



CASE STUDY

Digitalisation in Czech Ambulances

Client: Medical Rescue Service of the Hradec Králové Region

Location: Czech Republic

Product(s) supplied: **TOUGHBOOK G2 mk2 Standard**

TOUGHBOOK G2 mk2 Quick Release SSD

Already the seventh regional medical rescue service in the Czech Republic uses durable Panasonic TOUGHBOOK laptops for work in the field. The device, which is resistant to shocks, moisture, dust and falling to the ground, was recently started by the Medical Rescue Service of the Hradec Králové Region (ZZS KHK). Since this year, its crews have been equipped with 45 of the Panasonic Toughbook G2 tablets with rugged keyboards, which is a device specially adapted for the work of rescuers.

The supply for the Hradec Králové regional rescue service was provided by the company Medsol, which is the preferred representative of Panasonic in the field of medical devices. Medsol provides special software for synchronizing patient data with information from databases of medical facilities. It ensures not only the presentation of Toughbooks and their sale, but also subsequent service and technical support.

"In recent years, we have supplied TOUGHBOOKS to medical rescue services in the Pilsen Region, South Bohemia Region, Ústí nad Labem Region and South Moravian Region, and partly also in the Liberec Region and Karlovy Vary Region."

Jan Příbyl
IT specialist
Medsol



Paramedics are in constant contact with the hospital

TOUGHBOOK devices are used by ZZS KHK not only in ambulances, but also in helicopters operated by DSA for the Hradec Králové ambulance. The advantage of this solution is not only the increased durability of the device, but also excellent connectivity, which is important for sharing data about the patient with medical personnel in the hospital to which the emergency service is headed.

"Our devices are used by emergency services around the world because their connectivity is second to none. We are the only laptop manufacturer that designs and manufactures its own antennas and tests their limits in its own anechoic chamber"

Jacek Wielgus

Key Account Manager for Central and Eastern Europe
Panasonic TOUGHBOOK

Integrated Smart card and HF-RFID reader for secure log in

With connectivity via LAN, Bluetooth, 4G/5G and GPS, the emergency team can communicate, access critical incident data and share critical patient information with other components of the emergency system and possibly the pre-arrival hospital, all during transport. The TOUGHBOOK thus saves the time needed to save human lives. The durability of these notebooks is tested according to military and IP standards, so they can withstand intensive use 24 hours a day, seven days a week in demanding environments. The Toughbook has an integrated e-ID/Smart card and HF-RFID (NFC) reader so the user can securely log in and access sensitive digital patient records without the need for tokens or other authentication devices.





It allows you to work anywhere and in any weather

The hardened anti-reflective touchscreen allows the Toughbook to be used indoors and outdoors regardless of the weather. The extended battery life guarantees to keep the device in standby mode for up to 24 hours and thus handle several shifts of rescue teams in a row. Each piece of equipment is also tested for the use of disinfectants and cleaning solutions, so first responders can safely disinfect it. The accessory ecosystem also includes wipeable silicone straps, as well as special port covers and screw cavity covers that prevent dirt build-up and allow for easy cleaning. The Toughbook's equipment also includes various adjustable holders for emergency vehicles or helicopters.

With the latest Windows operating system all users are ready and secured for future applications. Panasonic Connect manufactures virtually all of the Toughbook's critical components in-house and controls the entire device manufacturing process, making the Toughbook the most reliable product on the market with the lowest error rate in its segment. In addition, the user does not have to worry about the compatibility of the purchased device with newer or older components

"Our solutions are ready for both future updates and backward compatibility with legacy systems."

Jacek Wielgus

Key Account Manager for Central and Eastern Europe
Panasonic TOUGHBOOK

A competitive solution has failed

ZZS KHK is not using Toughbooks for the first time, it already used the previous generation, which it deployed eight years ago. The rescue service was able to keep a number of components from the first generation G1, as they are also compatible with the new version. Now these laptops are used by 33 ZZS KHK crews and 35 devices are in the field every day, while dozens more are in reserve or are being updated.

"After that, probably because of the lower price, we switched to another solution, but it turned out to be completely unusable for us, because the touch screens of the laptops were coming off, the devices could not be cleaned sufficiently and their failure rate was significantly higher. That's why we went back to Panasonic when the new generation Toughbook FZ-G2 was produced."

Anatolij Truhlář

Medical deputy
Emergency Department KHK