

## Press Release

Vienna, May 30, 2018

### PCIM 2018: Smart Solutions for Grids and e-Cars

**AIT presents its know-how for industry and e-mobility at the international hot spot for power electronics PCIM Europe**

Power electronics has become a key technology for renewable energy and e-mobility. Intelligent grids and e-cars rely on these electronic components for power controls and conversion. The AIT Austrian Institute of Technology will present the intelligent converter concepts for smart grids and e-mobility at the world's leading trade fair for power electronics, intelligent drive technology and renewable energy, on June 5-7 in Nuremberg.

#### **AIT as the innovation partner**

AIT is continually growing as an innovation partner for the power electronics industry, offering the expertise in smart grids and electronic drive technologies: from concept, to "Hardware-in-the-loop" design, and further to laboratory testing. This approach saves valuable time-to-market to industrial companies investing in development of the new renewable energies and e-mobility products, and thus contributes to their competitive power in the future markets.

#### **Smart Interfaces**

Energy systems are getting increasingly complex with the growing share of renewable energy sources, and therefore the precise co-ordination becomes essential to ensure the energy supply stability. A real-time simulation converter model (digital twin) greatly benefits the developers of smart grid algorithms before the roll-out of the solution in the field could take place. Apart from the grid-building AIT Smart Grid Converter, which is an intelligent converter supplying the smart and microgrid, AIT hereby presents the bidirectional power supply which can be used as solar modules- and battery simulators to supply and test satellite systems, developed in co-operation with an industrial partner. In addition, the wide-band-gap demonstrator solutions shall be presented.

#### **The highly efficient electric vehicles' „brain“**

Power electronics provides for the electric vehicles' „brain“, controlling the complete power unit, and the transformation of the accumulator- into the motor voltage. The converter platform AIT presents at the PCIM allows for the testing of the entire electric power train, thus improving and optimizing the efficiency and power density.

#### **AIT Austrian Institute of Technology**

The AIT Austrian Institute of Technology is Austria's largest non-university research institution. With eight centers it is a highly specialized research and development partner of the industry. Research is performed on the key

infrastructure topics of the future: Energy, Health & Bioresources, Digital Safety & Security, Vision, Automation & Control, Mobility Systems, Low-Emission Transport, Technology Experience, and Innovation Systems & Policy. About 1.300 co-workers are making research all over Austria – at the main premises Wien Giefinggasse, Seibersdorf, Wiener Neustadt, Ranshofen and Leoben – to develop those tools, technologies and solutions for Austria's economy which will allow them to keep pace with future requirements., according to our motto „Tomorrow Today“.

**For more information:**

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