

The Elevator of Tomorrow & Beyond

How smart technologies from Cologne are transforming the elevator industry worldwide

Jörg Hellmich, CEO

ELFIN Technology GmbH

A hospital where the elevator knows when every second counts. An airport where escalators think ahead and prevent accidents. A hotel that welcomes guests in style right inside the elevator and takes them straight to the breakfast lounge. In buildings around the world, technologies from ELFIN Technology help people reach their destinations faster, safer, and smarter, often without even noticing it.

What began with innovative elevator displays has, in just a decade, grown into a high-tech company with global reach. Today, ELFIN Technology offers not only smart displays, but also monitoring gateways, intelligent sensor systems, and a fully accessible two-sense emergency call system-including sign language support. The technologies are in use at international airports, medical centers, hotels, train stations, trade fair venues, and landmark buildings across

the globe.

the globe.

The vision: Connecting elevators and buildings—making them smarter and safer

The story of ELFIN Technology starts with founder and CEO Jörg Hellmich. With over 20 years of experience in control system engineering, including as Head of Development, he was among the first to recognize the potential of smart interfaces, standardized communication, and connected systems in the elevator industry—and to pursue it consistently.

Driven by this vision, ELFIN Technology was founded in Cologne in 2012. Today, the company is one of the industry's leading technology drivers. With uncompromising quality standards and a passion for innovation, ELFIN Technology develops cutting-edge solutions that create real value for elevator manufacturers, planners, and operators alike.



Joshua Petri, Director ELFIN Technology GmbH



Leon Dokkum, Director ELFIN Technology GmbH

Monitoring, made simple.

Anyone managing a large elevator portfolio knows the problem: Different manufacturers, different controllers, different interfaces—and no central overview. When an elevator breaks down, you often don't find out until the phone rings and a frustrated building operator is on the line.





eleon S1 solves this issue by enabling crossmanufacturer monitoring of entire elevator portfolios—whether they include brand-new systems or older models. It brings visibility to previously "invisible" elevators, making it finally possible to optimize operations across your full portfolio.

Available Elevator Data Includes:

- · Operational status
- · Door states
- · Trip count and floor positions
- · Safety circuit status
- · Fault codes and descriptions

With eleon S1, technicians no longer need to visit each elevator on a fixed schedule. Instead, maintenance routes are driven by actual needsnot outdated routines.







Advantages:

- · Fewer unnecessary site visits
- Faster response to critical faults
- Lower costs and downtime
- Higher elevator availability

Fast Installation, No Downtime

Installation of the gateway takes just 15 minutes and can be done during regular service visits. No wiring required—thanks to:

- · Integrated modem and eSIM
- Direct communication from the machine room

This makes eleon S1 a truly scalable, flexible, and cost-effective solution for service providers managing mixed-brand elevator portfolios.

Seamless System Integration

Service providers can integrate elevator data from eleon S1 directly into their existing ERP, monitoring, or service management platforms. Whether you're using custom software or an established platform, data flows straight into the backend—and your familiar user interface remains unchanged. The data is delivered via an open interface, in exactly the format you need: Raw data, calculated KPIs or any other data maturity level.

"I'm absolutely convinced—within five years, there won't be a single elevator that isn't remotely monitored in some form. And we need to let go of the idea that the number of trips is what we charge for."

– Joshua Petri, Director, in the Major League Elevator Podcast with host Martin Reichl

When Escalators Become Bottlenecks

A plane lands. Passengers flow into the terminal via escalators. But at the end of the escalator, many hesitate, unsure which direction to go. The crowd stops moving. A bottleneck forms. It's a potentially dangerous situation that every airport operator is familiar with.

At major international airports, ELFIN VISION sensors help prevent this. They detect in real time when people begin to accumulate at the end of an escalator and automatically intervene: the escalator stops until the congestion clears. Once the area is free again, the system can restart the escalator remotely from the control room.

When combined with flexyPage displays, the system can instantly show context-sensitive guidance and directional information, right where it's needed. This helps resolve crowding before it becomes critical and can avoid escalator downtime.



Faster and Smarter

Airports handle thousands of passengers every day: people trying to find their way quickly to check-in counters, boarding gates, or baggage claim. flexyPage multimedia displays play a central role here: they display flight information, dynamic wayfinding, and situational messages-right at the point of need, whether inside elevators, at escalators, or in waiting areas. With digital signage and infotainment, the displays also enhance the passenger experience: travelers can check flight statuses in real time, receive boarding instructions, or discover current offers from shops and restaurants. At the same time, visual content and light entertainment help shorten perceived waiting times, making the terminal feel calmer and more welcoming.

Present When It Matters

In emergencies, flexyPage displays become key safety tools. They can automatically show evacuation instructions, safety messages, and even support fire service elevators by displaying real-time cabin locations to emergency responders.

Combined with optical sensors, the system can act as a visual substitute for windows, providing a live view into elevator cabins or floor areas during critical situations.

The seamlessly integrated and compliant twosenses emergency call system ensures that visitors with hearing impairments or language barriers can request help via visual communication and sign language, enabling truly accessible emergency communication.

Strong Partners, Smart Solutions.

When it comes to modern and innovative elevator technology, collaboration is key. For many years, ELFIN Technology and SCHAEFER have maintained a close, trusted partnership that perfectly combines engineering and design.

This close cooperation has resulted in customized solutions where mechanics, aesthetics, and digital functionality come together seamlessly.

The outcome: high-quality operating panels with integrated displays that win over operators with reliability, premium quality, easy integration, and modern appearance, from standard cabins to prestigious showcase installations.





This long-standing partnership proves how shared expertise leads to technically mature, visually appealing, and highly practical solutions. For planners and operators, this means: everything from a single source, perfectly coordinated, and ready to meet the demands of tomorrow's connected elevator world.



A Shared Journey Around the World

Thanks to strong partnerships with high-caliber distributors, ELFIN Technology's solutions are now in use on every continent—in airports, trade fairs, hotels, royal palaces, hospitals, train stations, and prestige buildings with high foot traffic.

From a superior-class hotel at Alexanderplatz in Berlin, to incline elevators in Monaco and Switzerland, and all the way to major international airports in France and Doha: ELFIN technologies support operators wherever smart functionality contributes to the safety and efficiency of elevators, escalators, and entire buildings.





Visit ELFIN Technology at interlift: Hall 3 | Booth E202

The truly barrier-free emergency call.

flexyPage®

For every elevator & every emergency call system.



Technology That Delivers Real Value, for Everyone

At ELFIN Technology, all solutions follow one core principle: Technology should never be an end in itself. It must simplify workflows, reduce risks, and truly support the people who work with it—be they service technicians, building operators, or passengers.



Monitoring That Pays Off

A monitoring solution is only effective if it actually simplifies the lives of service providers—and pays for itself quickly. In times of skilled labor shortages, efficiency is crucial. With limited personnel, more service contracts must be managed with existing staff, without compromising quality.

The monitoring gateway by ELFIN Technology was developed with exactly this in mind. It's compatible with the major part of multi-brand portfolios, can be installed in minutes, and can even be transferred to a different elevator if needed. In many cases, just one avoided technician visit already offsets the entire cost.

Thanks to its open interface, the collected data can be integrated directly into your existing IT landscape—whether it's an ERP system, monitoring platform, or service management software.



Smart Displays That Lighten Your Workload

Walking from elevator to elevator with a USB stick to update content? That's a thing of the past. Modern elevator displays only realize their full potential when they integrate seamlessly into existing infrastructure and can be centrally managed with ease. That's why ELFIN Technology displays are compatible with any elevator and controller, and available in a wide range of formats. There's a solution for every wall.

Content can be controlled remotely, managed in large volumes, and triggered automatically based on time, events, or location. When needed, the displays can also take over all cabin control panel functions—including emergency features such as accessible two-sense emergency calls, evacuation support, and fire service mode. This turns the display from a passive screen into a central communication interface.

Smart Sensors That Keep Learning

To be truly valuable, smart sensors must work reliably in real-world conditions. That's why every ELFIN sensor can be fine-tuned beyond its built-in Al model through project-specific training. This allows the system to recognize unique objects, movement patterns, or behaviors with high accuracy—tailored to each location. No generic



"one-size-fits-all" products here. Instead, you get customized solutions that adapt to your specific environment-its lighting conditions, traffic flows, movement dynamics, and even reflections.



When Every Second Counts: Smart Solutions for Hospitals

Patients, visitors, nurses, and doctors all share the same pathways and infrastructure in a hospital. Delays are inevitable and sometimes affect the very people who need to be moved urgently. Modern elevator technology supports the prioritization of critical transports and helps guide visitors efficiently through the facility.

Priority Rides Without Keys or Cards

Until now, bed transports and emergency rides often required a key switch or access card. Today, that process is faster: a simple PIN entered on the display is enough to initiate a priority ride.

Even better: smart sensors can automatically detect hospital beds, call the elevator, and prioritize the ride-all without a single manual step. This means urgent transports can proceed immediately, without delay.





Controlled Access to Sensitive Areas

Not everyone is allowed to access every floor-especially not ICUs or operating

rooms. By integrating elevator displays into access control systems, individual user roles and modes can be activated for staff. For hospitals, this means enhanced security and a seamless, centralized access strategy.

Accessible Emergency Communication

In hospital environments, accessible emergency communication is especially critical. Patients with hearing impairments, foreign language speakers, or individuals under stress can use the visual emergency system to communicate via the display. Simple texts, clear symbols, sign language support, and multilingual input options ensure that the emergency center can immediately understand the situation and respond effectively.

"Innovative technology should never be built for machines, but for people. You need to understand what truly helps operators, planners, and users alike."

Achieving More Together

ELFIN Technology helps shape the future of elevator technology not only through its own product developments, but also through active participation in international industry bodies. As a board member of NeXt group, CEO Jörg Hellmich advocates for open hardware and software standards in the elevator sector. His work supports the creation of a neutral platform for developing forward-looking components and interfaces. For over 20 years, he served as Chairman of the CANopen Special Interest Group Lift, consistently driving the standardization of communication protocols for components. He also contributed significantly to the development of VDI Guideline 6013 within the VDI committee, a standard that defines how elevators communicate with other systems.



Jörg Hellmich, CEO ELFIN Technology GmbH

This ongoing commitment ensures that elevator systems are becoming more open, compatible, and future-ready, to the benefit of manufacturers, operators, and planners worldwide.



Leon Dokkum & Joshua Petri Directors ELFIN Technology GmbH

Experience Meets Curiosity

The management team at ELFIN Technology combines decades of experience in elevator and building technologies with a sharp eye for innovation.

Jörg Hellmich, CEO, has been active in the industry for over 30 years and is an internationally recognized driver of smart elevator technology and standardization. He is joined by Leon Dokkum, who leads the Displays & Sensors business unit, and Joshua Petri, who heads up Monitoring & Gateways. Together, they bring technological expertise, market insight, and a passion for new ideas to the table–leading a team made up of 80% developers, a clear signal of the company's focus on technology and innovation.

After more than a decade in the elevator industry, ELFIN Technology is now developing solutions that reach far beyond vertical mobility. Its technologies are also used in industrial processes and high-traffic environments such as trade fairs and train stations, delivering value wherever smart automation meets real-world infrastructure.

