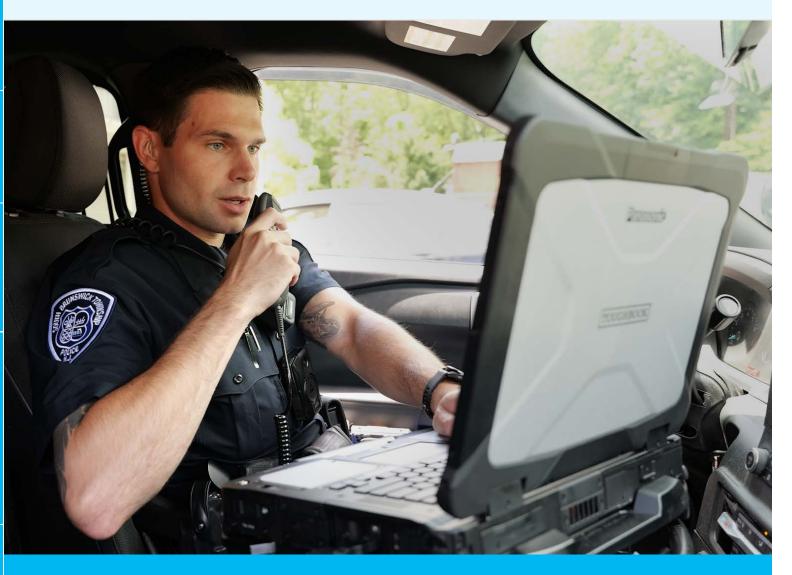


TOUGHBOOK

SHOULD YOUR ORGANIZATION INVEST IN RUGGED OR CONSUMER-GRADE DEVICES?

Why consumer-grade hardware can ultimately cost you more

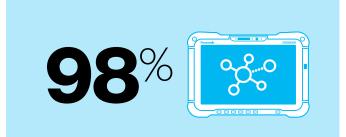


PERSPECTIVE: HOW TOUGHBOOK IS DIFFERENT

VISIT TOUGHBOOK

MUST-HAVE TECHNOLOGY

Mobile technology is a must-have for enterprise and government agencies that want to ensure their workers are connected to essential processes and data, engaged with customers, and operating productively and efficiently no matter where they are. Despite the higher initial cost of rugged devices, organizations should consider how they fit into their mobile technology mix.



Ninety-eight percent of businesses depend on enterprise mobile devices and applications.¹

This paper presents a perspective from Panasonic Connect on the business case for consumer vs. rugged devices. Purpose-built for workers who spend most of their day in the field operating in unusual or harsh environments, rugged devices can provide an excellent ROI and lower total cost of ownership (TCO) compared to their consumer-grade counterparts.²

In the moments that matter most, rugged devices like Panasonic TOUGHBOOK® laptops and tablets fit the bill—delivering lower TCO in these key areas: device durability, reliability and connectivity, and the impact on worker and IT productivity



Why not invest in consumer devices?

The biggest reason? It'll cost you more.

Consumer-grade devices can't handle extreme environments. They break more frequently in the field, wasting worker time. If you're using consumer devices, that means you may have to stop work and re-engage with the job at hand. You may have to overstock devices to keep spares on hand.

Over the average life cycle of a rugged device, organizations can expect to save:²

Rugged notebook \$1,045

Rugged tablet.....\$2,745

RUGGED INSIDE AND OUT



DURABILITY

Consumer devices aren't engineered for harsh or unusual work environments.

Rugged devices are designed to perform beyond normal "wear and tear." They typically meet MIL-STD-810H and ingress protection (IP) standards, which test for ruggedness and resistance to solids and liquids.

On the other hand, consumer-grade mobile devices are not specifically engineered to perform in harsh conditions. "Ruggedized" protective cases cannot protect internal components, which can lead to more frequent replacements.

Consumer-grade devices do not perform or can shut down in hot or cold conditions often found inside vehicles. Plus, consumer-grade batteries are not built to last a full shift and often require frequent charging throughout the day.

Our rugged mobile devices are built to be tough inside and out.

TOUGHBOOK devices meet MIL-STD-810H and IP65 or IP66 standards with an all-weather magnesium alloy design and raised bezels for LCD impact protection. TOUGHBOOK devices can withstand bumps, spills and drops of up to six feet in a physically active environment. They also handle dust, dirt, vibration, extreme temperatures and exposure to substances like oil, grease and caustic fluids. TOUGHBOOK devices can be sanitized when being used by multiple employees. The machine is just as tough inside, with components specifically engineered to elevate the power of the solutions—for example: enhanced connectivity and embedded antenna, non-breakable components, and all-day batteries.

Not all "rugged" devices are created equal.

TOUGHBOOK rugged claims are certified by third-party testing. Even among other rugged manufacturers, not all seek third-party validation of their rugged claims.

TOUGHBOOK devices last.

Typically, TOUGHBOOK devices are kept in service for three to five years—much longer than the average consumer-grade device, and they require lower rates of replacement and repair.

- "Before using the TOUGHBOOK 33, our staff was visibly frustrated by how easily their devices were breaking, as well as the involuntary downtime they experienced. Now, our employees can shift their focus from dealing with faulty tech to doing the task at hand efficiently and effectively."
- -Jason Waddell, Director of Construction Technology, Batson-Cook Construction³

EXTREME RELIABILITY



RELIABILITY

Consumer devices fail more often.

Rugged device failure rates are significantly lower than their consumer counterparts. Greater downtime with consumer devices means higher loss of productivity, which could lead to a secondary impact on employee confidence and engagement.



Workers lose an average of 74 minutes of productivity when their device fails.⁴



Consumer tablets fail at almost 3x the rate of rugged tablets -12.8% vs. 4.4% failure in the first year.⁴

In the moments that matter, you can depend on TOUGHBOOK devices to perform.

Unlike consumer devices, TOUGHBOOK laptops and tablets don't stop working in extreme environments.

 Modular design provides users with the ability to customize or upgrade their mobile devices to meet new demands, increasing capabilities and service life.

- Purpose-built features such as night mode, sunlightreadable and rain-sensitive displays, glove-touch input, and a programmable F11 button with raised bezel for easy identification make devices easy to use, even in the most trying conditions.
- Powerful antennas keep the remote mobile workers connected to critical information and apps.
- TOUGHBOOK offers an industry-leading warranty program—up to three years.

Lower total cost rate

Rugged mobile devices deliver lower TCO. Increased uptime and reduced device management demands boost worker and IT productivity and save costs by avoiding unexpected repairs and replacements.



TOUGHBOOK devices boast a 3% failure rate, the lowest for laptops in the industry. Other rugged competitors fail more than 4x more often and consumer devices fail as much as 7.5x more often.⁵

"When it comes to our officers, all of their equipment needs to work all the time. We have that confidence with Panasonic TOUGHBOOK products, more so than a lot of our neighbors do with competitor products"

-Lt. Haimbaugh, Mishawaka Police Department⁶

- 4. Panasonic Connect (2021). Enterprise Mobility Total Cost of Ownership. VDC Research (2021) ►
- 5. Compares Panasonic actual data for TOUGHBOOK computers to data gathered by IDC on consumer and rugged laptops, tablets, and handheld devices and reported in The Case for Deploying Rugged Devices in Your Organization. IDC (November 2021) ►
- 6. City of Mishawaka Police Department Enhances Operations, Real-Time Communications and Situational Awareness. Panasonic Connect (2021) ►

INTRODUCTION

POWERFUL CONNECTIVITY



CONNECTIVITY

Consumer devices depend heavily on their surroundings to offer wireless connections.

Rugged devices have superior built-in connectivity, extending their reach from dense urban areas to remote rural areas. Frontline workers may struggle to stay in contact if they're relying on devices that can't connect in remote locations with low wireless coverage or can't penetrate industrial areas with equipment and other structures that cause interference, reducing productivity and potentially harming mission-critical operations.



Consumer-grade devices are 28% more likely to experience connectivity issues in comparison to rugged devices.⁷

Not all rugged devices are equal when it comes to connectivity.

TOUGHBOOK devices offer multiple high-speed wireless options. The TOUGHBOOK 40 offers the fastest cellular in the industry—up to 2Gbps 4G modem or 5.5Gbps 5G modem which supports Sub-6, C-band and mmWave. TOUGHBOOK devices are engineered with advanced, integrated wireless technology and embedded antennas to minimize, if not eliminate, interference problems and provide connectivity even where signals may be blocked by industrial buildings and large machinery. We work with major network providers to help activate for first responder networks that offer priority and preemption (FirstNet[®] and Verizon Frontline).

Rigorous testing

Panasonic performs rigorous testing of its embedded wireless modules and their antennas for signal strength and interference, operating one of the industry's largest anechoic chambers for assessment.



"We've been using TOUGHBOOK [laptops] for six years here on the Marine Patrol Unit. This is our only communication device aside from our radio out here on the water."

-Thomas Boyd, Deputy Sheriff, Alameda County⁸



SERVICE AND SUPPORT

IT PRODUCTIVITY

Consumer devices make IT work harder to manage device issues and repairs.

Rugged devices are purpose-built and provide a higher level of IT support compared to their consumer-grade counterparts.



20% higher IT service ticket volume for consumer devices over rugged devices

64 minutes—the average time for IT to address each mobile failure⁹

Our professional services go way beyond simple warranty support to strengthen your IT team.

Panasonic Connect not only offers rugged devices with a proven low failure rate, but we also provide strong warranties and extended repair services for those times when something does go wrong. Beyond warranties, our ProServices team offers a robust portfolio of services that can help you plan, design, test and deploy your mobile solution, taking the pressure off your IT department.

In addition, ProServices offers solutions to boost employee and IT productivity:

• Smart Essential Services to monitor device health and battery performance and help identify issues before devices fail.

- Core Asset Management software, provided with all new TOUGHBOOK purchases, allows visibility into a full fleet of devices.
- Security solutions to protect sensitive data and secure your devices.
- Situational awareness apps such as distracted driving and voice-to-text software.

Best tech support

Panasonic has been rated higher than other rugged competitors for overall quality of technical support and customer service.¹⁰

- "Panasonic's reputation for providing superior customer support was the true differentiator in our decision-making process."
- -Karin Bullard, Systems Quality Assurance Analyst, Mission Linen Supply¹¹



WHY TOUGHBOOK SHINES

RUGGED MOBILITY IN MOMENTS THAT MATTER



Why TOUGHBOOK Rugged Shines

TOUGHBOOK rugged devices are aligned to the work environment with more comprehensive services and better warranties and repair services.



Engineered with higher-grade components and customizable for a range of industries



Improves employee productivity with less downtime



Easy to use with glove- and rain-touch screens, high-visibility displays and long battery life



Enhances morale for workers who are confident in devices that are reliable and responsive



Extends reach for more reliable connectivity



Longer product life cycle, stays in service longer

The low failure rate, greater reliability and powerful connectivity contributes to greater productivity for workers and the IT team. See for yourself how TOUGHBOOK rugged devices deliver a lower TCO than consumer-grade devices as well as other rugged competitors. Try our **TCO Calculator** >



Learn more about how TOUGHBOOK mobile solutions can help workers and IT become more efficient and productive.

VISIT TOUGHBOOK MOBILE SOLUTIONS >

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Panasonic CONNECT

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RELIABILITY

VISIT TOUGHBOOK