



About EKE

Smarter trains. Better future.



WHO ARE EKE-ELECTRONICS?

FOR ALMOST FOUR DECADES, EKE-ELECTRONICS HAS BEEN A TRUSTED PARTNER TO GLOBAL TRAIN MANUFACTURERS AND OPERATORS, DELIVERING COMPREHENSIVE TRAIN AUTOMATION SOLUTIONS.

WHY CHOOSE EKE?

EKE-Electronics is a Finnish high-tech company based in Espoo, near Helsinki, specialising in Train Control and Management Systems (TCMS). Founded in 1986, we have nearly 40 years of experience in the railway industry. As a family-owned business with Mitsubishi Electric as a minority shareholder, we combine advanced electronics and software to enhance train operations worldwide.

With a team of 100 professionals from around 20 nationalities, we operate globally, helping customers build and operate smarter, safer trains. Our Train Control and Management Systems (TCMS) solutions support train manufacturers, operators, and integrators with system integration, automation, communications, diagnostics, and safety enhancements.

DIVERSE PORTFOLIO

EKE offers a diverse portfolio spanning train control and management systems and SIL safety applications. Our expertise in these areas ensures robust, reliable performance across diverse railway environments, supporting enhanced safety, efficiency, and operational excellence.

01

TRAIN CONTROL AND MANAGEMENT SYSTEMS

EKE-Trainnet® Train Control and Management System supports SIL 2 development, with some key modules already pre-certified. Its modular design allows you to select only the features you need, creating a cost-efficient, flexible, and versatile solution with a simplified architecture.

02

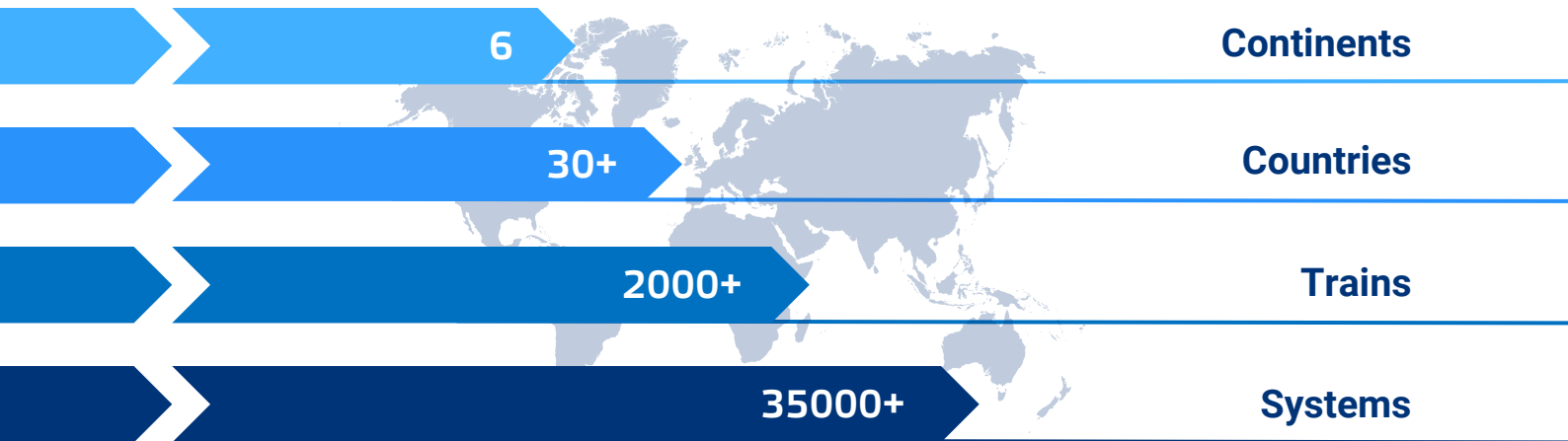
SIL SAFETY APPLICATIONS

At EKE-Electronics, we excel in developing SIL 2 systems across diverse safety functions, following strict standards (EN 50126/50716 (previously EN 50128)/ 50129). With our proven track record and rigorous practices, we deliver unmatched reliability in safety-critical solutions.

03

BUILD YOUR OWN APPLICATIONS

EKE-Electronics offers a flexible TCMS development platform that supports both in-house and supported approaches. We can train your engineers to build and manage software applications independently or deliver a complete, ready-to-use solution. With powerful tools for custom application design and seamless third-party integration, you retain full control over your train control systems.



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WHAT DO WE OFFER?

EKE offers a unique blend of a broad product portfolio, flexible business model, and experienced people. We deliver tailored solutions that enhance the efficiency and reliability of your railway operations.

TRAIN CONTROL AND MANAGEMENT SYSTEM

Modular EKE-Trainnet® TCMS platform

Modular EKE-Trainnet® TCMS platform, including platform software, our CODESYS® powered software development environment and a minimum of 20 years lifecycle support. Systems include:

- TCN Gateways: WTB, MVB, CAN Ethernet, serial links and Safety gateways.
- Vehicle Control Units
- Remote I/O Systems
- Event Recorders

TCMS for new builds and refurbishment projects

EKE-Electronics' modular TCMS platform is suitable for both new train builds and train refurbishment projects. It offers a highly flexible and versatile solution with a commitment to long-term reliability and support, ensuring peace of mind for clients.

Make or buy?

Whether you prefer to develop in-house or rely on our expertise, EKE-Electronics offers the tools and support to help you succeed. These include TCMS products, safety products, TCMS Platform projects, TCMS turnkey projects and solution projects.

SIL SAFETY APPLICATIONS

In-house competencies to develop a range of safety applications up to SIL 2

Examples of safety applications developed:

- Automatic selective door operation
- Hot axle box detection
- Lateral acceleration monitoring
- Vigilance control system
- Examples of other applications developed: Fire detection sub-system monitoring, brake pipe pressure monitoring, train speed and distance monitoring, supervision of traction enabling, supervision of passenger alarm activation



BUILD YOUR OWN APPLICATIONS

Powered by CODESYS®

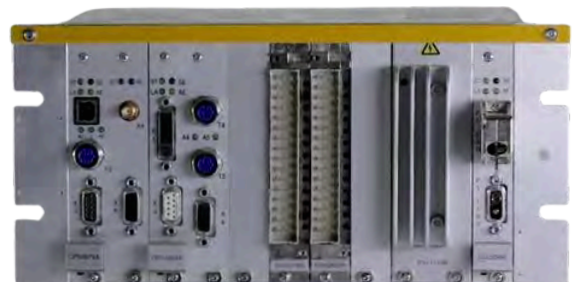
Our software development environment fully supports CODESYS®, the industry-leading manufacturer-independent IEC 61131-3 (PLC) automation suite. With this integration, you can effortlessly create, analyse, simulate, and commission applications, ensuring maximum efficiency and reliability throughout your automation projects. Streamline your development process, allowing you to focus on innovation and achieving your automation goals.

Independent implementation available

EKE-Electronics offers a flexible TCMS development platform that supports both in-house and supported approaches. We can train your engineers to build and manage software applications independently or deliver a complete, ready-to-use solution. With powerful tools for custom application design and seamless third-party integration, you retain full control over your train control systems.



Train Control and Management Systems



SIL Safety Applications



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Certification

EKE