

## PRESS RELEASE

### **World-first Set of Productivity Tools for precise RTLS nanotron Toolbox 3 cuts integration and installation time significantly.**

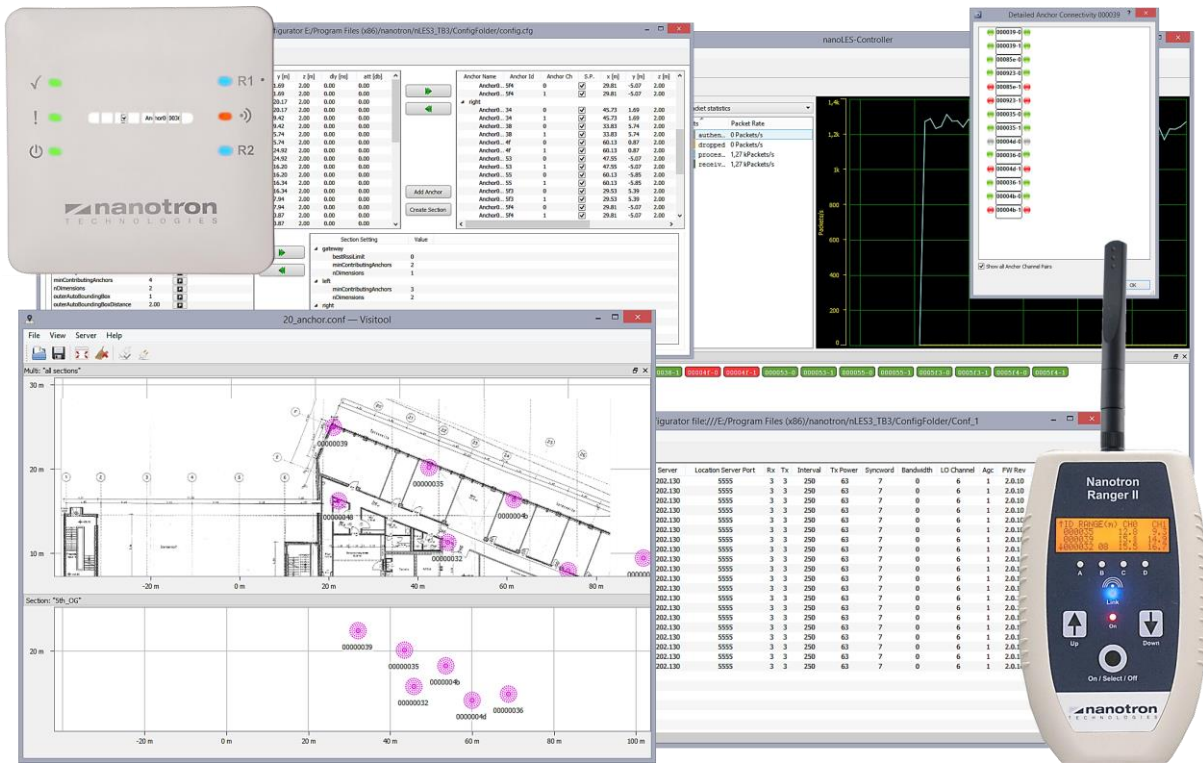
Berlin, Las Vegas, September 26, 2016 – nanotron Technologies, the leader in easy-to-use solutions for location-awareness releases its new *nanotron Toolbox 3* today. *Toolbox 3* brings the world-first complete set of software productivity tools for precise real-time location solutions (RTLS). The tools support nanotron's most recent location engine software *nanoLES 3 Live*. They help to optimise planning, integration, installation, configuration and maintenance of RTLS.

Despite of their rather complex implementation process RTLS need to deliver the exact accuracy and throughput required for the business application that leverages the location information. Predictability of planning, integration and installation saves time and translates to significant cost savings.

To work properly, time-difference-of-arrival (TDOA) location technology relies on optimum anchor positions, proper radio coverage and optimized system settings. Monitoring the health of each anchor is critical not only during system bring-up but also during regular operation. Tag parameters such as transmission mode, blink-rate and back-channel settings are critical. Adjusting and optimizing them for large numbers of tags can be very time consuming unless supported by a productivity tool like the new Node Configuration Device (NCD). Alongside *Toolbox 3* productivity software there is a number of supplementary hands-on hardware tools such as the Ranger II device. In the field it helps to find the optimum anchor positions and validates location performance. When deploying anchors in a mining tunnel 150 to 350 meters apart the updated tool provides instant feedback on location-performance and target anchor positions. No need for installation crews to go back and forth anymore.

“The Toolbox 3 concept is not limited to the productivity tools that we release today.” explains Jens Albers, CEO of nanotron adding “Our customers have been the main driver creating these tools. And they continue to push for improvements and new functions as their and our own experience in deploying RTLS grows.”

The *nanoLES 3 Live* location engine software, *Toolbox 3* productivity software and the supplementary hardware tools are all part of nanotron's *embedded location platform*. *Toolbox 3* further simplifies RTLS deployment with predictable location performance and minimum installation effort.



**Caption:** Toolbox 3 and supplementary hands-on tools simplify the deployment process in the field and cut down integration and installation time significantly.

## About nanotron's High-Throughput RTLS Products

A time-difference-of-arrival (TDOA) location system consists of beaconing tags, time-synchronized anchors, a data network and the location engine software.

Nanotron differentiates from all other flavors of TDOA technology by offering three fundamental advantages: Transparent wireless anchor synchronization, *sea of anchor technology* for linear scalability and concurrent data communication between tags and anchors in both directions.

The location engine software processes location raw data from the anchors, calculates physical positions and delivers this with location meta-data through an open API. Location meta-data includes supplementary information such as received signal strength (RSSI) for each anchor and 3D tag acceleration readings. Nanotron's location engine products break down complex geometries in sections with 1D, 2D or 3D coordinates. Users can mix and match different types of sections and add presence detection anywhere in their application. Flexibility to adapt the anchor density in-line with different accuracy requirements allows for very cost-effective infrastructure build-out.

Productivity tools cut planning and deployment to the minimum and deliver predictable location performance.

Scalable TDOA location technology is an integral part of nanotron's *embedded location platform*. It works with any wireless location technology such as Chirp, Ultra-Wide Band (UWB) or WiFi.

## 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](http://www.nanotron.com). Follow nanotron Technologies on [LinkedIn](#).

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