Getac

Rugged Mobile Computing Solutions



UTILITIES

From two people to one: digital network monitoring from urban areas to alpine terrain.

Getac F110 tablets boost efficiency and documentation quality in the network service department of Swiss engineering firm K. Lienhard AG.

For over 65 years, K. Lienhard AG has been serving utility companies throughout Switzerland from its five sights – from planning and geoinformation systems to network services. These include gas leak investigations and valve inspections, which Lienhard carries out on behalf of numerous network operators. When it comes to measurement and location technology, the company relies on solutions from Sewerin GmbH, for whom it has been the Swiss general agent for almost 50 years.

/ Challenge /

Network operators are obliged to have their gas pipeline networks checked periodically for leaks. Lienhard's leak detection specialists cover hundreds of kilometres of pipeline network each season: from urban areas to alpine terrain, where uneven ground, steep gradients, wet conditions, direct sunlight and long walks are part of everyday life. Previously, each assignment required two people with a paper map and a gas detector, and documentation was carried out by hand. There was a need for robust, hands-free devices that combined navigation, measurement and comprehensive logging in a single unit.

/ Solution /

Following an extensive market review, Lienhard found the ideal platform in the Getac F110 tablets: rugged, reliable and cost-effective. The F110 runs the Sewerin documentation system SeCuRi® SAT and controls the EX-TEC® HS 680 combined gas detector, supplemented by a Bluetooth-connected RTK GPS receiver for precise positioning. The integrated WAN module provides the GPS correction signal, enables remote maintenance and downloads the latest data directly in the field. Lienhard has been using the Getac F110 tablets since 2020; since 2026, they are using the new generation of the series.

/ Advantages /

Thanks to digital documentation, gas leak inspections now require half the number of resources: a single specialist replaces the previous two-person team: a saving from which their clients also benefit. GPS tracking, measurement data and photos provide highly accurate, traceable documentation for network operators and the inspectorate. Remote support instead of hours-long return journeys, hot-swap batteries for long working days and six years without a single device failure ensure smooth operations and low running costs.

/ K. Lienhard AG /

"Getac tablets play a key role in our surveys, yet they are never the focus of attention because they simply work. In six years, the problem has never been with the Getac hardware, so when difficulties arise, we can focus directly on other factors."

André Keller - Head of Business Administration at K. Lienhard AG.



Getac F110
Fully Rugged Tablet

/ Challenge /

Hundreds of kilometres of pipeline network – fully documented

The Network Services division of K. Lienhard AG carries out the legally required gas leak detection for six to ten network operators each year. The projects last from weeks to months, with two to three detection specialists working in parallel. The work can only be carried out on dry ground from late spring through to autumn; during this period, the equipment is in continuous use. The terrain ranges from urban streets – some of which are surveyed slowly by vehicle – to alpine pipeline routes in the Swiss canton of Valais, some of which lead up steep, rugged embankments. In that area alone, the pipeline network spans several hundred kilometres, the majority of which is surveyed on foot. The device must be hands-free, able to withstand shocks, moisture and direct sunlight, and last a full working day.

Before digitalisation, gas leak detection was a time-consuming and labour-intensive process: one person operated the gas detector, whilst a second guided them through the network using a paper map and marked the sections already checked with a pen. In addition to gas leak detection, the network service also carries out valve and gate valve inspections for utility companies and a well-known Swiss railway company. In addition, staff have to climb into pipes where the equipment is exposed to impacts and moisture. In both areas of operation, clients and supervisory authorities expect precise documentation of the inspections and the work carried out.

/ Solution /

Getac F110 as a platform for measurement technology, GPS and documentation

During the search for a suitable device, it quickly became clear that consumer and semi-rugged tablets met neither the interface nor the robustness requirements; laptops tie up the hands; and other rugged solutions were not cost effective.

Through Getac Platinum Partner ET Schweiz, Lienhard was introduced to the Getac F110 in 2020, becoming a pioneer in an industry where many were still using paper plans whilst on the move.

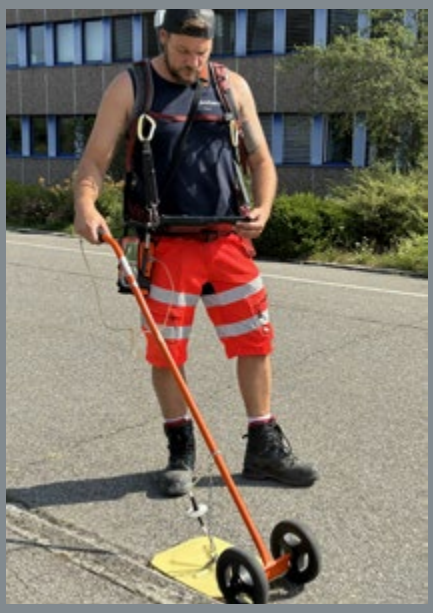
In the field, the F110 is attached to the backpack straps using carabiners; inside the backpack is the RTK GPS receiver, which is connected to the tablet via Bluetooth and achieves a high degree of accuracy through the correction signal. The SeCuRi® SAT documentation system runs on the tablet, whilst the EX-TEC® HS 680 gas combination analyser from Sewerin provides the measurement data. Every five seconds, the system records a GPS point; leak locations are logged with concentration, position and a photograph, and reported immediately to the network operator if critical values are detected. During valve inspections, the internal GPS navigates to the manhole, whilst the camera provides the photographs for the electronic condition report.
The integrated WAN module is essential for Lienhard and is an example of the high level of connectivity offered by Getac devices: it provides the GPS signal, enables remote support directly on the device, downloads updated network data and ensures the tablets remain compliant with the company network's security standards. Two hot-swap batteries allow the battery to be changed without restarting the device, whilst the display remains perfectly legible even in bright sunlight. When Microsoft was no longer able to provide Windows updates for the F110 G4, Lienhard replaced them with the new-generation F110 G7. However, as the hardware of the F110 G4 devices was still functioning perfectly, a number of tablets were promptly and successfully converted to Linux on a trial basis. As a result, the old G4 series remains available for parallel operation or as a backup for the peak season. In this way, Lienhard extends the useful life of his investment whilst further reducing the total cost of ownership (TCO).

/ Advantages /

Half the staff required, full audit trail, no downtime

"The most tangible benefit of the Getac devices is efficiency: where two people used to be out on the road, one is now sufficient," says André Keller, Head of Business Administration at K. Lienhard AG. The tracking specialist has the plan in front of him, can see where he has already been, and concentrates on taking measurements. As the second person was often provided by the client, the network operators also save money. At the same time, the documentation becomes more comprehensive: route records, concentration values and photographic evidence provide a complete record of which sections were inspected and which leaks were identified. This means that Lienhard meets the regulatory requirements and, in the event of a complaint, has a very accurate set of data to draw upon; an important consideration for both contractors and clients alike.

The WAN module reduces downtime and travel: instead of driving three to four hours back from Valais to the company's headquarters, staff receive support and up-to-date data directly in the field. The work can be distributed more flexibly amongst several location specialists. "*No equipment failures in six years; despite stones hitting the devices, them being dropped and exposure to wet conditions: we've never had to make a warranty claim, and batteries and accessories are still available even after all these years*", says Adrian Matter, the systems manager. These are supplied promptly by ET Switzerland when required. *The fact that the old units are still in use further reduces the total cost of ownership. These costs have been significantly reduced*, adds Keller; the decision to opt for the new generation of the F110 was therefore an easy one.





Copyright © 2026 Getac Technology Corporation and/or any of its affiliates. All Rights Reserved. V05M11Y26WW