Keep an eye
on the future.

01 INDEX

We develop
digital solutions.

INTERNET OF THINGS

IoT refers to the digitalisation of machines & processes in the industry. This positive trend does not spare the lift industry, but opens up new market opportunities. It can be used to plan, analyse and communicate online.
With the objective of improving availability, reliability and energy efficiency of lift systems, the **cloud service** from Kollmorgen came into being.

Today, it operates under the name **K-solutions** and offers digital solutions for all aspects of your elevator system.

INTRODUCTION

Since the company was founded in Cologne in 2008, K-solutions has developed into a think tank for digital concepts and solutions.

The company develops and provides services and products in the field of **process automation** and **digitalisation**, complemented by system consulting in information and communicaton technology.
A profound knowledge of modern IoT technologies and concepts - coupled with a keen understanding of markets and customer needs - makes K-solutions the „enabler" in lift manufacturing.

KLAUS ZÄHL
CHIEF EXECUTIVE OFFICER

Klaus Zähl leads the K-solutions team with the help of his strong analytical understanding. In his Function as head of IT and engineering his core competencies are software development, digitalisation and process optimisation.
His strategic way of thinking and many years of expertise in the lift industry contribute significantly to the companies' success.

PHILIPP BRÜßLER
CHIEF TECHNICAL OFFICER

Philipp Brüßler complements the K-solutions team with his constant striving for market-driven software solutions and his developer spirit. His aspiration to combine information from lifts and control systems in an intelligent, internet-based system paved the way for K-solutions to enter the world of digitalisation.

MISSION

The journey to a digital future is constantly evolving. To remain competitive, companies need to accelerate their digital transformation: New business models, unique customer experiences and the use of precise data analyses are essential. They are the gamechangers on the road to Industry **4.0.**

Together with you, **K-solutions** develops future-oriented concepts solutions that enable your company to successfully keep pace.

cloud solutions.

connectivity on every level

PERFORMANCE LEVEL 1
digital-lift-solution

- **DOCUMENTATION**
  (technical and business-related)
- **CONTROL SYSTEM OVERVIEW**
  (of all installations)
- **FULL ADMINISTRATION**
  (of users & installations)

PERFORMANCE LEVEL 2
real-time-solution

- **SUPPLY ONLINE CONNECTION**
  (between processor & liftbook)
- **SECURED FILING | ARCHIVING**
  (of all data)
- **SECURED REMOTE ACCESS**
  (online | to the control system)

PERFORMANCE LEVEL 3
service & maintenance

- **CURRENT OPERATING STATUS**
  (monitoring & assessment)
- **EVENT LOGS & TICKETS**
  (automated ticket generator)
- **ADDITIONAL DASHBOARD**
  (for operators)

PERFORMANCE LEVEL 4
application-integration

- **APP-SOLUTIONS**
  (for convenient & contactless
  lift call placements)
- **INTEGRATION OF FUNCTIONS**
  (into your own software)

SCOPE OF DELIVERY	FREE	BASIC	SERVICE	SERVICE+
liftbook	✓	✓	✓	✓
GSM access	X	✓	✓	✓
MPKlive	X	✓	✓	✓
liftcare	X	X	✓	✓
liftit	X	X	X	✓
liftQR	X	X	X	✓
liftAPI	X	X	X	✓

K solutions
by Kollmorgen

connectivity simplified.

PERFORMANCE LEVEL 1
LIFTBOOK FREE

liftbook free

Lifts' Overview & Documentation

K solutions

The digital lift-solution allows you to keep track of all the controls in your lifts 24/7.

lift book   MPK live   lift care   lift QR   lift it   lift API

THE DIGITAL SOLUTION FOR LIFTS

FEATURES

- **DIAGNOSTICS & ANALYSIS**

  The system's transparency is increased by various statistics such as system condition monitoring. Information can also be transmitted in real time for more efficient building management supervision and control.

- **MONITORING AND ALERT FUNCTION**

  Integrated component monitoring and fault notification support allows for smooth system operation. Errors can be analysed, corrected or avoided in advance. Life cycle monitoring further enhances predictive maintenance capabilities.

- **SECURITY**

  Encrypted connections and the MPKlive infrastructure secure access without additional software needed on the mobile device.

- **TECHNICAL DOCUMENTATION**

  Location-independent retrieval of fault logs – as well as technical documentation – provide better predictability and faster action to minimise lift downtimes.

- **TRANSPARENCY**

  Access to complete installation documentation and order status.

- **SERVICE MANAGEMENT**

  Supports your organization of service calls with the help of live overview maps.

PERFORMANCE LEVEL 2
LIFTBOOK BASIC

In addition to the control overview, liftbook basic offers you remote access to important lift information. With just one click.

THE USER-FRIENDLY SOFTWARE

MPKlive provides quick, convenient and intuitive access to the lift system. From commissioning to maintenance – the clearly designed user interface allows the user to carry out all tasks independently after just a short period of familiarisation.

FEATURES

- **CONNECTIVITY**
  Connection can be made via the internet or intranet using a GSM router, landline or wireless network.
  No additional software is required on the client side.

- **COMPATIBILITY**
  The control system integrates completely with MPKlive on all devices and is therefore a BYOD product (Bring Your Own Device).

- **SEARCH FUNCTION**
  The search function with practical search terms allows you to find your way around MPKlive quickly.

- **DIAGNOSTICS**
  The integrated diagnostics tools enable operating statuses to be called up and evaluated. I/O states, fault events, lift and component statuses can be displayed in real time.

- **LOCATION-INDEPENDENT**
  The location-independent application allows the system data to be analysed in advance, saving valuable time.

*Hardware not included in scope of delivery.

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PERFORMANCE LEVEL 3
LIFTBOOK SERVICE

The service package lets you collect and analyse system data. If a fault is detected, a ticket will be automatically generated and can be assigned to a technician.

THE INTELLIGENT SERVICE MODULE

The digital service liftcare monitors the event memory of the controller, reliably evaluates this information and generates a user notification when action is required. By specifying the processing status, error description, and priority, the user can assign a targeted service ticket to an available technician in the vicinity.

FEATURES

- **OPERATING STATUS MONITORING**
  (normal | special operations | error)
- **EVENT LOG MONITORING**
  and evaluations
- **AUTOMATIZED TICKET CREATION**
- **NOTIFICATION TOOL**
  for Users
- **ORGANIZED TICKETING SYSTEM**
    - Overview of site controllers | Technicians
    - Ticket assignment to technicians via native IOS App
      including status, priority and error description
- **ERROR LOG**
  offers commenting function
- **OPERATOR-DASHBOARD**
  enables creation of service requests

*Hardware not included in scope of delivery.

3
Auto-Tickets

1
davon offen
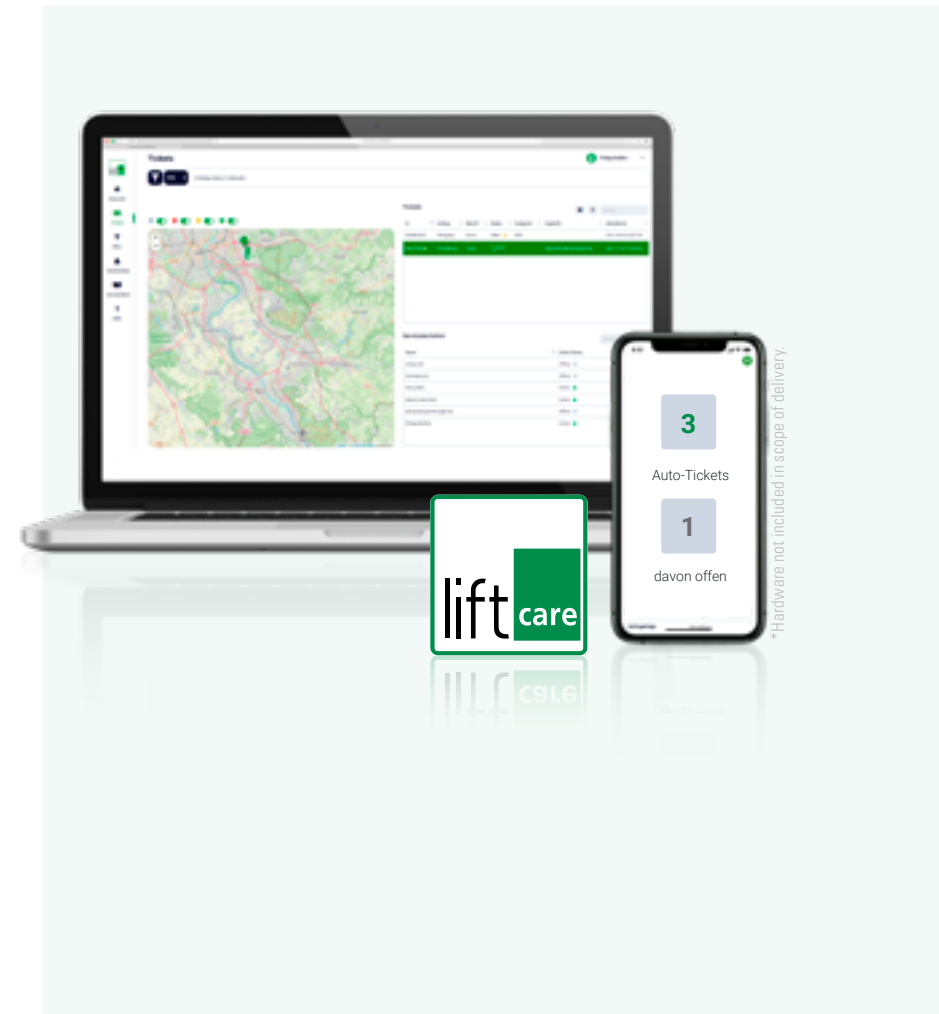
PERFORMANCE LEVEL 4
LIFTBOOK SERVICE+

liftbook service+

Enduser Apps & API

SIM Card
Connectivity on
all networks

K solutions

It doesn't get any smarter than this: liftbook service+ includes all of the above functions within our digital range of services, integrated API interface and additional end-user apps.

lift**book**   **MPK**live   lift**care**   lift**QR**   lift**it**   lift**API**

CONTACTLESS LIFT CALL PLACEMENT

Specifically for the C-line fixtures product line introduced in 2019, we have added a new digital service. Our web-based liftQR app enables the user to operate the lift easily, quickly and contactlessly via smart phone.

Dynamic QR-codes are **regularly** re-coded by the web server in order to provide the required security, preventing unauthorised use & misuse.

FEATURES

- **CONTACTLESS LIFT CALL PLACEMENT**
  (via smartphone)
- **DISPLAY OF ETA**
  (Estimated Time of Arrival)
- **DYNAMIC QR-CODES**
  protection against unauthorised use

REQUIREMENTS

- **MPK411/MPK4i** Processor
- **C-line 2,8" TFT-display**
- Internet connection via **GSR router**
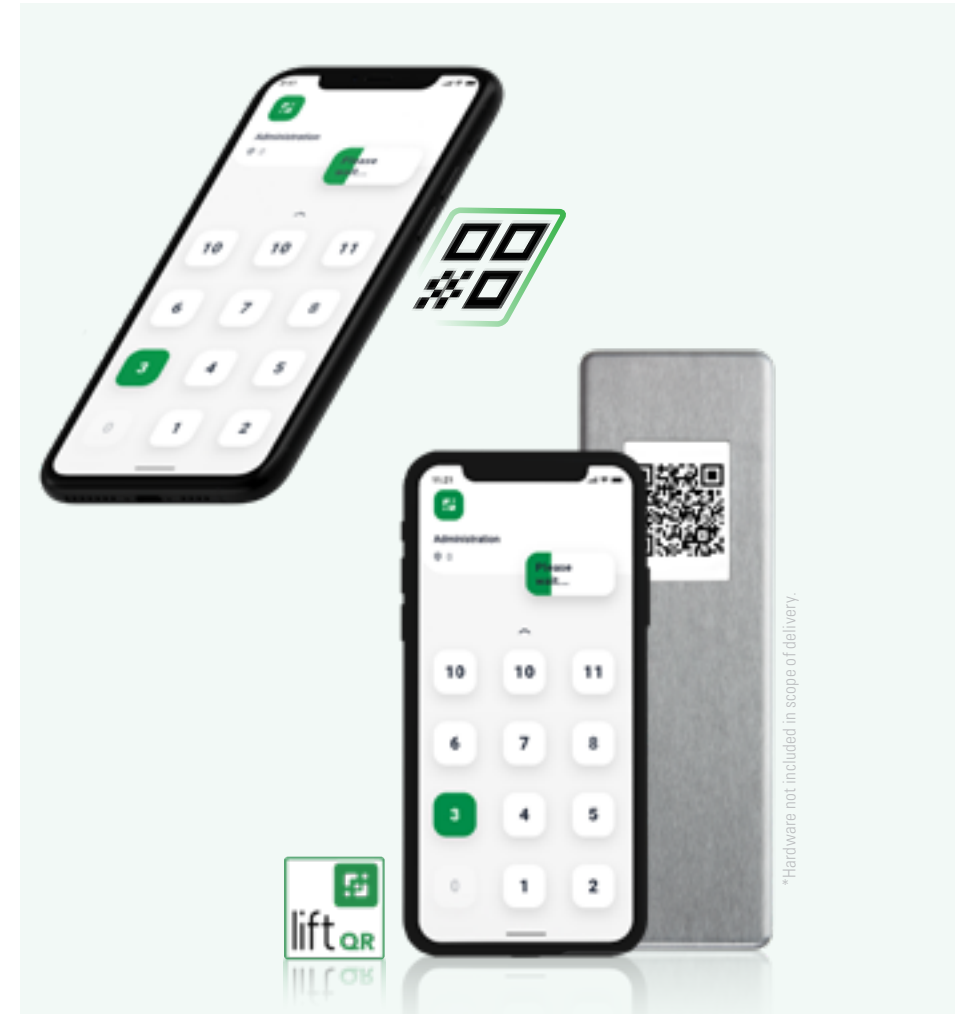
*Hardware not included in scope of delivery.

THE CONVENIENT LIFT-APP

In Germany alone, the number of smartphone users is growing steadily, reaching around **62,6** million in 2021; three million more than in the previous year[1]. Intelligent mobile phones with their multitude of apps have become an important part of everyday life. An app also offers many advantages for the lift user – no unnecessary waiting in front of the lift, contactless lift calling and individual access rights for easy operation.
liftit encompasses all that's required for modern lift call placement using smart phone devices.

[1]Source: statista.com/statistik/daten/studie/198959/umfrage/anzahl-der-smartphonenutzer-in-deutschland-seit-2010/

FEATURES

▪ **ADMINISTRATION**
The interface allows fast administration of users and their access rights (remote location, blocked floors, time periods, etc.). Two authentication options can be selected.

▪ **SECURITY**
The combination of encrypted connections and an automatic authentication provides a comprehensive security concept, which requires no additional software.

▪ **LIFT CALLING**
The lift call is placed in the direction of travel. Depending on technical requirements a desired destination can also be specified. Waiting time and the assigned lift are shown to the user in real time.

▪ **STATUS INDICATORS**
Once the lift is „out of service" or in „energy-saving mode", the user receives information about the current status of the lift system via app.

*Hardware not included in scope of delivery.
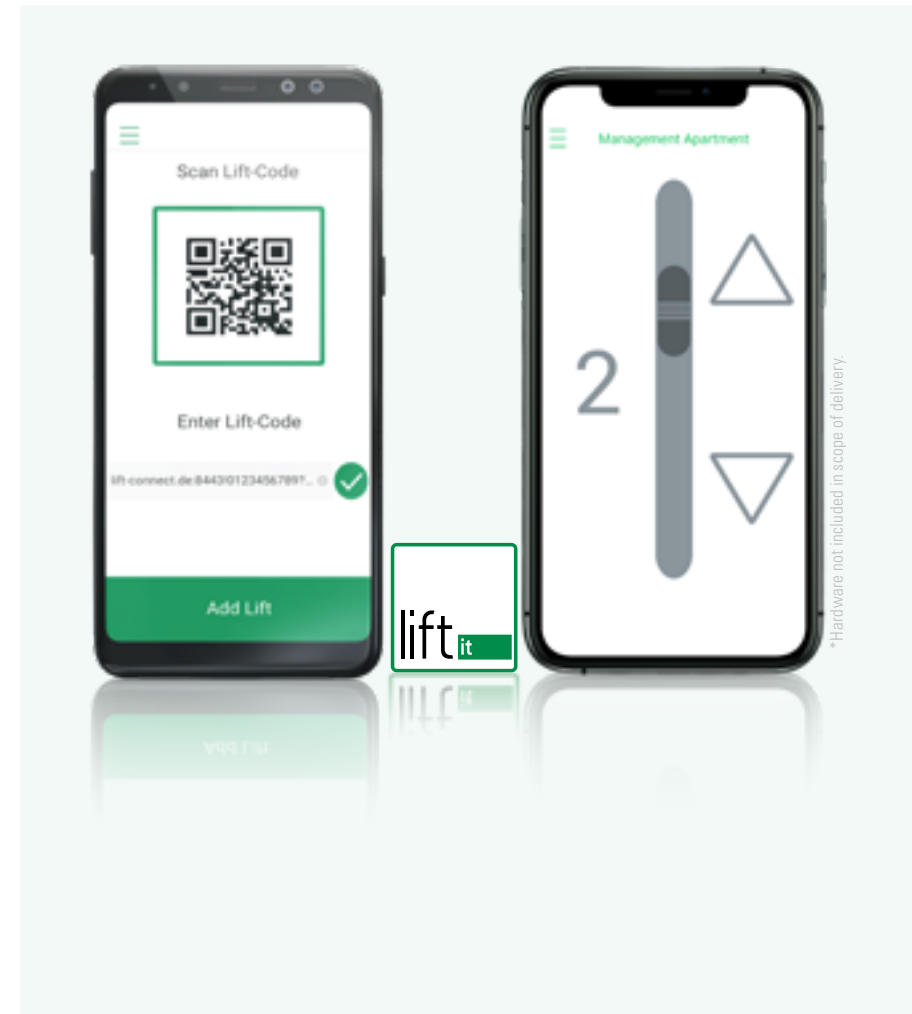
LIFT APPLICATION PROGRAMMING INTERFACE

With the Web-programming interface **liftAPI** the liftbook cloud-solutions can be implemented in **your** software, comfortably and secure.

FEATURES

The programming interface gives you access to the following data:

- **EVENT LOG**
- **OPERATIONAL STATUS**
- **CAR POSITION**
- **LIFT SPEED**
- **DIRECTION OF TRAVEL**
- **SAFETY CIRCUITS**
- **STATISTICS** (status and availability)
- **WAITING TIME**
- **TRAFFIC RECORDING**
- **TRIP COUNTER**
- **RUN TIMER**
- **TICKETS**
- **CALL COMMANDS**

* Hardware not included in scope of delivery.

FURTHER INFORMATION

You want to learn more about our service or individual packages?

Visit our Website, write us an E-Mail or give us a call:

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*Hardware not included in scope of delivery.

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