

## **ZigBee Ethernet Gateway Provides Central Interface Co-ordinator for Network of ZigBee Wireless Mesh Devices.**

IDC is providing optimum interface capabilities for its ZigBee range of wireless mesh products, with the launch of its ZB104 Ethernet Gateway. Designed for use in logistics, warehouse distribution, manufacturing and medical sectors, the ZB104 is a dual function device, which acts as the central co-ordinator for a network of ZigBee devices; it also transfers data to and from the wireless network over Ethernet.

"The ZB104 opens up endless possibilities for local or remote communication with our ZigBee wireless mesh network products," said IDC MD Kevin Buckley. It uses standard 10/100 BaseT Ethernet, making it simple and flexible for integrators to achieve interface solutions across all networks. We are also providing wider connectivity options for manufacturing and automation with a new standard OPC Server interface. This allows industrial automation SCADA and DCS applications supporting OPC client connectivity to seamlessly integrate our ZB product range."

The ZB104 is the latest addition to IDC's family of ZigBee modules for cable-less wireless mesh networking. It features Power Over Ethernet (POE), or, alternatively, can be powered via an external 5vDC power supply. The device is housed in a robust IP45 rated enclosure, and is provided with a wall mounting bracket to allow easy installation.

The IDC family of ZigBee modules, of which the ZB104 is part, is designed around the ZB108 OEM module which features a complete System-on-Chip (SoC), combining a high performance microprocessor with digital, analogue and serial connectivity. In addition to the ZB104 and ZB108, the family includes serial and OPC gateways, routers, logic and serial controllers, handheld keypads, key fobs with touch-screens, and analogue general purpose modules soon to be introduced. All of these devices offer embedded intelligence, unique 16-digit identifiers, internal position tracking algorithms based on received signal strength, and consume very little power.

The ZigBee wireless network used by the modules 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 manufacturers' equipment and products.

IDC supports its ZigBee range of products with complementary software applications including "over-the-air" programming, data logging, remote control and position tracking. Importantly for users of the ZigBee range, IDC are not reliant on third-party software providers; hardware, application firmware, PC-based software and server applications are all designed in-house by IDC software engineers at the company's headquarters in Derby.

IDC Ltd

Intelligent Distributed Controls (IDC Ltd) is based in Derby. The company has a highly skilled team of dedicated hardware and software design, development and application engineers. These personnel have specialist application knowledge of control systems applied to logistics, warehouse distribution and manufacturing. This applications experience has IDC enabled to develop key skills in real time control, RFID and wireless technology, and to develop niche products for these industries and related OEMs. IDC's customer base includes Toyota, Toys R Us, ASDA George, Smiths Aerospace, Astra Zeneca and Vestas Wind Systems A/S