

The Highlands - January 2008

In this issue ▶

[Letter from our CEO](#)

[Product overview](#)

[The Honeywell Green Case](#)

[New Tokyo sales office](#)

[Industry standards](#)

[Career and jobs](#)



Letter from our CEO

Welcome to the first issue of our newsletter. We hope you enjoy this edition.

Only a few months after the successful launch of our new company, GreenPeak, our vision of ultra low power sensor networks utilizing energy harvesting has been globally acknowledged by our customers, the press and industry analysts.

Our revolutionary technology uses energy harvesting to facilitate battery-free operation in a totally wireless environment, without the need for either communications or power connectivity. It is clear that this will be the third wave in the evolution of wireless technology, after the wireless voice revolution and the wireless broadband data.

The establishment of our new Japanese sales office is a key part of our global expansion plan and will enable us to provide focused and complete support for our valued Japanese customers and distributors. By opening our Tokyo office, we are signaling our strong commitment to the Japanese market.

Apart from building our global network of local offices and distributors, we continue to make considerable investments in resources and technology development to support our growth strategy.

Looking ahead, we are excited about our prospects in both the module and chip markets. It is clear that the market requires standard, ultra low power wireless sensor network solutions, and GreenPeak is the first to offer this technology as a battery-free solution with energy harvesting capability. We will continue to lead the way as a technology and standards innovator, with a near-term goal of establishing ourselves as the market leader. With our technological expertise and our dedicated team of professionals, I believe we are uniquely positioned to meet this challenge.

I would like to thank our customers for their support and our staff for their superb effort in ensuring excellent development and quality engineering.

I welcome your views on how we can continue to evolve as a market leader and I invite you to share your thoughts with us. Thanks for your time.

Cees Links

Chief Executive Officer, GreenPeak Technologies



GreenPeak Product Overview

GreenPeak Technologies provides best-in-class **wireless** and **battery-free** solutions for sensing and control networks requiring **high reliability** and **standards compliance**.

GreenPeak's wireless sensor technology can be readily utilized in a wide variety of applications requiring ultra low power consumption, high reliability and high performance. These applications span a broad range of industries, including building automation, health care, safety & security and asset management.

GreenPeak's product portfolio features tiny, low power communications modules and chips for mesh networks, integrated software, tools for seamless integration, starter kits and development kits.



GreenPeak "Lime" CM-08 Module

Small size, high performance "System-in-Package" wireless module.

- ▶ Wireless module with power amplifier delivers 3x the range of comparable products
- ▶ Chip antenna integrated on module Also supports external antenna
- ▶ Ultra low power ideal for end nodes and routers (up to 20 years)
- ▶ Tiny SMD mountable footprint Less than 1 square inch (5 cm²)
- ▶ Designed for low cost applications
- ▶ Easy integration with host application
- ▶ ETSI, ARIB and FCC approval
- ▶ IEEE 802.15.4 compliant
- ▶ Designed for ZigBee
- ▶ Energy harvesting interfaces include:
 - ▶ Energy dripping from e.g. solar cells
 - ▶ Energy burst from piezo devices
- ▶ Mesh networking software, self-forming, self-healing
- ▶ All CM-08 modules come pre-configured with the PeakNet mesh network communication/application stack of choice:
 - ▶ PeakNet Z(igBee) or
 - ▶ PeakNet Low Power Routing (LPR) network protocol

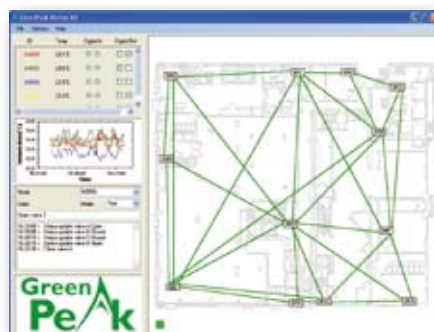
GreenPeak "Emerald" Series GP-2000 Chip

GreenPeak has a well developed product roadmap and is working on a chip solution that integrates all the functions of the current module while providing a full tool chain for OEM integration.

This radio chip will support ultra low power solutions without compromising range or reliability.

GreenPeak Supporting Tools

GreenPeak's suite of software support tools is available to help designers through all stages of a wireless sensor network project: definition, development, piloting, field-deployment, commissioning, testing, operation and maintenance.



▶▶
Snapshot of example control panel application, showing the graphical representation of mesh network nodes, with temperature readings, digital inputs and digital outputs.

New lower pricing
for GreenPeak
Starter Kits &
Development Kits



GreenPeak Starter Kits & Development Kits

GreenPeak provides a complete, high-quality design environment for engineers. The GreenPeak kits contain the nodes with built-in example sensors and include the Jade software development tools, reference designs, graphical network visualization tool and cables. These kits will greatly simplify programming and significantly reduce time to market.

Everything you need to jump-start your wireless sensor application.

GreenPeak Starter Kit

This five-node kit is ideal for engineers who are seriously evaluating wireless sensor applications and wish to gain more insight into mesh capabilities (multi-hop, self-forming, self-healing) with standard off-the-shelf products.

Development Kit Pro

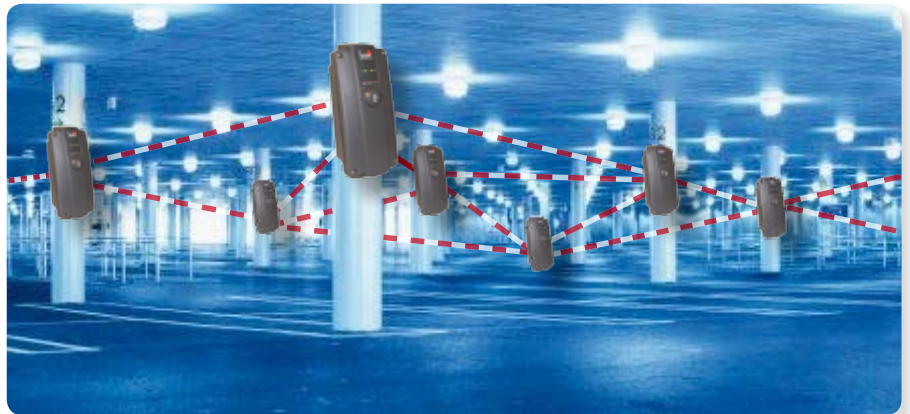
This 10-node kit is ideal for engineers who want to integrate low power wireless modules into their system and interface with their application using a serial command set interface.

Development Kit Enterprise

GreenPeak's 10-node kit is ideal for engineers who want to integrate the GreenPeak modules into their system and develop their own applications for deployment on the wireless modules.

The Green Case

The construction industry is notorious for its small profit margins and conservative approach to technological changes. Yet, Honeywell integrated GreenPeak technology in their gas detection product line and made this solution a success for underground parking lot installations. The Honeywell CO detection solution drastically reduces installation and maintenance cost. In addition, this "green" solution also provides huge energy savings for the ventilator fans.



Honeywell

Honeywell Gas Detection

Pierre Francou, General Manager of Honeywell - North American Gas Detector division, states:

“ GreenPeak offers a proven solution for our critical line of gas detection applications. GreenPeak’s technology offers the best solution for our needs.

We also selected GreenPeak as our strategic partner because we believe in the organization and we trust in their experience, the expertise of their team and their technical leading edge. ”

Huge benefits in an extremely cost sensitive market

Wireless Gas Detection Sensors

GreenPeak technology has been integrated in Honeywell’s CO sensing gas detection devices for installation in underground parking lots. Let’s take a look at the savings.

Wireless Solution from GreenPeak

GreenPeak’s wireless mesh networked solution, which utilizes Honeywell gas detection devices equipped with GreenPeak wireless access technology, requires no cabling.

As a result, the total price for this wireless add-on solution is less than € 2.000.

Business Case

Wiring cost for traditional wired solution
In this case, gas sensors are connected to a central control computer via a control-bus.

That makes the total savings for this wireless solution €18.000, a major breakthrough for this extremely cost sensitive market !

- ▶ A mid-size underground parking garage is equipped with 50 CO sensing modules
- ▶ The sensor devices need on average 40 meters of wiring per device
- ▶ The cost of wiring is €10 per meter, including both materials and labor

Additional Benefits

- ▶ Easier to install: 15% cost savings with lower wage workers
- ▶ No wiring errors: extra cost savings
- ▶ No cable faults: higher reliability
- ▶ Can be installed everywhere: safer
- ▶ Lower maintenance costs



50 devices
* 40m wiring/device
* € 10/m

Total price for wiring = € 20.000

Green Solution

In order to maintain safe CO levels, underground parking lots are equipped with large, energy-wasting ventilator fans that run continuously to guaranty acceptable air quality, to adequately provide fresh, clean air and to prevent the build-up of toxins.

By contrast, in a parking garage equipped with Honeywell/GreenPeak gas detectors, the ventilation system can be managed and controlled intelligently: the ventilators are activated only when CO concentration reaches a certain level, thereby reducing energy consumption and cost. The recordings show that the energy consumption is moderate when compared with key figures from traditionally ventilated parking lots.



Tokyo Sales Office

GreenPeak has opened a sales office in Japan. Yoshinori Furuno will head this new office as Director of Business Development.

Cees Links, CEO of GreenPeak Technologies:

“ By opening our Tokyo office and appointing Mr. Furuno to lead it, we are signaling our strong commitment to the Japanese market. The Japanese market has an excellent history of leading the way for new technologies.

Our new Japanese sales office is a key part of our global expansion plan, and will enable us to provide focused and complete support for our valued Japanese customers and distributors. ”



Mr. Furuno has 20 years of sales and marketing experience in the high-tech industry with a focus on wireless communication technologies.

The GreenPeak office is centrally located in Tokyo, in the Shinagawa area.

Yoshinori Furuno
Director of Business Development Japan

Compliant to Industry Standards

Wireless communication prospers best within the space of industry standards. Standards are developed to offer OEMs the freedom to purchase from a larger pool of suppliers. Additionally, standards allow devices from different vendors to interoperate, a feature which is paramount in applications ranging from building automation to industrial automation.

GreenPeak fully commits 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 is proud to be a contributing member of the Zigbee Alliance since 2004.

Bob Heile, Chairman of the ZigBee Alliance about GreenPeak:

“ GreenPeak brings the real strength of ZigBee wireless sensor networks to life by providing battery-free solutions based on energy harvesting. Many applications do not permit connection to the power grid and battery-less operation is the ultimate long life solution.

GreenPeak's battery-free vision is the logical next enhancement for the expansion of ZigBee wireless sensor networks. ”

Would you like to join GreenPeak?

GreenPeak is continuously looking for enthusiastic people to fuel our growth strategy. We currently have several vacancies for the following jobs in our offices in Utrecht (NL) or Zele (BE):

- ▶ Embedded Software Engineer Wireless Systems
- ▶ Sales Support Engineer
- ▶ Electronics Engineer, specializing in low power techniques
- ▶ Field Application Engineer for in-depth technical customer support
- ▶ Product Engineer, to bring product ideas to reality by aligning market needs with technical solutions
- ▶ Analog Chip Design Engineer
- ▶ Digital Chip Design Engineer

At GreenPeak, people make the real difference!

GreenPeak is continuously looking for new team players. We offer excellent growth opportunities within an international, growing company, an attractive salary package, and a challenging, dynamic, young work environment.

Don't hesitate to send us your application letter and resume. We look forward to hearing from you!



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