

New ZigBee Keypad Provides Wireless Mesh Networking for Operator Prompts in Manufacturing & Logistics Operations

IDC has launched a new addition to its ZigBee range of wireless mesh products for use in automation, manufacturing and logistical operations. The new ZB102 keypad is a programmable battery -powered wireless unit with keys that are easily customised to suit specific user applications. Typical applications for the ZB102 include operator prompts for manufacturing and logistic operations, remote control and position monitoring.

The ZB102 is a convenient handheld unit featuring a customisable keypad with up to 9 user- defined keys in a 3X3 matrix. It includes useful options, such as an optional built-in positional location engine, internal temperature and battery monitor, and can be programmed to wake up on event -driven basis, or at regular reporting intervals.

Designed for operation with IEEE 802.15.4 wireless access points & sensor networking, the ZB102 provides secure and robust two- way communications up to 100m between nodes, with routing over multiple nodes for larger networks and longer distances. Additional security and redundancy is provided with encryption and alternative routing of messages in the event of a single node failure.

In common with all of IDC's ZigBee products, the ZB102 is an extremely low power device that can remain dormant for long periods, and then "wake up" on an event- driven basis, or at pre-programmed intervals. The unit provides a True System on Chip Solution (SoC), integrating the latest industry- leading CC2420 RF Transceiver and the TI-ZigBee stack, one of the first to be certified for the ZigBee 2006 specification. This certification ensures that products developed on this platform will be fully interoperable with other platforms that have been ZigBee 2006 certified.

To support the development and integration of the ZB102, and all other ZigBee modules in its range, IDC has developed client server applications, which include the ZBServer for web services integration, "over the air" programming, data logging, and OPC connectivity for SCADA integration.

About IDC's ZigBee Range

The ZB102 is the latest element to be introduced to IDC's synergised ZB family of ZigBee modules. The modules include Ethernet and serial gateways, routers, micro- controller and handheld devices. They provide a comprehensive single source for complete wireless solutions, ranging from simple cable elimination to large- scale, site- wide telemetry systems in a distributed control system architecture.

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