



TOUGHBOOK FOR PORTS & HARBOURS

Rugged. Connected. Secure.

Digital transformation is reshaping the ports industry, from ocean freighters and shipping terminals to storage, logistics, and transport operations.

To harness the benefits of digitisation—improved efficiency, productivity, accuracy, control, and visibility—every stage of the supply chain must digitalise its processes and equip teams with the right technology.

With TOUGHBOOK, you get further, faster.



One tool. Unrestrained possibilities.

Saving time. Saving resources. Saving budgets.

- Always-on communication between vessels, port operations and other sites
- Traffic and cargo control
- Cargo tracking and inspection
- Digital documentation, always accessible
- Automated unloading and loading
- Monitoring and supervision of ground operations
- Flexible, accurate digital documentation

TOUGHBOOK devices are multitasking digital tools that offer unrivalled connectivity, uninterrupted access to data, real time communication and extensive customisation for complete peace of mind.

Why port and harbour operators trust TOUGHBOOK



SEAMLESS, SUSTAINABLE ADAPTABILITY

TOUGHBOOK devices are highly configurable with userexchangeable modularity so they can evolve to suit the task at hand. This means workers across ports and harbours can do multiple tasks with just one device – a long term investment for a more sustainable tech portfolio.



PERSISTENT PERFORMANCE FOR LONG SHIFTS

Extended battery life plus easy and quick hot and warmswap options makes TOUGHBOOK a dependable partner for the most demanding shifts. Get up to 24-hours of operational capability, extending to up to 40 hours.



SUPERIOR SCREENS, RAIN OR SHINE

TOUGHBOOK devices have high resolution, glove enabled touch screens that are designed to withstand extreme temperatures, water, dust and drops. This combined with their light and ergonomic design enables easy and accurate signature capture on the move.



SECURE TRACEABILITY

Track containers through integrated barcode scanners or OCR software; accurately capture signatures through high resolution capacitive multi-touch screens; and control device access through smart card or fingerprint login.



CYBER SECURITY TRUSTED

Cyber attacks can be detrimental for port operations. So security is critical when choosing your tech. Our connection, data, and hardware protection is trusted by public services and the military worldwide.



UNRIVALLED CONNECTIVITY FOR REAL TIME UPDATES

Uninturrupted connectivity and accurate GPS is critical for accessing and sharing updates such as gate changes in real time. Our devices are 5G ready, and we can customise BIOS and OS to support your network infrastructure.



FAST & COMPLETE REPAIR SERVICES

Our 'cradle-to-cradle' approach to service is delivered out of our facility in Cardiff, Wales. Combining service with configuration, the total solutions we offer our customers are designed and developed in-house so port and harbour operations can keep running at all times.

TOUGHBOOK mounting solutions

GUARANTEED ACCESS TO DATA AND APPS

Our docks and mounts combine dual pass-through connectivity, Wi-Fi routers and vehicle antennas, with the already optimised antennas found within all TOUGHBOOK devices, to guarantee consistent access to life-saving applications and data in real time.

FUTURE-PROOFED ECO-SYSTEM COMPATIBILITY

To minimise cost, Panasonic maintains form factor through generations of a product so only the device needs to be replaced at time of refresh, future-proofing the critical ecosystem around it, including your vehicle installations.

SAFE AND ERGONOMIC VEHICLE INSTALLATION

Our in-vehicle docks and mounts are vigorously and independently impact tested, to ensure your TOUGHBOOK devices don't detach in a collision – plus, our devices are ergonomically designed for intuitive use in the field.

ADAPTABLE FOR EVERY CHALLENGE

TOUGHBOOK devices can be customised with various purpose-built accessories, mounts, and docks to equip a variety of port machinery with the technology and software applications necessary to manage handling missions.



Cranes & quay cranes



Straddle Carriers



Trucks



Front Stackers



Carrying solutions

5G Private Networks – The lifeblood of smart ports

For ports and harbours operators, the ability to create a private 5G network offers the added benefits of full control over network and data, including traffic prioritisation and resource allocation.

For them to harness the full spectrum of advantages furnished by 5G Private Networks, teams need reliable devices and meet two criterias: a chip that supports the licensed sub-6 band, and a licence for the chip to support 5GSA.

Panasonic manufactured and designed two rugged devices that are equipped for 5G private networks.



Driving digitalisation

The ultimate partner for port and harbour operators

Digitalisation has driven the adoption of mobile devices in most areas of port operations. For modern SCADA systems, mobile devices are particularly important to enable real time tracking and updates.

TOUGHBOOK devices are the perfect mobile tools for the main operations areas – replacing paper-based processes and boosting efficiency and accuracy across all use cases.

This includes everything from logistics, warehousing and manufacturing operations, inland transport, storage, to customs & police operations

TOUGHBOOK solutions offer seamless support to all operators, increasing speed and productivity and reducing downtime.



Crane maintenance

In the challenging environment of port crane maintenance, field engineers contend with wet and windy conditions, frequent knocks, drops, and the need to interface with diverse vehicles and equipment, all of which strain conventional commercial IT equipment.

TOUGHBOOK 40 is a reliable device uniquely equipped to withstand the challenges of port crane maintenance. With MIL-STD-810H shock protection and IP66 water and dust resistance, it provides a tailored solution for engineers navigating the demanding environments of ports and harbours.

Furthermore, its modular design with customizable ports, including high-speed Ethernet, streamlines fault diagnosis and performance assessment—a tailored, robust solution for crane maintenance challenges.



TOUGHBOOK in action



TOWARDS BETTER LOGISTICS

Interporto Padova is located on key road, rail and port communication routes for the North East of Italy and Europe. At the heart of their strategy is the challenge of investing in infrastructure technology and services. To further automate road and rail gates and movement in general, they had to extend the means of displaying and managing operations in real-time to the operations on the ground and on freight vehicles.

They chose to adopt Panasonic TOUGHBOOK G1 fully rugged tablets as an integral part of the equipment of the staff. By using our devices and dedicated software work can be managed without loss of continuity. Operators continuously receive and send information from the G1, which, through the LTE connection guarantees continuity of flow even through metal structures such as cranes and very high container walls.

TOUGHBOOK's ecosystem complete with accessories and peripherals allows them to be used in any environment, whether it is handheld or mounted on vehicles.



TOUGHBOOK devices are 7× more reliable than the industry average – for an even better TCO and next-to-zero downtime



IMPROVING PRODUCTIVITY AND SERVICE

DP World, one of the largest container terminal operators in the UK, turned to TOUGHBOOK to digitise the safe and correct loading and unloading of containers from vessels at their Southampton terminal in the UK.

Before using TOUGHBOOK, the majority of operations were managed with pen and paper which was inaccurate and vulnerable to the volatile working and weather conditions in and around the port. Information had to be physically delivered to vessels, causing heavy operational delays and mistakes.

After a range of tests, DP World chose the Panasonic TOUGHBOOK G1 rugged tablets and TOUGHBOOK 33 notebooks. They also built their own software to provide staff with live data and autonomy to make on-site decisions. The solution was integrated across 15 key cranes and all straddle carriers, improving productivity and driving down costs. Information sharing has become instantaneous, causing crane move rates to increase, meaning ships have shorter stays and can move to their next port sooner.

With TOUGHBOOK, DP World knew they could trust their device's reliability and ruggedness. Our technology is designed to be used on the go, for long shifts in demanding conditions. With in-vehicle capabilities, a bright and readable screen, extended battery life and hot swap capability, TOUGHBOOK is the ultimate partner for nonstop productivity.

"Panasonic has been able to deliver a range of mobile computing solutions that have helped improve productivity, customer service and user experience."

intel®

Intel®



Many port and harbour operators trust Panasonic expertise and equip their operational staff with TOUGHBOOK solutions.

We've collaborated with ports across Germany, Italy, Belgium, Netherland and the UK - integrating mobile solutions that increase efficiency in harbour operation management including loading, docking and technical services, as well as cybersecurity operations.

At Panasonic Connect, we help you navigate the digital challenges of today and the future. We design mobile devices that support smarter, leaner, and more efficient operations – facilitating the transition to more sustainable practices and smarter customer service. When it comes to driving operations forward, TOUGHBOOK is your perfect companion.



Talk to us today
Read more at toughbook.eu



The Intel logo is a trademark of Intel Corporation or its subsidiaries. Android is a trademark of Google LLC
Intel® Core™ i5 vPro® processor

