PRESS RELEASE

Smart Engineering from Rosenberger for Customized Autonomous Tracking Solutions

Holistic Co-Engineering Approach for Customized IoT Systems

Fridolfing, 14/07/2026 – With Smart Engineering, Rosenberger pursues a consistently application-driven approach to developing IoT products. Based on specific customer requirements, the company creates holistic solutions—from conception through development and integration to operation. The focus is not on a single product, but on the interplay of hardware, software, connectivity, and data intelligence.

Co-engineering instead of standard solutions

IoT and artificial intelligence offer enormous potential, but also increase the complexity of technical systems. Rosenberger addresses these challenges with a structured Smart Engineering approach, in which all system components are designed as an integrated system from the outset. The goal is to create robust, scalable, and long-term reliable solutions that function reliably even under demanding environmental conditions.

While many IoT solutions rely on standardized components, Rosenberger focuses on true customization. Through close collaboration with customers, specific pain points are identified and transformed into bespoke solutions that integrate seamlessly into existing processes and IT landscapes.

TINO® – the flexible tracking platform

The TINO® platform for autonomous IoT asset tracking is one example of this approach. Designed to meet the specific requirements of logistics, industry, and construction, the solution offers long battery life, minimal maintenance, and flexible system integration. TINO® enables precise tracking across large areas, optimizes processes, and reduces operating costs sustainably.

As part of a holistic system, the device, connectivity, backend, and data logic in TINO® are closely integrated. The solution can be configured in real time without modifying the hardware or software. A robust, durable architecture ensures reliable operation under demanding conditions. Open interfaces and a powerful backend infrastructure guarantee seamless system integration and future-proofing.

Maximum battery life through intelligent algorithms

A key feature of TINO® is its exceptionally long battery life. Intelligent algorithms, data science tools, and AI dynamically adjust transmission intervals, enabling battery life of up to ten years with full functionality, even in harsh environments.

The system filters out irrelevant movements at the device level. The **Movement Pattern Detection (MPD) method** analyzes typical movement patterns using statistical methods and linear algebra. This allows for the reliable detection and prediction of unusual events such as theft, operational errors, or inefficient use.

PRESS RELEASE

Cybersecurity: Secure by Design

Cybersecurity is an integral part of all Rosenberger Smart Engineering solutions. End-to-end encryption, role-based access rights, and a “Secure by Design” architecture—which is also suitable for critical infrastructure (KRITIS) environments—meet high security and compliance requirements.

Connected, global, and versatile

Integration with ERP and asset management systems such as SAP enables the direct exchange of asset and operational data in real time. Global SIM cards with multi-provider roaming, a multi-band LTE module (LTE-M, NB-IoT, EGPRS), as well as GPS and cellular positioning ensure stable, seamless data transmission worldwide. Typical application areas include airport ground handling, logistics and transportation, industrial processes, and the construction industry.

“Smart Engineering from Rosenberger stands for high-performance IoT solutions that increase efficiency, reduce costs, and ensure long-term future-proofing. With AI-supported energy optimization, advanced cybersecurity, and a structured rollout, Rosenberger supports companies end-to-end as a reliable partner for individual IoT use cases,” says Kai-Uwe Müller, Director of Smart Engineering at Rosenberger.

For more information, visit: www.rosenberger.com/smart-engineering

Image material: (free of charge when credited as “Image: Rosenberger”):

	TINO® Tracking Unit: self-contained tracking system with maximum battery life and minimal energy consumption

PRESS RELEASE

About Rosenberger

Rosenberger is a globally renowned manufacturer of electronic components and systems, recognized for cutting-edge technologies, engineering excellence, and uncompromising quality. Headquartered in Germany, the Rosenberger Group operates worldwide with numerous sales and production locations, offering a broad range of standardized and customized connectivity solutions in RF, high-voltage, and fiber optic technologies.

Rosenberger ensures the reliable transmission of signals, data, and power in the most demanding application areas. Leading high-tech companies across sectors such as mobile communications and telecommunications, industrial measurement technology, automotive electronics, medical and industrial electronics, data centers, and aerospace rely on Rosenberger products for their precision and outstanding reliability.

The company's CNC machining division produces precision parts for various industries, including the automotive and commercial vehicle sectors, shipbuilding, and classic mechanical and plant engineering.

Since its founding in 1958, Rosenberger has been family-owned and currently employs around 15,000 people worldwide. The company's employees are known for their dedication, innovative spirit, and commitment to quality, all firmly rooted in the values of a traditional family business.

For more information, please visit: www.rosenberger.com

Media Contacts

Rosenberger Hochfrequenztechnik GmbH & Co. KG
Aldo Croci Torti
Marketing Services
1 Hauptstraße
83413 Fridolfing, Germany
Tel. +49 8684 18 1707
aldo.crocitorti@rosenberger.com
www.rosenberger.com

Profil PR oHG
Jan Lauer
Husarenstraße 74
38102 Braunschweig, Germany
Tel. +49 531 387 33 18
j.lauer@profil-pr.com
www.profil-pr.com