

Secure.  Connected.

Field service technicians need mobile devices that support, not hinder, their work. In this guide, we explore the major environmental and technological challenges they face daily, and how you can provide your teams with secure, reliable connectivity to business-critical applications – wherever work takes them.

**The Ultimate Technology
Team-Up for Field Services**

Emerging Device Trends for Field Services

From secure access to critical data and legacy port compatibility, to the ability to withstand outdoor environments and maintain resilient connectivity, field service technicians need reliable, adaptable, and secure devices, that go beyond the limitations of commercial laptops and software.

Of course, portability is a must for remote workers, but it also means devices can be more easily lost, stolen, or damaged. Beyond the cost of fixing or replacing equipment, the reputational and financial impact of data breaches or ransomware attacks can be devastating.

The new Cyber Resilience Act (CRA) will set out a framework of requirements governing the ongoing maintenance and security of devices, so cyber resilience will no longer be a 'nice to have', but rather an obligation to provide duty of care for the entire lifecycle of field devices.

Another significant factor affecting field services technology is the changing profile of connectivity.

With 5G rolling out and 3G coverage being phased out, any device that only supports 4G will struggle to stay connected, even in areas covered by 5G. So, what does this mean for your investment in field services devices?

Discover how TOUGHBOOK and Absolute combine to offer field services devices that stand up to the rigours of outdoor use in the harshest environments, and provide the multi-layer security, remote device management, and reliable connectivity to business-critical applications in the field.

Counting the Cost

Sending technicians into the field with devices that aren't secure and struggle with reliable connectivity can cost you in more ways than one.

2 hours

Weekly productivity loss due to connectivity and IT interruptions

24%

Frequency of security compliance policy failure

45 days

Average delay in applying new patches devices

\$4m+

Average cost of a corporate data breach in 2023



Utilities Infrastructure

Repairing and maintaining water, energy, wind power, and other essential utilities infrastructure can take field service engineers to remote and hazardous environments.

From outdoor smart meter installation and the wet and windy conditions at offshore plants to the temperature extremes and dust of desert oil pipelines, engineers need reliable devices that are portable, durable, and adaptable enough to work with a variety of other equipment.

Beyond the environmental hazards typical of their locations, there are several data and security challenges to contend with for field service technicians visiting utilities sites. For instance, pipeline inspections involve

collecting, transferring, and analysing vast volumes of data in the field, while the national and global importance of utilities infrastructure makes them potential targets for digital disruption or attack.

Therefore, any devices or applications used by utilities field technicians must not only overcome the environmental and connectivity challenges of the field, but almost meet the highest security standards.

TOUGHBOOK + **ABSOLUTE™**

Combining rugged design and powerful processing with 5G connectivity and adaptable legacy ports, **TOUGHBOOK** devices give utilities technicians the power to keep working in all conditions.

And with large, sunlight viewable, glove-enabled touchscreen and detachable full keyboards, field teams gain the ability to view, verify, and analyse data while in the field.

By pairing **TOUGHBOOK** with the remote asset management, reliable VPN access, and endpoint security of **Absolute**, technicians can boost productivity with seamless access to business applications, while ensuring that devices and the wider organisation remain protected. In the event of accidental loss or theft, **Absolute** allows IT managers to not only pinpoint the location of a device, but also remotely disable it and erase sensitive data.

With the new Panasonic devices we have seen connectivity rise from 68% to 80% plus in our region, which includes some of the most rural parts of the country. This has been an instant benefit.

John Vaughan

Technical Services Manager
Severn Trent Water

Absolute is now a key part of our data security measures because almost every time we've had a laptop stolen or mislaid, it allows us to prevent anyone from accessing the data. For a business like Tullow Oil, this capability is very important.

Trudie Seeney

Information Systems Asset Manager
Tullow Oil



Telecommunications

Like other essential utilities, telecommunications infrastructure spans huge areas, often taking engineers and technicians to remote, outdoor locations.

Visits to these sites bring the obvious environmental challenges around unpredictable weather conditions, as well as the need to stay powered for long shifts involving multiple visits.

In terms of connectivity, the gradual switch-off of 3G coverage is creating a growing need

for 5G-capable devices to enable access to applications, systems, and secure communication channels.

Additionally, the increasing adoption of high-speed broadband across Europe calls for devices that can be used to measure and test gigabit connections across commercial and residential sites.

TOUGHBOOK + **ABSOLUTE™**

Wherever work takes them, **TOUGHBOOK** is built to support telecommunications engineers around the clock in any weather. With IP-rated water and dust resistance, long lasting battery power, legacy ports, high-speed Ethernet and 5G connectivity, it's the ideal companion for technicians on the move. **Absolute** enhances productivity with a seamless VPN experience

that provides fast, secure access to business-critical applications, enabling technicians to achieve a faster mean time to resolution (MTTR). In cases of limited connectivity, Absolute can utilise intelligent routing and prioritisation to ensure your most important applications and services receive the bandwidth they need for optimal performance.

The added value of a TOUGHBOOK is not only in their ruggedness, but also the serial access ports inside are very important. TOUGHBOOK has all the necessary software to facilitate field engineers in their work.

Christopher Kyndt

Operations Director Energy
Circet

Absolute Secure Access just makes that whole experience for the IT side of things much smoother, because the tunnel allows that management and communication that otherwise wasn't possible with the solutions we had before.

Jake Fraser

IT and Operations Director
Four Communications Group



Facilities Management

Whether it's commercial real estate, industrial complexes, or residential high-rises, facilities management teams face a range of technological challenges.

Installing, servicing, and repairing everything from elevators and air conditioning systems to EV charging points and security systems means connecting to a wide range of new and legacy interfaces to diagnose and resolve issues. Additionally, when working in basements, outbuildings, and other remote areas where Wi-Fi networks and 4G/5G signal is unreliable,

connecting to cloud applications and external systems becomes a significant challenge. But even when technicians can get online, each new device that connects with a building's network has the potential to become a security vulnerability by increasing the attack surface for hackers and malevolent actors.

TOUGHBOOK + **ABSOLUTE™**

With its modular, customisable design, **TOUGHBOOK** enables service technicians to adapt its physical connectivity to every scenario. Supported by 5G standalone capability, independent high-speed Ethernet ports, and Panasonic's strategically positioned proprietary antenna, **TOUGHBOOK** delivers reliable and secure connectivity, even when moving between networks.

The **Absolute** cyber resilience platform builds on the powerful connectivity of **TOUGHBOOK** to deliver endpoint-to-network access security coverage, ensure automated security compliance, and enable operational continuity. With security and remote management software integrated at the firmware level, this secure access solution is purpose-built to keep mobile workers productive, wherever they are.

We choose Panasonic devices with integrated GPS, a double camera and numerous other options as they allow us to meet the changing needs of our customers and offer them a lasting solution.

Christophe Durr

Product Manager

GAZOMAT™

Absolute Secure Access is characterized by a very high degree of product maturity in this market segment—and that is very important for quality-conscious, professional users. For us, Absolute Secure Access is currently the best solution on the market.

Björn Wolf

Head of ICT

Unity



Railroad and Airport Services

Servicing the vast range of vehicles and equipment found across railway lines, and airport ground operations, and other transport operations means working in all kinds of weather and temperatures.

As well as this, the accumulation of dust and dirt, along with high levels of vibration encountered when servicing vehicles and moving machinery call for devices that are far more durable than commercial laptops and tablets.

Another challenge facing technicians is the legacy technologies still in operation across these networks. While innovation is rapid, there is still decades old equipment working in tandem with newer, smarter technologies. This requirement to connect with

multi-generational technology calls for high adaptability from any mobile devices used by field service technicians.

And finally, when it comes to security, the critical role that these transport networks play make them high-value targets for cyber-attacks and data theft. So, similarly to utilities and telecommunications, any devices connecting to the IT networks need to ensure that they don't expose the wider systems and organisations to any risks.

TOUGHBOOK + **ABSOLUTE™**

Tested to MIL-810-STD drop and vibration resistance, and with IP-rated dust and water resistance, **TOUGHBOOK** devices are the ideal technology partner for transport services.

Built to withstand the bumps and dirt of sustained outdoor use, the long-lasting battery and adaptable, modular connectivity allow field teams to work long, uninterrupted shifts across a range of equipment and machinery.

When **TOUGHBOOK** is combined with the security and connectivity enhancements of **Absolute**, technicians can achieve improvements in operational efficiency, data protection, and device management. With seamless access to secure systems, applications, and data in the field, **Absolute** empowers technicians to be more productive, while effortless device management makes it easier for IT teams to update, monitor and troubleshoot devices remotely.

We were looking for a rugged product, capable of performing reliably under all conditions. This is because our staff works outside and, although the device is installed in a vehicle, it is still exposed to widely fluctuating temperatures which at Bologna can range from -10°C on a snowy night to +40°C under hot August sunshine.

Roberto Raciti

Terminal Operations Engineering Manager
Bologna Marconi Airport (SAB SpA)

The IT department has received zero trouble tickets related to application crashes or connectivity issues. Absolute Secure Access solved our problems.

Fraport Spokesperson



Situational Challenges



Why TOUGHBOOK + Absolute?



Connectivity

Whether it's connecting to the energy grid from the top of a power mast or performing maintenance on underground infrastructure, field services engineers require reliable connectivity – often in remote locations.

TOUGHBOOK has unique proprietary antennas and high-speed Ethernet and 5G standalone modules, with pass-through antenna capabilities on docks. When paired with Absolute Secure Access, technicians get secure, uncompromised access to applications they need in the field.



Processing Power

Running vehicle diagnostics, analysing survey data, and accessing complex building schematics in the field often involves the use of multiple demanding applications, sharing data with other services and systems, and long shifts.

TOUGHBOOK combines Intel® Core™ processors and Windows 11 Pro with Absolute Secure Access to enable seamless integration with secure systems, while long-life batteries and in-vehicle charging docks support engineers for longer in the field.



Usability and Adaptability

Field services teams need devices they can easily carry, use while wearing gloves, use to visualise and interact with data, and physically connect to a wide range of legacy ports, vehicles, machinery, and more.

TOUGHBOOK boosts field productivity with customisable interfaces, large glove-enabled touchscreens, detachable keyboards and more, while remote device optimisation from Absolute further improves the user experience.



Harsh and Remote Environments

From the physical hazards and weather extremes of outdoor work to working in remote locations, field services take technology some of the most unforgiving environments where accidental damage and loss are common risks.

TOUGHBOOK devices withstand temperatures ranging from -29°C to +63°C, have IP-rated dust and water resistance, and MIL-STD-810H vibration, shock, and drop resistance, while Absolute GPS location can pinpoint missing devices to within three feet. Even in the most remote locations, Secure Access gives the ability to dynamically enforce policies for devices no matter where they are.



Security

Data being transferred from critical infrastructure sites is often commercially sensitive, requiring the protection of data in transit and at rest, while any missing devices can pose a wider operational threat to all parties.

TOUGHBOOK includes the latest stable chipset from Intel vPro and Secured Core PC technologies, while real-time threat intelligence, undeletable security software, and remote-wipe capabilities from Absolute provide additional protection, while securing critical data utilising Secure Access.

TOUGHBOOK + **/ABSOLUTE™**

Panasonic TOUGHBOOK and Absolute Security have enjoyed a long and successful partnership. All TOUGHBOOK devices are built with Absolute embedded in the firmware, making it possible to activate security measures both on new and legacy devices. With self-healing applications and undeletable security, Absolute makes it simpler and easier to recover and restore devices after accidental loss or theft.

The combination of TOUGHBOOK devices and Absolute Security software addresses the physical and digital challenges of field service by providing unmatched durability, cutting edge security features, and seamless remote management capabilities.

**MIL-STD-810H impact resistance
and long-lasting battery**

**IP65 dust and water rating and
-29°C to +63°C operating range**

Sunlight viewable, glove-enabled touchscreen

Modular design, detachable keyboard, and accessories

5G/Wi-Fi/Ethernet connectivity and proprietary antenna

Windows 11 Pro and Intel® Core™ processors

Uninterrupted connectivity for always-on connection

Enhanced security and Zero-Trust network access

**Undeleteable security technology
and self-healing applications**

**Digital experience monitoring
and application optimisation**

**Device recovery and NIST Level
secure data-wipe**

**Unprecedented visibility and
remote device management**



TOUGHBOOK

+

ABSOLUTE™

Absolute Secure Access

offers a comprehensive suite of features designed to enhance the connectivity and security of your Panasonic TOUGHBOOK devices. By securing data with end-to-end encryption and optimising network performance with application prioritisation, you can significantly improve in operational efficiency, data protection and device management.

Absolute Secure Endpoint

is a multi-layered security solution designed to protect your critical data and devices, no matter where your operations take you. Providing real-time security insights and the ability to enforce policies remotely, it identifies and mitigates risks proactively with comprehensive reporting and analytics, ensuring compliance.

TOUGHBOOK

+

ABSOLUTE™

Reliable Connectivity to Business-Critical Applications in the Field

TOUGHBOOK + Absolute is the ultimate technology team-up for field services looking for the perfect balance between ruggedness, operability, security, and management.

As well as standing up to the environmental challenges that come with industrial and outdoor use, TOUGHBOOK devices are easy to use, allowing users to flawlessly navigate the touchscreen applications, while wearing gloves in any weather condition, at any location.

The combination of TOUGHBOOK devices and Absolute Security offer the multi-layer security, remote device management, and secure access to data to field teams wherever they are.

To learn more about how TOUGHBOOK + Absolute provide reliable connectivity to business-critical applications in the field, talk to our experts today.