet specific business requirements. This means you can customize your mobile computers with the right features and software for the demands of your work environment, industry and job task. With Panasonic Professional Services, you can also customize the services you need to help plan, test and deploy your solution.

Mobile computers. Our laptops, tablets and handhelds are engineered to perform flawlessly even in the most unforgiving environments while meeting or exceeding performance and ruggedness levels set by the U.S. military (MIL-STD 810G). These standards can include high and low temperatures, torrential rains, dirt and dust, high altitude, vibrations, bumps, bangs, and drops. Find out what you need to know about MIL-STD certification.

Optional features can be added for use in potentially hazardous environments, to provide ports for connection to specialized equipment and to integrate a thermal imaging camera or other options into the device.

Applications. We work closely with industry-leading software providers to make sure our devices take advantage of the latest application capabilities. Our mobile applications include security, mobile device management, and specific industry and work applications.

Services. Depending on your situation, we can provide a range of services such as field testing, vehicle mounting, global connectivity, and software imaging and other deployment support. With our customization capabilities, we can help you configure a TOUGHBOOK® mobile computer and a software and service support package that will meet your specialized needs.

WHAT MAKES US TOUGH?

Materials and technology.

Superior materials and strict quality control processes have helped make our mobile computers five times more reliable than standard laptops. In addition, our mobile computers lead the rugged industry with the lowest failure rate across our product line for the fifteenth straight year.

Manufacturing. We control the design, sourcing, fabrication and manufacturing of every TOUGHBOOK product.

Testing. We design for ruggedness and then actually test for it. We torture test our mobile computers every year to ensure that they can perform under the harshest conditions. Ask for our results.

Research investment. We are involved in extensive R&D, globally and in the U.S., leaning heavily on our customers to help us to better understand user needs.









TOUGHBOOK® rugged computers are designed to be exceptionally customizable. Panasonic manufactures nearly all the major device components and controls the major manufacturing processes from design through delivery, building in durability and reliability as well as configurable options.

- We internally source major device components such as the motherboard and batteries.
- We design, manufacture and assemble every mobile computer at our own facilities using Panasonic-built robotic technology.
- We offer a menu of applications, mobile device management and security software, services, and accessories.
- We provide an industry-leading standard warranty and offer value-based extended warranties and professional services so you can design the support package that's right for your organization.
 Repairs are performed by U.S.-based and regional global service centers.

THREE STEPS TO CUSTOMIZING YOUR MOBILE SOLUTION:

1. SELECT FORM FACTOR



The first step to choosing the right rugged device is to understand how and where it will be used. Panasonic TOUGHBOOK® mobile computers are available in several form factors that can be customized for specific industry applications. TOUGHBOOK mobile computers are engineered to handle a wide range of extreme conditions, carrying MIL-STD and Ingress Protection (IP) certifications that define the level of ruggedness.

Laptops. Fully rugged and semi-rugged laptops pack the computing power of a desktop PC and can handle complex, demanding business applications.

For example, manufacturing plants and equipment servicing techs use TOUGHBOOK rugged laptops for factory quality inspections, service diagnostics and repairs, and reporting. Some of the device features and capabilities that can be configured specifically for manufacturing include serial ports to connect to legacy plant equipment and additional optional security protections.

Tablets. With a rugged tablet, workers get enterprise-grade computing power and connectivity in a portable, compact form factor.

This is crucial for industries or organizations that require a mobile computer lighter than a laptop, but with a larger display than a handheld and more stringent security than a consumer tablet. For example, the U.S. military uses the durable Panasonic TOUGHPAD® FZ-G1 with features such as daylight-readable touchscreens and our patented rain/glove sensing technology for work in the field. In addition, communications capabilities with maximum reliability help warfighters maintain situational awareness to stay combat-ready and help manage assets and supply chains to support troops.

2-in-1s. These devices are useful for workers who need the powerful computing and functionality of a laptop and keyboard plus the ultra-portability of a tablet

For example, first-responder incident commanders use the FirstNet Ready™ Panasonic TOUGHBOOK 33 to begin managing operations as the rig rushes to an incident. At the scene, they can detach the tablet to move to the command center, share complex information such as building plans in real time, coordinate with other public safety agencies and collaborate with headquarters to help them respond appropriately.

Handheld devices. These small, lightweight mobile computers are an excellent choice for applications such as workforce management, job scheduling and barcode scanning.

A leading package delivery and logistics company uses TOUGHBOOK handheld devices to help them keep business moving on time—scanning packages, tracking progress and providing optimal routes and proof of delivery. The unique, ergonomic, angled barcode scanner on the Panasonic TOUGHBOOK N1 fully rugged handheld makes scanning barcodes easier and faster. Plus, our unique optimized noise suppression technology enables the device to be operated in noisy warehouses and shipping docks. Handheld devices are often used by multiple workers, across shifts and on the road, so the N1 also provides a warm-swappable, optional long-life battery and reliable connectivity.

THREE STEPS TO CUSTOMIZING YOUR MOBILE SOLUTION:

2. CONFIGURE YOUR TOUGHBOOK



Once you've decided on your form factor, the next step is to configure your mobile computer. Panasonic makes this easy with a self-service **Product Configurator tool**. The configurator tool gives options based on the form factor and the specific product you've selected.

To customize your TOUGHBOOK® mobile computer, choose from among options for computing, connectivity, security, safety and integrated, enhanced add-on options. While you can use the configurator yourself, you can also speak with our team of trained specialists to help you match device options to your needs. Contact our team at 1.888.245.6344.

The basics. You can start customizing your mobile computer with the basics: CPU, operating system, memory (RAM) and storage.

For example, for Panasonic Windows® devices, you can choose your CPU. Depending on your form factor and model, storage can be specified to include storage drives that meet the Federal Information Processing Standard (FIPS) for cryptographic algorithms and software, as well as Opal-compliant solid-state drives (SSDs).

Connectivity components. Panasonic offers connectivity options that take advantage of our powerful antenna modules sourced and designed into the device to work flawlessly over Wi-Fi, mobile broadband. Bluetooth® and GPS.

Options for connectivity across broadband providers is crucial for first responders and field service workers, for example. In manufacturing, connecting is typically via Wi-Fi, and some devices may also need an Ethernet (LAN) port for times when the device is docked or workers need access

to servers on the local wired network. With a TOUGHBOOK mobile computer, Wi-Fi and Bluetooth come standard, and you can configure devices to add mobile broadband connectivity and GPS on most models. We also offer P.180, a global connectivity service that offers mobile workers network connectivity across geographies and devices.

Security components. To help users comply with stringent security requirements, Panasonic offers several ways to configure additional safeguards into your devices, including options for security software and device access protection.

For example, Panasonic can provide federal government users with insertable smart-card readers as an extra layer of protection, and can even configure a TOUGHBOOK model without Wi-Fi or Bluetooth and without any camera to make sure data stays offline.

Safety components. In addition to meeting multiple rugged standards to ensure durability, certain TOUGHBOOK models can be configured to meet hazardous location standards for areas at high risk for explosion or fire, such as oil and gas environments, to help protect against sparking and electromagnetic discharge.

More integrated options. Based on the device form factor, you can configure your mobile computer with add-ons such as a barcode reader, magstripe reader, UHF RFID reader, second USB port, second Ethernet port, serial port, thermal camera and 3D camera. Panasonic makes these options available for use with highly specialized applications.

THREE STEPS TO CUSTOMIZING YOUR MOBILE SOLUTION:

3. CUSTOMIZE SOFTWARE & SUPPORT



TOUGHBOOK® mobile computers are backed by an industry-leading warranty program and the personalized support of the Panasonic ProServices team. U.S.-based National Service Centers and global service centers provide rapid turnaround on repairs.

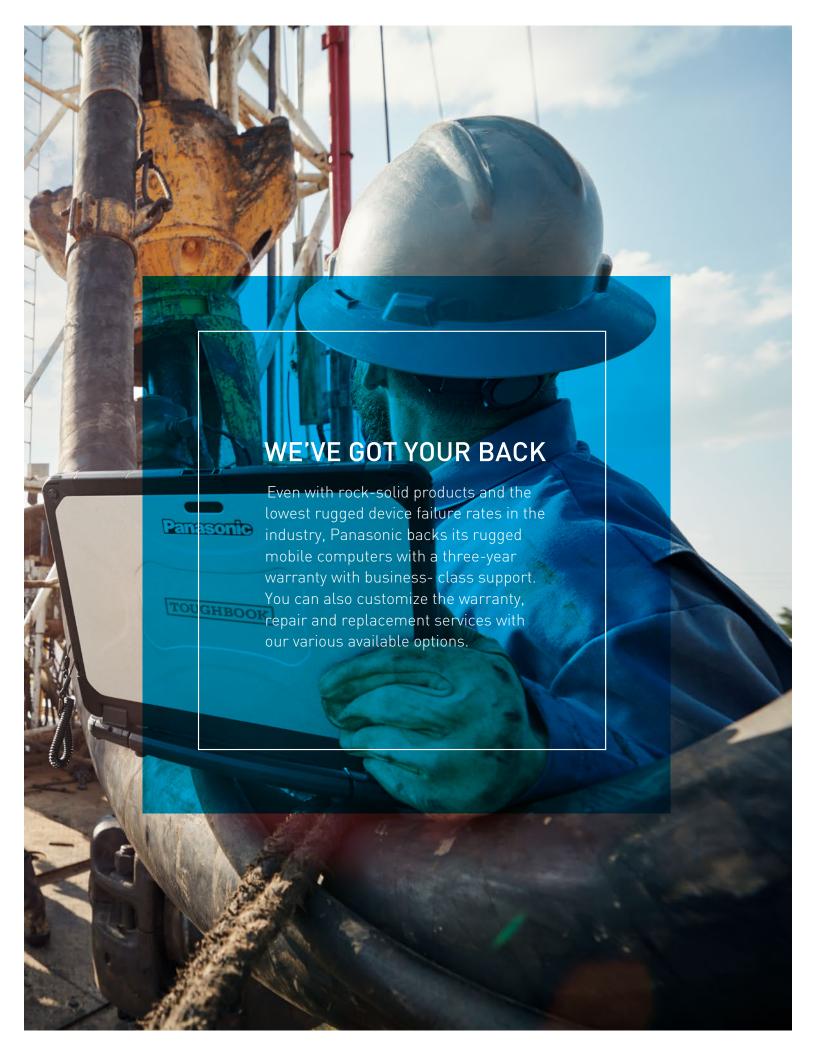
Our services include solution consulting and engineers with experience in a wide range of industries and deployments. Our experts are available to assess your current mobile and IT setup, support integration of your mobile computers with legacy software systems, deploy third-party software, image and test your applications to check for operating system and driver issues, and provide training for your IT staff. They can observe firsthand how your devices will be used outside in the field or on the road in a vehicle, and make process improvement recommendations that help increase productivity.

Our experts can also recommend the best accessories and vehicle mounts so that you can use the hardware easily and safely. For example, to secure their devices while they climb poles or make repairs in small spaces, utility workers benefit from shoulder or hand straps. And our TOUGHBOOK mobile computers end up in all kinds of vehicles, from forklifts to delivery vans, long-haul trucks and police cars, each needing secure vehicle docking mechanisms specific to each application. See the Services tab at TOUGHBOOK.com for a detailed description of all our professional services.

SERVICES ACROSS THE LIFE CYCLE



No matter what the job or work conditions, Panasonic can deliver a customizable, rugged mobile solution that combines the right hardware, software and services for your workers to be successful. TOUGHBOOK laptops, tablets and handhelds are built to withstand the challenges of unforgiving environments and can be customized to fit your unique application. Powerful warranties and optional professional services reduce IT department headaches and help you experience a smooth deployment.



TALK WITH OUR EXPERTS

If you have questions about the best form factor or configuration options for your specific application, talk to our experts. Panasonic has decades of technology experience with all major industries and applications. We can help you configure the TOUGHBOOK® mobile computer that works best for your environment and job needs.

Contact a Panasonic customer representative:

1.888.245.6344 toughbook@us.panasonic.com

For more about how our customizable solutions can help your business:

www.toughbook.com

