

# Outdoor-Ready, Versatile Handhelds Streamline the Work Process for Utilities

As in many industries, utility field work has always been dependent on paperwork in the field and communicating back with a central office. It's very task-oriented work that requires documenting various steps and transmitting information back and forth. Rugged handhelds are improving the way utility field workers do those jobs today. In many deployments, they eliminate paperwork, cut down on data-entry errors and allow instant, wireless transmission of schedules, meter readings and other information. Combining a rugged handheld with specialized utility and field service software brings the ability for customized tasks, guiding utility workers logically through their day.

There are many obvious drawbacks to relying on processes that require multiple trips to the home office, the most obvious being inefficiency. And paper-based record-keeping with manual data entry always has the enormous potential for errors, or duplicating work by writing down information in the field only to require someone else to input it in the computer system back at the office. With increased labor and fuel costs, smart utilities are searching for effective ways to increase overall efficiency in the field. Some sample ways these rugged outdoor computers have been used by utilities:

## Field service

Using a handheld with advanced communication capabilities allows workers to communicate up-to-the-minute with the home office. No need for showing up at a house only to find that they called to reschedule the appointment.

And that's just one type of task. Utility workers can use specialized software that runs on a handheld's Windows Mobile operating system to accomplish any number of tasks. Specialized utility-focused software allows up-to-the-minute service or work order information to be transferred between the office and the field. It features on-screen, paperless work orders in a survey format that intelligently prompts field workers to answer questions specific to each job. Once the work order is complete, the information is transmitted back to the office.

Advantages of the process are eliminating paper and not having to hand-enter most of the information. That reduces data-entry errors, lost orders and paper handling. It also increases the number of work orders you can complete in a day. Beyond that, it cuts down trips to the office, which is a big plus as fuel costs rise. With a wireless mobile handheld, it's conceivable that a field worker could receive the day's work orders, complete all the work and transmit all the information back to the central office without ever having to actually go there.

## Meter installations and replacements

Electric and water utilities typically change out their meters when they've reached the end of their useful lives. When they send a worker out to make the replacement, a handheld can greatly expedite the process. An office-based dispatcher sends appointment information directly to the field via the handheld-address, task and other details. Upon arriving at the job, the worker verifies the meter's location using the handheld's built-in GPS to pin down the coordinates. Then it's time to swap the units. A built-in bar-code scanner on the handheld lets the worker quickly scan the old unit and then the new one. Once the new meter is installed, the worker uses the handheld's digital camera to snap a date-stamped photo of the new installation. All the information from the procedure is then transmitted wirelessly and instantly from the handheld back to a central-office mainframe.



### Challenge

Utility field work that relies on paperwork and then manual data entry in the office faces an enormous potential for, data-entry errors, lost orders and inefficiency.

### Solution

Using a handheld with advanced communication capabilities allows workers to communicate in real time with the home office and directly transmit collected data without even leaving the field.

### Result

A versatile field rugged handheld, such as the Nautiz X5 or Nautiz X7, brings the ability for customized tasks which increases the number of work orders completed in a day. With fewer errors and lower travel costs the work process can be streamlined and efficiency goes up.



Handheld is a world wide supplier of rugged PDAs and handheld computers. All our products are ruggedized and can withstand water, dust, drops and vast temperature changes. Handheld and its partners deliver complete mobility solutions to businesses in industries such as logistics, forestry, public transportation, construction, military and security.

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## The key is choosing the right device

Having the right handheld is the key to streamlining the work process. And that comes down to two main factors — ruggedness and versatility.

The technology tools available to help utilities save time and money are wide-ranging and impressive. Two such products would be the Handheld Nautiz X5 and the Nautiz X7. With these WWAN-equipped rugged devices, a field worker can wirelessly receive and send information even in rural areas. Both units come with a full VGA color screen, 806 MHZ processor and integrated Bluetooth, WLAN and a digital color camera. You can add features like GPS and a laser scanner depending on the configuration, making them an ideal tool for meter change-outs. As utilities upgrade and change out meters to include automatic meter reading, handhelds can obtain readings instantly and automatically using proximity technology that's good within 200 yards of any meter with an AMR radio transmitter.

All this technological progress can make life a lot easier for field workers these days. Efficiency goes up; errors and travel costs come down.



For more information about the Nautiz X5 and the Nautiz X7, visit [www.nautiz.com](http://www.nautiz.com) or [www.handheldgroup.com](http://www.handheldgroup.com)

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