Wireless Mesh Networking Products for Machine Builders & OEMS are Designed to Make Machines Talk

Intelligent Distributed Controls (IDC) has introduced a range of ZigbeeTM-based wireless products, which enable machine builders and original equipment manufacturers (OEM) to integrate wireless networking into their own products.

IDC's family of products is designed around the ZB108 OEM module, which features a complete system- on- chip (SoC), comprising a high performance microprocessor with digital, analogue and serial connectivity. The wireless network is based on the licence free international standard IEEE 802.15.4 which provides 2.4GHz, two- way communications, and is capable of connecting hundreds of devices together in a mesh network using gateways, router and end devices (usually battery powered). The product range features the ZigBee stack, which leverages the advantages of continued main stream development and future compatibility with other manufacturer's equipment and products.

The IDC family of modules includes Ethernet and serial gateways, routers, logic and serial controllers, handheld keypads, key fobs with touch-screens, and analogue general purpose modules, which will be introduced shortly. All of the devices offer the benefit of being designed to operate in electrically noisy environments. They have embedded intelligence, unique 16 -digit identifiers, and offer the benefits of extremely low power consumption, internal position tracking algorithms, based on received signal strength, and many other features.

Supporting the wireless OEM products are IDC's complementary software application packages. These include "over-the- air" programming, data logging, remote control and position tracking. In addition, a function block logic configuration tool, based on IEC61499 distributed multiprocessor networking, is in development and due for release in 2009.

For machine builders and system designers who require wireless mesh networking IDC offers the ability to design bespoke hardware and software solutions based on existing designs, to reduce risk, cut the cost of development and time to market, and reduce certification costs. Importantly, IDC is not reliant on third- party software providers, with all hardware, application firmware, PC- based software and server applications designed in-house by IDC software engineers at the company's headquarters in Derby.
