



TESTIMONIAL

Utility

Rugged Technology Ramps Up District Heating Systems



Vantaa Energia, established in 1910, is a full-service energy company for private and public entities. Its main products include electricity, district heating and natural gas. According to the company, district heating is a reliable, cost-effective and convenient heating method, since the equipment used does not need frequent maintenance. It's also very safe to reside in a building that is connected to a district heating system. Systematic anticipation of possible faults and failures increases the security and reliability of the system. Therefore, the majority of inhabitants in Vantaa, the 4th largest city of Finland, depend on district heating. The length of the district heating system

in Vantaa already exceeds 410 km. The supervisor, Matti Sundholm, and his team, are responsible for connecting new buildings to the district heating distribution network and also for the maintenance of the existing network. They outsource to contractor companies for welding and fastening pipes.

When the supervisor is informed of a leaking pipe or other maintenance work is required, the response time is immediate. Prior to the introduction of a mobile computing system, the maintenance team's supervisor searched for maps and more detailed drawings of the targeted problem from a micro film and printed the documents for the service staff at the office. This involved voluminous, cumbersome, time-consuming paperwork and unnecessary trips back and forth to the office to collect the information. When Xplore's iX104C2 Tablet PC was deployed, the same database including the maps and plans for buildings was stored on the computer and the information became available anywhere, at any time. In addition to the district heating pipes, the drawings also have details of electrical & sewage pipes and phone lines. It is essential for the crew to be cognizant of all the pipes and lines in the area before starting ground excavation to ensure that these utilities are not damaged. Using the drawings, the rugged Tablet PC allows the service staff to identify the closest spot where the specific part of the network under repair can be temporarily closed in order to safely begin the maintenance work. Additionally, locations of maintenance rooms in the buildings and their entrances are shown in the system to ensure quick and easy access. The iX104C2 Tablet PC is equipped with a snap-on GPS module, which facilitates navigation to the targeted location. Additionally, the vehicles are equipped with a mobile thermal sensor indicating the exact location of a broken pipe. Often the right spot is easy to perceive from steam in the air!



"Readability of display in varying conditions – in the vehicle and also outdoors – is extremely important for us", states Matti Sundholm. This was a crucial factor in the company's choice of the Xplore iX104C2 with hi-brite indoor/outdoor readable AllVue technology display. "The iX104C2 rugged Tablet PC with the accurate stylus is also easy to use in the field. The computer size is ideal. It's compact and suitable for mobile use, but the display is not too small to read the drawings. At the office, we update the database daily on the tablet simply by connecting it to our network through the LAN port. We occasionally connect a USB keyboard to the tablet as a secondary input device", Sundholm continues.



"We could add the contact details of the service staff and house managers to the system on the Tablet PC, so that it would be easy to reach them whenever needed". Sundholm plans even more versatile use for the iX104C2 Tablet PC for the future. Acquiring a printer for the vehicle is also under consideration. This would enable paper copies of drawings and plans for buildings to be generated from the computer. The iX104C2 Tablet PC can also be connected to the broadest wireless city network (Wivanet) in the Nordic countries with the integrated wLAN card standard in the system. Thus, the database on the Tablet PC could be updated remotely. Local service and support is also appreciated by the customer. "In addition, we've been very satisfied with the service from Xplore and their distributor Axel Group", Sundholm concludes.