

## Micropelt's self-powered Wireless Temperature Monitoring Sensor Wins IDTechEx Award

Grenoble, France and Freiburg, Germany – Micropelt, Germany based world leader in micro thermoelectrics received the renowned IDTechEx Award 'Best Application of Energy Harvesting' at the sponsor's energy harvesting conference held last week in Munich, Germany. Micropelt wins this award for its TE-qNODE - a self-powered wireless condition monitoring sensor which helps to ensure failure-free electric power availability in 24/7 production environments.



TE-qNODE wireless sensor system monitors busbars and busways.

The autonomous device is powered by Micropelt's micro thermogenerators which turn waste resistive heat to electricity. It was developed for Schneider Electric, the global leader of Energy Management for its electrical distribution businesses. Fabrice Huré, VP Marketing & Offer Management - Energy & Power Services, describes the new wireless sensor solution as a „key enabler to deliver thermal monitoring Services of Low Voltage Electrical Distribution for Schneider Electric“. A new service model is based on the easily deployed, maintenance-free TE-qNODE concept: Continuous temperature monitoring of low voltage busbars will allow for capturing the thermal indicators of upcoming failures. "Our experts continuously monitor the sensor signals in a central location, says Eric Jouseau, Diagnosis Expert for Service Business. "About 60% of all incidents in low voltage distribution go along with a temperature increase; TE-qNODEs let us identify that long before the situation gets out of

control. The impacts on our customer's productivity and safety can be significant," he concludes. "We are proud of this award" comments Fritz Volkert, Micropelt's CEO, "even more since it appreciates one more time the value of close cooperations with our customers who make good use of our technology.

[Link to IDTechEx Winners of Energy Harvesting and WSN Awards](#)



### **About Schneider Electric**

As a global specialist in energy management with operations in more than 100 countries, Schneider Electric offers integrated solutions across multiple market segments, including leadership positions in energy and infrastructure, industrial processes, building automation, and data centers/networks, as well as a broad presence in residential applications. Focused on making energy safe, reliable, and efficient, the company's 110,000 plus employees achieved sales of 19.6 billion euros in 2010, through an active commitment to help individuals and organizations "Make the most of their energy."

[www.schneider-electric.com](http://www.schneider-electric.com)

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## **About Micropelt**

Micropelt GmbH, Freiburg, Germany, develops, produces and markets the world's smallest and most effective thermoelectric elements for clean-tech micro energy harvesting, thermal sensing, cycling and cooling. The company employs 23 staff and recently opened their first million-unit production facility, also located in Germany.

Micropelt's thermoelectric chips are based on a patented scalable thin film [micro-structuring platform technology](#), which minimizes component size while maximizing power density for energy harvesting, cooling or thermal cycling applications. Process-inherent economies-of-scale break previous cost and price barriers of conventional thermoelectrics. Batteries become obsolete as cost-free electricity from waste heat powers wireless sensor networks for their entire life. Chip-thermogenerators also boast unprecedented sensitivity, resolution and dynamics in sensing heat flux and temperature change. For more information contact Micropelt or visit the website <http://www.micropelt.com>

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