XPLORE™

RUGGED TABLETS
Feature Checklist
for Public Safety and Emergency Response Workers

This checklist outlines rugged mobile computing features commonly required by the Public Safety sector – namely Law Enforcement, Fire and Rescue, and EMS. Evaluating the necessity of each capability for your organization's workflows and your workers' daily flow is a critical first step as you research different rugged tablet PC options for your department's specific applications.

☑ Device Reliability to Minimize Downtime and Danger

Device shutdowns, frequent application reloads, delayed data delivery, and other hardware-related downtime in the field can be highly dangerous in a first responder situation. To ensure reliability, a response-ready mobile PC should include the following features:

☑ Proven Durability with a Fully Rugged Rating

Only MIL-STD-810G certified rugged tablets can consistently power mission-critical data applications despite harsh operating conditions, including in-vehicle vibration and shock, extreme temperature variances, high humidity, and frequent drops, bumps and spills that commonly occur during emergency response. While an IP65 or higher rating offers ideal protection against water and dust damage, fire operations may require the truly impervious protection of an IP67 device.

☑ Solid State Drives (SSDs) and Limited Moving Parts

SSDs do not use moving parts like traditional hard drives, and better protect against data loss if dropped.

☑ Performance Power to Ensure Speed

The processor, memory, and storage should be robust enough to run necessary applications and store data without slowing down in the field.

☑ Field-Replaceable Parts

In case of accidental damage, a device with field repairable capabilities lets workers change out parts quickly while on the job. Hot swappable batteries also prevent downtime, as they let users switch out a battery without having to turn off the device.

☑ Device and Data Protection in Hazardous Locations

Safety always comes first. That means that the mobile PC you choose for use in potentially explosive environments, whether the scene of a car accident or a building fire, must be designed with intrinsic safety techniques that make it suitable for use in Hazardous Locations. For many fire and rescue departments, choosing a C1D2/C1Z2 or ATEX-compliant rugged tablet designed with intrinsic safety measures is mandatory.

Sunlight Readable Display for All Conditions

Public Safety work requires personnel to be able to read data under a variety of lighting conditions. An excellent sunlight readable display with ambient light sensor is crucial to ensure accurate reading of information, even in direct sunlight. A large display size and robust graphics card is also useful for viewing maps, charts, and other detailed visual data.

Integrated Scanning Capabilities

Public Safety officials increasingly rely on scanners to quickly retrieve information about patients, drivers, and vehicles, and make more informed, real-time decisions on best next steps. Determine if your crews need an integrated barcode scanner, barcode capable camera, or RFID scanner, and select a rugged tablet that includes these tools as built-in features.

Fast and Accurate Data Input Methods

The mobility that is required of Public Safety work makes a tablet with optional pen input a viable option; the handheld nature of a rugged tablet allows for data input without having to set the device down. Personnel can capture accurate situational data using menu-based applications. Capturing data without a keyboard is easy with improvements Touch/Glove Touch capabilities and handwriting recognition technologies.

Continuous Wired and Wireless Connectivity

Public Safety requires constant transmittal of information in emergency situations, as well as highly coordinated real-time communication between dispatch and geographically dispersed teams. Aside from Wi-Fi® and Ethernet capabilities to enable local connectivity, first responders also require highly reliable wireless "anywhere connectivity" that enables uninterrupted data and voice communications from any location. Rugged tablets that can easily transition between 3G and 4G LTE networks are best.

Bluetooth and IP Connections

Mobile device users often rely on Bluetooth® and IP technology to connect with key equipment (i.e. body cameras, defibrillators, or RFID readers) and immediately/automatically transmit captured data into a central database for further use. Most mobile devices come standard with Bluetooth® and IP connectivity, but ensure the capability is there if you need to wirelessly connect to external equipment.

Simple Decontamination (EMS)

Equipment used by emergency medical response teams will often become contaminated on the job, and it must be sterilized with harsh chemical agents. A MIL-STD-810G rugged tablet with an IP65 or IP67 rating will be extremely resistant to liquids and corrosion and can usually be hosed down or subjected to a number of cleaning agents without incident. Check with the manufacturer to determine which cleaning chemicals a device can withstand.

Mobile Data and Mobile Device Security

Due to the sensitivity of information shared via Public Safety databases, several internal and external security measures are often necessary. Rugged tablets offer both standard and optional features that support VPN access, multi-layer authentication, fingerprint readers, Common Access Card (CAC) readers, TPM, and Kensington physical locks.

Long-Term Software Compatibility

Public Safety operations need mobile-focused software. Contextual apps that support records and reporting, CAD, criminal data lookup, and citation management, to name a few critical workflows, require an enriched end-user experience that rugged tablets are specifically designed to deliver. Capacitive and resistive (glove) touch screens, expansive storage capacity, and flexibility in RAM and I/O configurations are critical. So is the availability of both Windows® and Android™ OS rugged tablets with otherwise identical feature sets capable of supporting immediate and future software upgrades.

Secure Mobile Docking with the Right I/O

Vehicles maintain a central role in Public Safety and Emergency Response, and the practicality of a rugged tablet doesn't stop at the PC. Choose a solution that comes with highly customizable, non-fixed vehicle docking options. Personnel should be able to undock the devices quickly under urgent circumstances for use in the field, as every second counts in a first response situation. The docks should also extend the connectivity of a device with multiple I/O options so it can interface with equipment like alarms, medical equipment, and more.

Integrated GPS for Navigation

Dispatch and routing accuracy are mission-essential; so is a rugged tablet with a reliable and integrated GPS solution. The GPS must deliver a fast acquisition time from boot-up, and it should be highly accurate to ensure correct directions during emergency circumstances, even in adverse conditions like dense urban areas.