

PRESS RELEASE

Autonomous smart items for the Industrial IoT

***swarm* bee modules deliver location-awareness in energy-autonomous mode.**

Brussels, May 25, 2016 – nanotron Technologies, the leader in easy-to-use solutions for location-awareness today announced its new *swarm* API version 3.0 at Geo IoT World 2016. The new firmware runs on all *swarm* bee modules and focusses on further reducing power consumption required to deliver location-awareness.

“The combination of our low power module with *swarm* API v3 and e-peas’ game-changing energy harvesting chip lets energy autonomy become a reality.” says Marcel Borwitzky, Product Manager at nanotron Technologies and adds “For the first time we are demonstrating distance measurement (ranging) running from a small low cost solar cell with 2 second updates here at Geo IoT”. Monitoring distances in energy autonomous mode broadens the scope of location-awareness for the industrial IoT significantly. Safety applications like proximity detection and virtual safety zones will be running without permanent power supply or batteries.

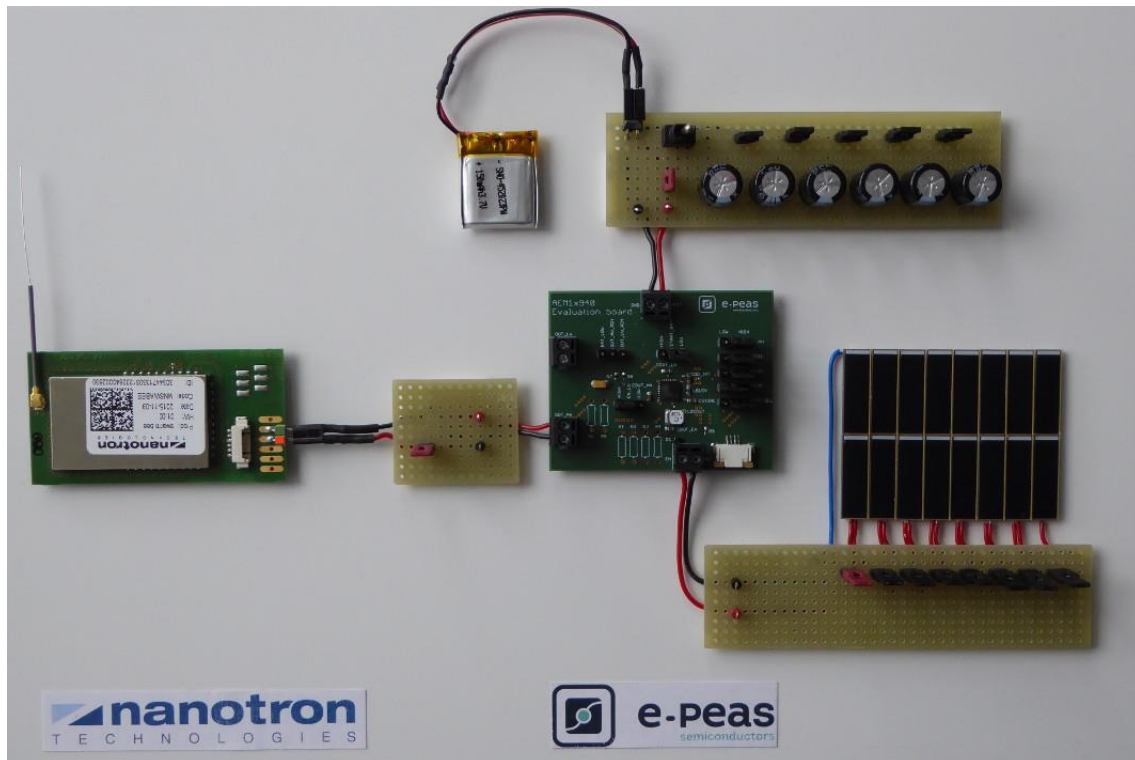
Thanks to the new *swarm* API *swarm* bee modules provide a new level of flexibility for power management. The built-in acceleration sensor, timers or programmable GPIOs can be used to change the module’s power consumption and location update rates directly. The *swarm* development environment with its set of *swarm* PC Tools and DK+ evaluation and test boards supports application development on a host micro controller or a Windows PC.

The new *swarm* API version 3.0 is available for all customers now.

nanotron Technologies is continuing the effort to further simplify the deployment of precise location technology at the lowest possible cost and with the lowest possible energy consumption.



Caption: Marcel Borwitzky, Product Manager at nanotron Technologies.



Caption: nanotron's *swarm* bee LE module with energy harvesting technology from e-peas running autonomously from a low cost solar cell while providing real-time distance readings every 2 seconds.

About the *swarm* product family

Swarm bee modules are available with Chirp or UWB radio technology. Both versions are sharing the common *swarm* API. The *swarm* product family targets the growing market for autonomous smart items and cuts time to market for location-aware products by 12 months. Very precise low-cost location technology can now be used without the need for RF-design capabilities or expertise on low level device drivers. Developers focus on application design.

About nanotron Technologies

Today nanotron's *embedded location platform* delivers location-awareness for safety and productivity solutions across industrial and consumer markets. The platform consists of chips, modules and software that enable precise real-time positioning and concurrent wireless communication. The ubiquitous proliferation of interoperable location platforms is creating the location-aware Internet of Things. More information on www.nanotron.com. Follow nanotron Technologies on [LinkedIn](#).

About e-peas

e-peas develops and markets disruptive ultra-low power semiconductor technology. This enables industrial and IoT wireless product designers to substantially extend battery lifespans and eliminate the heavy call-out costs of replacing batteries, without in any way compromising on reliability. Relying on 10 years of research and patented intellectual property, the company's products increase the amount of harvested energy and drastically reduce the energy consumption of all power consuming blocks within wireless sensor nodes. Headquartered in Belgium, **e-peas** offers a portfolio of photovoltaic/thermoelectric harvester interface ICs, microcontrollers and sensor solutions. For more information, please visit www.e-peas.com.

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