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**GREENPEAK TECHNOLOGIES ANNOUNCES REVOLUTIONARY  
BATTERY-FREE WIRELESS COMMUNICATION TECHNOLOGY  
FOR SENSE AND CONTROL APPLICATIONS**

*TECHNOLOGY VENTURE TO DELIVER WIRELESS SENSOR SOLUTION  
REQUIRING NO CABLING FOR COMMUNICATIONS AND NO BATTERIES FOR POWER*

October 2, 2007 - Utrecht – The Netherlands – GreenPeak Technologies today announced a revolutionary new product portfolio for ultra-low-power wireless sense and control networks. The new company offers open standard, easy-to-install wireless communications devices for sensor applications that can operate without power cabling or a battery.

GreenPeak's new wireless communication devices leverage three key technologies that enable it to operate in a battery-free environment without cabling. The first is an ultra-low-power wireless transceiver and sensor interface design with efficient power-up and power-down modes that dramatically reduce power consumption. Second is an energy harvesting interface that enables the modules to utilize power provided by e.g. external solar, electromagnetic, and piezo-electric transducers. Third is a mesh technology that enables designers to create extended sensor networks without the need for battery-powered or cabled routing nodes. This innovative mesh technology is also self-forming and self-healing, making it easy and inexpensive to install.

"The strength of a truly wireless sensor network can only be fully utilized when the wiring for both the data communications and power cables can be eliminated," said Cees Links, CEO of GreenPeak Technologies. "GreenPeak is a company with a true battery-free vision that offers wireless communication solutions eliminating the need for both communication wiring and power cabling."

GreenPeak is initially offering its low-power communication technology as the 'Lime CM-08' module, a tiny 5 cm<sup>2</sup> (less than one square inch) electronic component that OEM customers can integrate into their products. The tiny module functions as a stand-alone communication system, integrating a transmitter/receiver, antenna, and low-power mesh network software on a single device. The module



also features a transmit power amplifier that delivers four times the transmission range of non-amplified products with less than 1% impact on energy consumption. The module's software can be configured to manage the power of different types of energy harvesting devices. OEMs can also add their own applications to the module, thereby eliminating the need for an external processor and lowering total system cost.

GreenPeak is also working on a chip solution that integrates all the functions of the current module, providing a full tool chain for OEM integration.

Many vendors provide energy harvesting solutions based on kinetic, electromechanical, or solar energy. But GreenPeak's wireless sensor modules and networks leverage these energy harvesting solutions for real world applications better than anyone else. GreenPeak devices can accommodate a variety of energy harvesting devices over a broad range, from the dripping energy of solar cells, to the energy bursts from piezo-electric torsion or electromagnetic fields. GreenPeak has developed on-board power management circuits that will monitor the state of the energy harvesters and take appropriate actions to optimize the available energy. This allows the GreenPeak devices to operate in a battery-free environment in a reliable way.

To facilitate the configuration of extended low-power sensor networks, GreenPeak has created a low-power, self-forming and self-healing mesh technology, which enables wireless devices to build a reliable and efficient communication chain. Each device in the GreenPeak network, utilizing GreenPeak's integrated mesh software, can act as a repeater for other wireless devices, thereby enabling the network to span larger distances. Unlike competitive mesh solutions, which require battery power or cabling for the main routing nodes, GreenPeak networks utilize smart power-up/power-down and synchronization techniques that enable all mesh nodes to operate in a low-power mode without a battery or power cabling.

GreenPeak is fully committed to development based on open industry standards. The GreenPeak technology is based on the IEEE 802.15.4 wireless network standard and supports the open global standards of the ZigBee Alliance.

GreenPeak's patented wireless sensor technology is being tested in a wide range of applications, including healthcare, safety/security and industrial automation. Honeywell, for example, is integrating



GreenPeak's technology in their gas detection systems to provide a reliable, ultra-low-power solution for applications such as underground parking lots. Kronos, a global provider of human capital management solutions, is utilizing GreenPeak technology in mobile applications they are offering to their partners.

### **Pricing**

The GreenPeak modules will be offered via a worldwide network of local distributors.

The suggested retail price for the GreenPeak Lime module (CM-08) is \$ 21 (volume 100K).

The suggested retail price for the Starter Kit is \$ 1,390 and \$ 6,950 for the Development Suite.

### **About GreenPeak**

Formed through the recent merger of Xanadu Wireless and Ubiwave, GreenPeak is a leader in battery-free communication technology for wireless sense and control applications. This revolutionary technology, based on the IEEE 802.15.4/ZigBee wireless networking standard, utilizes energy-harvesting to facilitate battery-free operation in a totally wireless environment, without the need for either communications or power connectivity. GreenPeak is based in Utrecht, The Netherlands and has offices in Zele, Belgium. GreenPeak is backed by venture capitalists: DJF Esprit (UK), GIMV (Belgium), Motorola Ventures (USA) and Allegro Investment Fund (Belgium).

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