WIRELESS TEMPERATURE MONITORING OF CRITICAL HEALTHCARE ASSETS PROVIDES EASY COMPLIANCE & FREES-UP ESSENTIAL PERSONNEL

IDC is providing safeguards for the secure temperature monitoring of critical healthcare assets, such as vaccines, drugs and blood, with the introduction of its ZB110 ZigBee wireless monitoring device. The ZB110 is an extremely low power device designed for installation in fridges and freezers at healthcare facilities. It can be programmed to activate automatically and report on event- driven occurrences, such as under/over temperatures, or at preset intervals, as part of a compliance assurance programme.

The ZB110 is a simple and low cost tool to help hospitals, clinics and surgeries improve the care and management or their refrigerated assets. It boosts patient care, by freeing-up key personnel from the task of manual monitoring and logging, and helps healthcare facilities to achieve easier compliance to all existing and future regulatory standards.

The key advantages that make the ZB110 ideal for critical healthcare monitoring are its low cost, and the power and flexibility of its communications. The ZigBee technology at the heart of the ZB110 is both simpler and cheaper than other WPANs such as Bluetooth, and it can be incorporated into small inexpensive chips that consume minimal power. As regards communications, ZigBee is a full- blown telemetry system in its own right, with the ability to provide wireless personal area networking (WPAN) i.e. digital radio connections between computers and related devices, such as sensors.

Importantly, ZigBee provides two-way communications between nodes; these nodes can relay each other's traffic, bypassing wired networks completely (a problem with other Wi-Fi networks). This feature offers significant benefits for the medical user. First, it provides remote monitoring and logging of temperature readings, on a centralised PC, at pre-arranged intervals – and allows the subsequent preparation of reports. Second, it sounds alarms, both locally and centrally, when temperatures go out of limit; here, IDC can program the ZigBee node to send a message as soon as it detects a temperature problem.

Third, it enables authorised (via a password) personnel to interrogate the ZB110 Zigbee node, remotely, to determine and, if necessary, change the temperatures at which the healthcare assets are stored. These changes are also logged and stored.

The ZB110 is one of a wide range of ZigBee wireless mesh products developed by IDC for medical applications. Providing true system- on- a- chip solutions, with the benefits of built-in positional engines, small size and extremely low power consumption, the ZigBee products provide a simple cable-less network for interactive paging, tracking of patients and assets, barcoding of assets, nurse station call and alarm systems, security tagging, temperature monitoring of critical healthcare assets, and emergency roll calls.

IDC supports its ZigBee medical range with complementary software applications, including "over- the- air" programming, data logging and remote control, in addition to temperature monitoring and positional tracking. IDC also offers the ability to design bespoke hardware and software solutions based on existing site architectures. Importantly for users of the ZigBee range, IDC are is 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.

About IDC

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 enabled IDC 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 (UK and Europe), Toys-R-Us (UK and

Europe), ASDA George, GE Aviation, Astra Zeneca and BAE Systems.

Editor Contact

DMA Europa Ltd. : Brett Davies

Tel: +44 (0)1299 405454
Fax: +44 (0)1299 403092
Web: www.dmaeuropa.com
Email: admin@dmaeuropa.com

Company Contact

IDC Ltd : Peter Hadley

Tel: +44 (0)1332 604030
Fax: +44 (0) 1332 604031
Web: www.zig-bee.co.uk
Email: sales@idc-limited.co.uk