

HI-TECH C® Compilers Help Locate Power Outages in CHK GridSense's LineTrackers

With over 15 years experience in the power industry and a prominent international presence, GridSense Systems Inc. (operating as CHK GridSense in the Australian and New Zealand markets) has been helping power utilities to more cost-effectively manage the power and reliability ("PQR") of their transmission and distribution grids.

Additional information about GridSense and their Power Quality Instrumentation solutions can be found at www.gridsense.net.

For the past 7 years, CHK GridSense has been using HI-TECH C compilers in the development of one of their main products, LineTrackers. This Distribution Fault indicator and Logger identifies the location and type of fault on overhead powerlines, allowing power utilities such as Energy Australia, ETSA, Ergon Energy and Country Energy to efficiently restore power after outages.

A network operator typically has thousands of kilometers of powerlines to monitor. Locating where a powerline is down or where a tree has fallen on the lines is often a difficult and time-consuming task. Therefore, power utilities can use LineTrackers to find the source of the problem quickly and minimize their customer's power outage. This is extremely important as utilities are regulated and measured, and occasionally penalised thousands of dollars for poor performance.

Working under such critical conditions, CHK GridSense sourced Microchip's PIC 16 series processors for its low power operation, and as complex patented algorithms needed to be implemented extremely efficiently, HI-TECH's PICC™ compiler was selected. "The PICC compiler is ANSI C and the code optimization allowed us to squeeze in more complex algorithms than thought possible," says Adam Goldsmith, Senior Firmware Engineer of CHK GridSense. "HI-TECH Software's PICC and PICC-18™ compilers are simple and well documented and support is excellent - the few times I've needed urgent assistance, HI-TECH has been able to help solve the problem within a day."

"As consumers' demand for superior power and competition from world-wide utility deregulation and privatization increases, we are continually improving our designs and HI-TECH Software's regular updates ensures that we are kept up to date with the latest technologies," states Mr. Goldsmith.