

Nano Science, Technology and Industry Scoreboard

PV Nano Cell 5D Electronics of Things Complete Solution to Power IoT

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PV Nano Cell Ltd., an innovative provider of inkjet-based conductive digital printing solutions and producer of conductive digital inks, today announced that it is introducing a revolutionary 5D (5 Dimensions) Complete Solution. This solution enables Electronics Everywhere and is digitally printing numerous electronics that power the Internet of Things. This newly introduced solution leverages the company's 3D printed electronics technology that uses conductive additive manufacturing with mass-production applications.

The IoT (Internet of Things) is a driver for implementing electronics everywhere, and created an industry need to implement additive digital mass production processes in the manufacturing of electronics. Digital additive manufacturing has proven viable and additional applications ranging from automotive, solar, and smart cities to medical devices, wearables and consumer electronics are implementing the digital approach.

PV Nano Cell is introducing a 5D complete solution that digitally prints electronics and conductive patterns for IoT and other applications. The 5D complete solution address the 3D printed electronics geometry, the conductive ink optimization dimension, and the printing process dimension. The ink optimization dimension includes domain expertise in nanoparticle chemistry addressing critical factors such as metal load, stability, viscosity, evaporation rate, and jet ability. The printing process dimension includes the printing strategy, printing parameters, and throughput capabilities.

PV Nano Cell's Chief Executive Officer, Dr. Fernando de la Vega, commented, "The solution we are launching today is a result of years of experience developing and printing electronics. We have developed five degrees of freedom technology which together with our customers, can control, develop, and manufacture their next-generation superior electronic devices. This solution is applicable to R&D, prototyping, low volume production, and of course, mass-production. Using our technology, customers gain a competitive, unfair advantage, technology companies must always retain. During the development of this solution, we achieved some remarkable results in printing embedded passive components, filling vias,

printing on a variety of substrates, and serving multiple industries. With a growing number of registered patents, PV Nano Cell continues to be at the forefront of innovation enabling customers to fully realize the potential of their pioneer technologies."

As published, PV Nano Cell announced that it is introducing additional digital conductive inks meant for Solar, Ceramic, Glass, LIFT, and Generic Applications. The company was also recently granted a patent in Brazil, BR 11 2013 013885-8 A2, Method to Produce Concentrated Dispersions of Nanometric Particles of Silver.

As part of the company's business focus on mass-production based recurring revenues, PV Nano Cell also recently announced a non-exclusive strategic agreement was signed with Notion Systems GmbH, a leading manufacturer of industrial inkjet systems for functional materials. The two companies plan to jointly go to the market and offer complete solutions including inks, printers and the printing process to be implemented in digital, mass-production additive manufacturing of printed electronics.

Read the original article on Printed Electronics World.