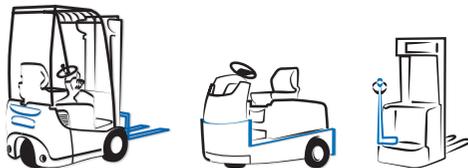


mobile
easykey®

MORE SECURITY – LOWER COSTS



Get To Know Your Fleet



Who uses Mobile Easykey?

With more than **1,000 customers in 25 countries**, Mobile Easykey is the **European market leader** in manufacturer-independent fleet management systems. With many innovations and the **patented Crash Sensor**, Mobile Easykey enjoys a unique position in the market. Half of the companies listed in the German stock index DAX belong to our customers.

The use of Mobile Easykey already **pays off from the first forklift**, simply because of the increased security in the company. As soon as several devices are used, even at different locations, the possibilities of **fleet management and optimisation** come into play. Mobile Easykey usually pays for itself immediately after implementation.

DAIMLER



Aurubis

SONY



Aleris

B/S/H/

BLG LOGISTICS



MERCK

FloraHolland



DFH

Rudolph Logistik Gruppe
Alles erreichbar.

Henkel

BASF
The Chemical Company

BÖHLER

ENGEL

Schwarzkopf

mondi

HÖRMANN
Tore • Türen • Zargen • Antriebe



Lufthansa

Sortimo

CLAAS



DB SCHENKER

saarstahl

voestalpine
ONE STEP AHEAD.

BOMBARDIER

Dunapack Mosburger
Packaging

EGGER

schüller

MEYER WERFT
PAPENBURG 1795

AMAG
Austria Metall AG

KLM

LGI

SCHAEFFLER



MAGNA
MAGNA POWERTRAIN
zumtobel group

MAN

Continental

PFEIFER

ÖBB
INFRA

Manner

BSW

ORF

SAINT-GOBAIN

SANDOZ
A healthy decision

sappi

WÜRTH

TRUMPF

VÖSLAUER

WOERLE
1889

FUNDERMAX



Avoidance of damage to forklifts



Tired of reading?

Mobile Easykey explained in 2 minutes (EN)

Video on www.mobileeasykey.com

This is Mobile Easykey

Mobile Easykey is a **manufacturer-independent modular fleet management system** for forklift trucks and machines of all kinds. The basis of the system is the **non-contact Access Control**, only for authorised drivers or operators via RFID transponders. Furthermore, Mobile Easykey offers a variety of possibilities to **efficiently control and optimise the fleet**. The introduction of Mobile Easykey in a company leads directly to a more prudent driving style and thus to a **significant reduction in vehicles and periphery damages**. Mobile Easykey **proactively ensures increased security** in the company.

In this brochure we explain all the possibilities of the hardware and software as well as the extensive accessories. **Our sales team will be happy to provide you with further information.**

Contact details can be found on page 19 of this brochure. Alternatively, simply send us a message using the **contact form on our website**.

Where does Mobile Easykey come from?

Mobile Easykey has been offering **quality from Germany** since 1999: development, production, distribution and service come from Friedrichsdorf and Frankfurt am Main.

Today, 35 employees work in the various areas and departments for Mobile Easykey. Mobile Easykey is backed by **Domnick+Müller, which has been family-owned since it was founded in 1956**.

The third generation of the Müller family has now moved into the management of the company and continues the success story. Mobile Easykey is a product that supports companies to **operate forklift fleets more sustainably**.

Domnick+Müller itself also optimises its processes under the premise of **sustainability**.

Consequently, this medium-sized company saves 100 tons of CO₂ per year through climate-neutral electricity, gas and printed products.



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Service | Contact

This is Mobile Easykey

Access Control



A **Personal Transponder** for the employees is particularly important for safety. A large part of the forklift trucks is operable with just a few keys – keys that anyone can order on the internet. The RFID transponder, however, has a **unique encoding**. And the software stores exactly **which user is allowed to operate which machine**. A **time limit** can also be defined – important e.g. for temporary workers. **Mandatory training and health checks** are also monitored with the Mobile Easykey software. For supervisors and workshop staff there are further special transponders. With the **Master Transponder**, a forklift can be released after a crash – after inspection. The **Workshop Transponder** is used for the transfer to the workshop.



Accident prevention

With the introduction of the system, the **number of accidents and the associated costs generally decrease** drastically.

This has a well-intentioned effect: Even if the personal data can only be read out in the presence of a works council employee, depending on the data protection setting, the anonymity of the user is removed. **After an accident, it is transparent who last used the forklift.**

With the introduction of the Personal Transponder, for example at **Lufthansa Cargo**, the **number of damages was reduced by 50%**. When staff knew that it was possible to trace who was driving, they drove more cautiously. Like many other companies, Lufthansa Cargo now uses the existing factory ID card for this purpose.

Maintenance and UVV

| Modul | Update Status | Modul Status | HybridID | UVV | Nutzungstunden Nächster Br.-Alarm bei | Nutzungstunden Nächster Br.-Alarm |
|----------------|----------------------|--------------|----------|------------------|---------------------------------------|-----------------------------------|
| Stadler 45-205 | ⚠️ Voll-Update nötig | 🟡 | 0038 | 23.09.2020 18:00 | 1666:00:00 | 1749:19:07 |
| Stadler 45-204 | ⚠️ Voll-Update nötig | 🟡 | 0038 | 23.09.2020 18:00 | Inaktiv | Inaktiv |
| Stadler 45-209 | ⚠️ Voll-Update nötig | 🟡 | 0038 | 23.09.2020 18:00 | 1099:00:00 | 10x 4.0 Tage! 47:55:08 |
| Stadler 45-211 | ⚠️ Voll-Update nötig | 🟡 | 0034 | 23.09.2020 18:00 | 2752:00:00 | 1:24:07 |
| Stadler 45-212 | ⚠️ Voll-Update nötig | 🟡 | 0031 | 02.10.2019 18:00 | Inaktiv | Inaktiv |
| Stadler 45-202 | ⚠️ Voll-Update nötig | 🟡 | 0039 | 23.09.2019 18:00 | 1995:00:00 | 10x 4.0 Tage! 40:02:14 |
| Stadler 45-205 | ⚠️ Voll-Update nötig | 🟡 | 0037 | 23.09.2019 18:00 | Inaktiv | Inaktiv |

In the Mobile Easykey software, appointments for UVV and maintenance can be stored. The reminders are made according to the **traffic light system**: green, yellow, red and red flashing in case of overdue. In the last stage, additional warnings are also issued via **pop-up windows and e-mails**, e.g. to the security officer.

Pro-active, the vehicle can also be shut down in case of overdue maintenance and can only be started with the master- or workshop transponder. While UVV tests are carried out according to rigid time intervals, thanks to Mobile Easykey, maintenance can be carried out **dynamically, according to the effective hours of use**.

Departure Control



At the start of work, shift change or after a crash, each user must perform a **short technical check**. With the **modular plus** module, this is done via the **display**. The questions can be worded individually for each vehicle type. In addition, a country code can be stored in the transponder for each driver, so that the departure check is carried out **in the respective national language**. The changing yes/no answer **protects against memorisation**.



Tired of reading?

Mehr Sicherheit mit Mobile Easykey (DE)

Video auf www.mobileeasykey.de

Crash Sensor

The **patented** Crash Sensor works dual. A **three-axis acceleration sensor** is supplemented by a **body sound microphone** that measures the sound of the body in the fixed mass of the vehicle. If both sensors are activated within 250 milliseconds, a **crash alarm** is triggered. Then various, freely selectable scenarios are possible: from an entry in the logbook of the software to the time-delayed shut down of the forklift.

”

Since the introduction of Mobile Easykey and the Crash Sensor two years ago, there has been no serious accident.

Gernot Schmidt, Saarstahl



The screenshot shows the 'Crash Einstellung' configuration window. It includes sections for 'Hardware konfigurieren', 'Crashverhalten (bis Modulversion F-49)', and 'Crashverhalten (ab Modulversion F-50)'. The 'Crashverhalten' sections contain tables for 'Stufe I', 'Stufe II', and 'Stufe III', with columns for 'Schutzzeitung', 'Mikrofon', 'Active Crash', and 'Passiver Crash'. Each row has checkboxes for 'entstellen' and 'erschalten', and dropdown menus for 'dauhaft' and 'nur für'. There are also input fields for 'Sekunden'.

Figure: Configuration of the Crash Sensor in the Software

Compliance

Mobile Easykey is in close contact with **trade associations, occupational safety officers and associations** such as VDI (Association of German Engineers) and VDMA (Association of German Mechanical- and Plant Engineering). The current legal regulations are always considered in the further development of the system. Mobile Easykey supports companies in a variety of ways.

In addition to the measures already mentioned, such as Access Control, shut down after an accident or compliance with UVV intervals, the **documentation and archiving** of all processes in the logbook of the software is an important factor.

”

According to the Industrial Safety Regulations, every contractor is obliged to secure his forklift trucks against unauthorised use. Mobile Easykey helps you in fulfilling these requirements – simple and cost-effective.



Volker Quirin, Head of Department and Development Mobile Easykey

Data Security

In most companies the **protection of personal data** has been a security-relevant issue, not only since the **General Data Protection Regulation**. Mobile Easykey's GDPR compliance is **independently verified and confirmed**. Read more about this topic on the following pages in the 'Software' chapter.



IT-Consulting & Audits
Privacy, ISO 27001
ISMS, ITIL

Audit Report Mobile Easykey Manager

For

Domnick+Müller GmbH + Co. KG, Max-Planck-Strasse 11,
61381 Friedrichsdorf

Author: Paulette Feller
Date: 12.03.2020
Version: 1.1

Page 1




Figure: Test report available on www.mobileeasykey.com

More Security

Accidents

Lower costs due to **less impact damage**: The basis for this is the Personal Transponder and the patented Crash Sensor. Every login and every crash are documented in the **logbook of the software**. With appropriate permissions, controllers can read out who operated the device and, if necessary, who caused damage. The cost of impact damage in industrial plants and warehouses can be immense. Not only the forklift can be damaged but the peripherals, e.g. high racks and fire protection gates. These costs can be much higher than those of the damage to the forklift.

“*Since we implemented Mobile Easykey, the costs of impact damages have been reduced and, of course, the safety of our employees has been significantly improved.*”

Steffen Rödger, Rudolph Logistik

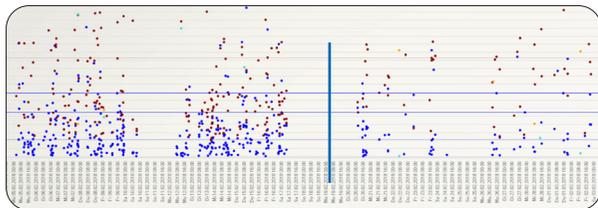
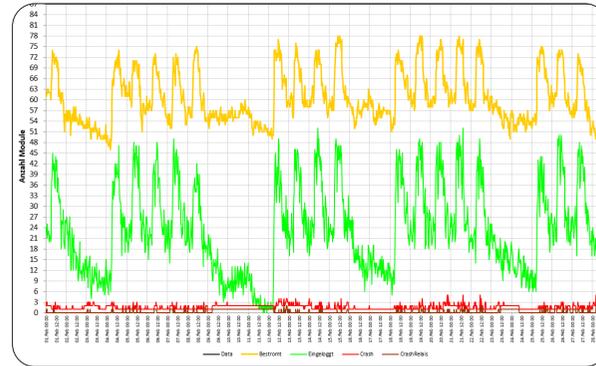


Figure: The 'crash-cloud' with the records of the Crash Sensors shows significantly fewer events after the introduction of Mobile Easykey (blue vertical line)



Fleet Size



The all-important question for the fleet manager is: **How many vehicles does the operation actually need?** In more than 20 years of Mobile Easykey, the software has not once shown that there are too few forklifts in the company. The analysis shown here is a typical example. The yellow line shows the powered vehicles and the green line which are actually used. **A quarter of the fleet could be shut down immediately.**

“*In addition to the reduced impact damage, we also note that the forklift fleet is growing more slowly than the capacity utilisation at our sites.*”

Hans Christian Sproedt, Rudolph Logistik



Sustainability

Declining impact damages and fleet sizes are important sustainability factors. In the case of fuel power units, the **Presence Detection** also **reduces energy consumption**. The shutdown takes place after a freely definable period. In electric vehicles, the **Electrolyte Sensor** protects the batteries from low levels. The Mobile Easykey product itself can also be described as sustainable, simply because of its **long service life**. The modules can be **easily removed and refitted** on purchase of a new forklift.

“*The quality of the modules is undeniable. The system installed 15 years ago still works flawlessly today.*”

Thomas Müller, Lufthansa Cargo



Daimler

Impact damage _____ **- 20 %**
 Fleet size _____ **- 10 %**
 Maintenance costs _____ **- 10 %**

Source: VDI Report 2011, Figures for Plant Germersheim

Volkswagen OTLG

Impact damage _____ **- 40 %**
 Fleet size _____ **- 15 %**
 Maintenance costs _____ **- 15 %**

Source: Job Report 2015, figures OTLG Germany

@ Tired of reading?

Kosten senken mit Mobile Easykey (DE)
 Video auf www.mobileeasykey.de

Maintenance

Dynamic maintenance planning also contributes to increased sustainability. This does not take place at rigid intervals, i.e. not after six or twelve months, but according to **effective hours of use**. This saves maintenance costs and, of course, downtime, in which vehicles are in the workshop and cannot be used. And: **Regularly maintained forklifts have a longer service life!**

Leasing

Some forklifts have reached their contractually agreed maximum hours of use well before the end of the lease. Others are returned to the lessor with half of the possible hours. The Mobile Easykey software offers an **exact forecast at any time until the end of the leasing contract**.

“*We definitely have total control of our leasing contracts. Due to the exact determination of the operating hours by the software, we remain within the agreed warranty periods for all machines.*”

Marc Schölermann, ArcelorMittal



Job Reports | Success Stories

The publications about Mobile Easykey in the trade press provide a lot of useful information. Renowned German magazines such as 'materialfluss', 'Technische Logistik' or 'dhf Intralogistik' regularly report on Mobile Easykey and its customers.

Development partner for 20 years

Lufthansa Cargo

Fleet management for route trains

BSH Bosch Siemens Household Appliances

Safety first with smart lock

Bombardier

Forklifts on Google Earth

Seaport Brake

Safety from the Blue Box

ArcelorMittal

Intelligent fleet management for forklift

Rudolph Logistik



Total Costs

With the software option 'Finance' of the Mobile Easykey software, the fleet manager keeps an **overview of the costs**: from the individual forklift to the entire fleet. Investment decisions become much easier. This tool is customizable. **Various alarms warn in good time** if something 'gets out of hand'. Freely configurable import filters provide maximum flexibility for **automatic recording of costs**.

The inclusion of **operating materials** (electricity, diesel, propellant) is also possible and creates even more **transparency in the effective operating costs**.

| Modul | Monat | Kategorie | Betrag | Ignorieren | Rechnungsnummer | Rechnungsname | Teilrechnung | Rechnungsdatum |
|---------|--------------|-----------------|------------|------------|-----------------|------------------------|--------------|----------------|
| SZ 0002 | Februar 2017 | Wartungskosten | 387,20 € | Nein | 431 | Wartung 200h | Nein | 07.02.2017 |
| SZ 0003 | Januar 2017 | Wartungskosten | 188,87 € | Nein | 361 | Wartung 300h | Nein | 14.01.2017 |
| SZ 0003 | Oktober 2016 | Wartungskosten | 201,31 € | Nein | 291 | Wartung 200h | Nein | 28.10.2016 |
| CT 0005 | Oktober 2016 | Wartungskosten | 197,70 € | Nein | 410 | Wartung 100h | Nein | 21.10.2016 |
| CT 0005 | August 2016 | Wartungskosten | 112,10 € | Nein | 316 | Wartung 100h | Nein | 24.08.2016 |
| CT 0005 | August 2016 | Einzelarbeiten | 111,78 € | Nein | 268 | Einzelarbeiten Spiegel | Nein | 04.08.2016 |
| SZ 0003 | Juli 2016 | Wartungskosten | 196,00 € | Nein | 231 | Wartung 100h | Nein | 17.07.2016 |
| CT 0005 | Juli 2016 | Wartungskosten | 236,54 € | Nein | 235 | Wartung 500h | Nein | 01.07.2016 |
| SZ 0003 | April 2016 | Ers-Anschaffung | 3.000,00 € | Nein | 174 | Anschaffung | Nein | 08.04.2016 |
| SZ 0002 | April 2016 | Ers-Anschaffung | 3.000,00 € | Nein | 164 | Anschaffung | Nein | 08.04.2016 |
| CT 0005 | April 2016 | Ers-Anschaffung | 6400,00 € | Nein | 123 | Anschaffung | Nein | 18.04.2016 |

Figure: Individual documents recorded in the software option 'Finance'

“*The beginnings with the system have grown historically, so to speak. It is only in the course of time that we become aware of how powerful and helpful Mobile Easykey is.*”

Hans Christian Sproedt, Rudolph Logistik



Lower Costs



WITH integration into IT infrastructure

This is a simplified representation of the two basic ways of implementation. The possibilities are – also because of the wide range of accessories – much more extensive.



WITHOUT integration into IT infrastructure



Tired of reading?

Die Produkte: Mobile Easykey Module (DE)
Video auf www.mobileeasykey.de

smart lock

smart lock is the **cost-effective entry** into the Mobile Easykey family. The smart lock modules 1, 2 and 3 enable the compact installation **instead of the existing switch lock**. All security-relevant basics of Mobile Easykey are already included here. It is controlled via the Mobile Easykey Manager smart.

smart lock 1 is suitable for **small vehicles** such as sweepers or drawbar devices. The data transmission is carried out by infrared cable.

smart lock 2 can be combined with a **Presence Detection**, which is absolutely necessary for driver's seat devices. The **data transfer takes place automatically** in the 'passing' via Bluetooth to the Mobile Easykey Bluetooth Base Station, which is installed in a central location.

smart lock 3 has a Universal Reader. In addition to the RFID transponders, the **factory ID cards** of the employees can also be used for login. smart lock 3 transmits and receives data via Bluetooth. **Upgrade from MEKM 2021:** Load Sensor and Battery Tool 2 can now also be used with the smart lock 3 module.



modular

modular is the classic and all-rounder from Mobile Easykey. This module is freely configurable and meets all customer requirements – from basic equipment to high-end. **Access Control** is, of course, always there. Also standard is the **Crash Sensor**. 95 percent of all modular modules are equipped with it. The data is exchanged over the usually existing **Wi-Fi network**. Alternatively, the data can also be transmitted via **Bluetooth, mobile phone or cable**.

With the **optional sensors** such as the EBZ Power Sensor, the Event Tool or the Loading Sensor, Mobile Easykey determines every second whether the vehicle is currently powered or driving, whether it is moving load or whether it is currently unused and thus available.

Other features that are possible with modular: **Wi-Fi Indoor Locator and GPS Outdoor Locator**. You can find out more about this in the chapters 'Software' and 'Accessories' in this brochure.

The installation is carried out by **retrofitting** or simply with the **Mobile Easykey Interface**, which is already available **ex works** at most forklift manufacturers.



modular plus

modular plus is the latest product from Mobile Easykey. In addition to the **display with its comfortable and safe Departure Control**, the biggest difference compared to modular is the use of the so-called VDI Interface. This was developed by Mobile Easykey in close coordination with the VDI and well-known forklift manufacturers. **Access to the CAN-bus** of the forklift system enables the generation of further **vehicle-related data**, which makes the statistics and analyses of the Mobile Easykey software even more comprehensive and meaningful. In addition, information and commands, such as unlocking, can be sent directly to the vehicle's electronics.

” *The modular system allows a targeted use of Mobile Easykey – according to our individual needs.*

Hasso Lotz, Volkswagen OTLG



Modules

MEKM Mobile Easykey Manager EKS-100

The software, the Mobile Easykey Manager (MEKM), is the **heart of the system**. On the one hand, it serves the **management of the fleet and its users**. On the other hand, data is collected via the software and turned into **valuable statistics and analyses**. The software is **GDPR compliant**. This is constantly independently checked and confirmed. The software meets the highest data protection requirements. The principles **'Privacy by Design'** and **'Privacy by Default'** are more than fulfilled. The current test report is available on the www.mobileeasykey.com website.

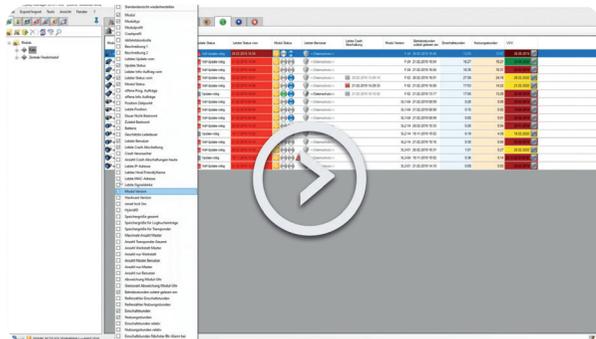
”

*The software is really
easy to understand.*

Gernot Schmidt, Saarstahl



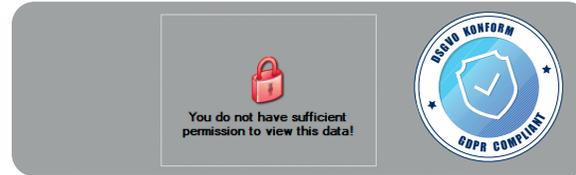
The **intuitive** Mobile Easykey Manager can be purchased or rented as a **license model**. The latter in combination **with valuable services** under a licensing agreement. The purchase version includes three updates. Support by Mobile Easykey is provided only for current software installations. The support period for the purchase version is thus limited to the term of a maximum of four versions, i.e. according to the current state to a maximum of two years. Thereafter, the software must be repurchased, or a license agreement is concluded if support is requested by Mobile Easykey.



Standard functions of the Software (excerpt)

Data Protection

- Assignment of operating rights for the software in accordance with the respective data protection guidelines of the company



Documentation

- Logbook for recording all operations with time stamp (protected by operating rights from unauthorised access)

Illustration of the Corporate Structure

- Structure of equipment management according to the company structure (locations, companies, departments, etc.)

Vehicle Profiles

- Creation of vehicle profiles with standardised settings for individual product classes, e.g. with setting of the time for the auto shutdown

Vehicle Classes

- Breakdown of vehicles and machinery by group or type

Evaluation

- Reading out usage- and cut-in hours



Fancy more knowledge?

Mobile Easykey Software Basics Grundkurs (DE)

24/7 Webinar auf www.mobileeasykey.de

Crash Profiles

- Creation of the individually definable three-stage crash profiles: light, medium and heavy (possible scenarios: logbook entry only, lighting up of the LEDs on the module, time-delayed shutdown)
- Possibility to notify individual- or all software users by pop-up or e-mail

Driver Management

- Record drivers with information such as driving permits by vehicle type and necessary training or examination, e.g. G25 (occupational health check) (each with individually definable expiration data)
- Assignment of Personal Transponders so that only vehicles that are necessary for the work and for which the driver has access rights can be operated

Management of Special Transponders

- Assignment of Master Transponders for supervisors for activation after a crash and assignment of Workshop Transponders for maintenance employees, for transfer and work on vehicles in workshop mode

Training Management

– Standard from MEKM version 2021–

- Important tool for compliance with legal regulations for (post-) training: use of driver management alarms and handling of complete training: from assigning drivers to check-in/check-out, from assigning Personal Transponder to documentation and archiving of complete instruction certificates

Maintenance and UVV – Standard from MEKM version 2021 –

With this software option for pro-active security, **up to ten time-alarms** can be configured per module (e.g. for the due date of a UVV test) and one limit for the cut-in and/or usage hours. When a time alarm is reached or a defined limit is exceeded, an **alarm is automatically triggered**. This is displayed in the information center and can appear as a pop-up window if desired, and/or sent to **one or more e-mail addresses**. In addition, an alert can be issued in good time before reaching the **alarm limit**. It is also possible to send an **'overdue message' by e-mail**, e.g. to the security officer, if the alarm is not acknowledged accordingly.

MEKM place – Standard from MEKM version 2021 –

MEKM place is the new app from Mobile Easykey. Here everything is in one place, summarized in one app MEKM place creates new opportunities for intralogistics. **battery, smart, go, crash, service call** and **call a fork** are the functions for electrolyte level, departure control, damage reports, repair requirements, request notifications and much more. Mobile and convenient on your smartphone at any time.



Information Centre

▮ All vehicles with current status at a glance, individually configurable

| Modul | Modultyp | Modul Status | Dauer Nicht Bestromt | Zuletzt Bestromt | Einschaltstunden | Nutzungsstunden | Nächste Wartung bei Nutzungsstunden | DGLUV 68 |
|--------------------|---------------|--------------|----------------------|---------------------|------------------|-----------------|-------------------------------------|------------|
| @MEKM 001 1Schicht | smart lock | | 0:02:01 | 30.09.2015 20:35:25 | 6427:38:50 | 3877:49:00 | 4000:00:00 | 01.02.2017 |
| ES 0028 1 Schicht | smart lock | | 0:01:24 | 30.09.2015 20:32:01 | 6886:50:23 | 4164:51:06 | 4500:00:00 | 01.11.2016 |
| ES 0029 1 Schicht | smart lock | | 0:02:41 | 30.09.2015 21:07:58 | 7838:04:38 | 4457:13:21 | 4500:00:00 | 01.10.2016 |
| ES 0030 1 Schicht | smart lock | | 0:02:06 | 01.10.2015 06:22:29 | 6001:55:11 | 3617:19:12 | 4000:00:00 | 11.11.2017 |
| ES 0031 2 Schicht | smart lock | | 0:03:26 | 30.09.2015 08:13:53 | 2406:56:16 | 3827:52:14 | 4000:00:00 | 11.05.2017 |
| ES 0032 2 Schicht | Basic | | | | 6489:00:40 | 3927:02:20 | 4000:00:00 | 11.05.2017 |
| ES 0033 2 Schicht | Crash+ Remote | | 0:02:54 | 30.09.2015 10:10:34 | 1316:41:28 | 4090:43:27 | 4500:00:00 | 19.11.2016 |
| ES 0038 3 Schicht | Crash+ Remote | | | | 173:55:23 | 100:07:37 | 500:00:00 | 16.03.2017 |
| ES 0039 3 Schicht | Crash+ Remote | | 0:04:13 | 30.09.2015 18:44:05 | 2089:05:44 | 1393:59:54 | 1500:00:00 | 08.02.2017 |
| ES 0040 3 Schicht | Crash+ Remote | | 0:03:19 | 01.10.2015 08:54:50 | 2033:17:43 | 1343:29:36 | 1844:00:00 | 26.11.2016 |
| ES 0041 4 Schicht | Crash+ Remote | | 2:15:48 | 01.10.2015 10:53:04 | 1991:45:40 | 1367:55:14 | 1500:00:00 | 16.03.2017 |
| ES 0042 4 Schicht | Crash+ Remote | | 0:03:09 | 01.10.2015 09:44:05 | 1731:36:23 | 1190:57:06 | 1500:00:00 | 08.02.2017 |
| ES 0043 4 Schicht | Crash+ Remote | | 0:02:40 | 30.09.2015 20:20:55 | 3336:30:14 | 2353:52:16 | 3500:00:00 | 11.05.2017 |
| ES 0044 4 Schicht | Crash+ Remote | | 0:03:49 | 01.10.2015 11:55:08 | 2873:43:03 | 2090:31:27 | 2500:00:00 | 11.11.2017 |
| ES 0045 | Crash+ Remote | | 0:02:33 | 30.09.2015 19:38:07 | 3421:37:57 | 2500:37:56 | 3000:00:00 | 11.11.2017 |
| ES 0046 | Crash+ Remote | | 0:04:29 | 30.09.2015 10:22:34 | 3379:29:34 | 2440:59:35 | 2500:00:00 | 01.10.2016 |
| ES 0047 | Crash+ Remote | | 0:02:57 | 30.09.2015 09:51:57 | 3138:52:11 | 992:00:00 | 1992:00:00 | 11.05.2017 |
| EZ 0006 | Crash+ Remote | | 0:02:56 | 30.09.2015 12:50:08 | 2791:11:24 | 1690:29:27 | 2191:00:00 | 11.11.2017 |
| EZ 0007 | Crash+ Remote | | | | 1297:53:55 | 852:54:52 | 1000:00:00 | 11.11.2017 |
| MS 0002 | Crash+ Remote | | | | 216:59:29 | 156:57:36 | 1001:00:00 | 11.05.2017 |

Other Features

- ▮ Fulfillment of the requirements of the VDI standard 4458 (fleet management for forklift trucks)
- ▮ Automatic, bi-directional data transfer via Wi-Fi, Bluetooth, mobile or cable (depending on the equipment of the module)
- ▮ Easy Translate for translation into any language
- ▮ Document management for depositing e.g. service reports, logs, invoices, etc.
- ▮ Import and export of data, also automated
- ▮ Manage all of a company's technical equipment, even without the Mobile Easykey module installed
- ▮ Notification of various events (e.g. oil pressure, electrolyte level; see also accessories: EKZ-066 Event Tool)
- ▮ Automated back-ups after freely definable time period



Software

i easy²

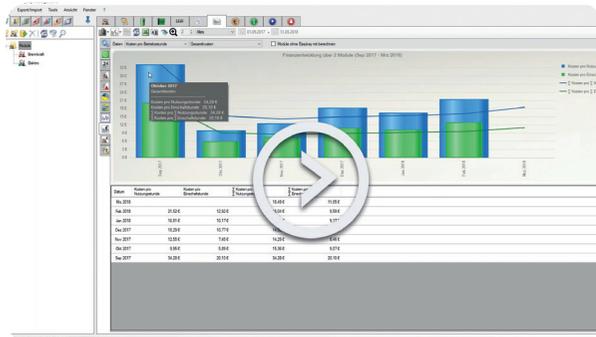
Fleet management made easy: **without integration into the IT infrastructure.**

Particularly suitable for this are the Mobile Easykey Modules **smart lock 2 and 3**, which are installed instead of the existing switch lock. The **Easy Point 2** is installed at a central location. **Almost in passing, the modules communicate** with the Easy Point 2 via **Bluetooth**.



The Easy Point 2 is a **full-fledged PC** with touchscreen in robust production according to industry standard. Here the **software Mobile Easykey Manager** is installed in the **smart** version. That is all it takes to use all Mobile Easykey's **security-relevant basic features**:

- ! Access Control with Personal Transponder
- ! Monitoring of G25 health checks
- ! Monitoring of UWV appointments
- ! Recording of cut-in/used hours
- ! Logbook for recording all operations



Option: Finance EKS-105

The software option Finance provides an accurate **overview of the costs** for each vehicle. **The hours of use are set in relation to the costs.** You can record and evaluate costs in different categories. This software option is **customisable**. From some manufacturers digital invoices can already be imported.

With various alarms you can be warned at any time if something is 'out of control'. **Freely configurable import filters** provide maximum flexibility for automatic cost capture. The intake of **operating materials** (electricity, diesel, propellant) is also possible and creates even more transparency in the effective operating costs.

| Modul | Monat | Kostenart | Betrag | Ignorieren | Rechnungsnummer | Rechnungsname | Teilrechnung | Rechnungsdatum | Gesamtbetrag | Berechnung | Firma | Person |
|---------|--------------|------------------|------------|------------|-----------------|-----------------------|--------------|----------------|--------------|------------|-------|------------------|
| SZ 0002 | Februar 2017 | Wartungskosten | 387,00 € | Nein | 451 | Wartung 2500h | Nein | 07.02.2017 | 387,00 € | Sofort | Mulag | Peter Kondas |
| SZ 0003 | Januar 2017 | Wartungskosten | 158,97 € | Nein | 364 | Wartung 3000h | Nein | 14.01.2017 | 158,97 € | Sofort | Mulag | Konstantin Hudon |
| SZ 0003 | Oktober 2016 | Wartungskosten | 201,31 € | Nein | 291 | Wartung 2000h | Nein | 20.10.2016 | 201,31 € | Sofort | Mulag | Max Müller |
| CT 0005 | Oktober 2016 | Wartungskosten | 197,70 € | Nein | 410 | Wartung 1500h | Nein | 21.10.2016 | 197,70 € | Sofort | Mulag | John Meyer |
| CT 0005 | August 2016 | Wartungskosten | 112,10 € | Nein | 316 | Wartung 1000h | Nein | 24.08.2016 | 112,10 € | Sofort | Mulag | Max Müller |
| CT 0005 | August 2016 | Gewaltschaden | 111,78 € | Nein | 268 | Gewaltschaden Spiegel | Nein | 04.08.2016 | 111,78 € | Sofort | Mulag | John Meyer |
| SZ 0003 | Juli 2016 | Wartungskosten | 156,00 € | Nein | 231 | Wartung 1000h | Nein | 17.07.2016 | 156,00 € | Sofort | Mulag | John Meyer |
| CT 0005 | Juli 2016 | Wartungskosten | 236,54 € | Nein | 235 | Wartung 500h | Nein | 01.07.2016 | 236,54 € | Sofort | Mulag | John Meyer |
| SZ 0003 | April 2016 | Erst-Anschaffung | 32600,00 € | Nein | 174 | Anschaffung | Nein | 08.04.2016 | 32600,00 € | Sofort | Mulag | Max Müller |
| SZ 0002 | April 2016 | Erst-Anschaffung | 32600,00 € | Nein | 164 | Anschaffung | Nein | 08.04.2016 | 32600,00 € | Sofort | Mulag | John Meyer |

| Modul | Berechnet ab | Berechnet bis | Logbuchdaten verfügbar bis | Vorletzter Gesamtbetrag | Letzter Gesamtbetrag | Gesamtbetrag | Vorletzte Gesamtkosten pro Einschaltstunde | Letzte Gesamtkosten pro Einschaltstunde | Gesamtkosten pro Einschaltstunde | Vorletzte Gesamtkosten pro Nutzungsstunde | Letzte Gesamtkosten pro Nutzungsstunde | Gesamtkosten pro Nutzungsstunde | Einschaltstunden Gesamt | Letzte Einschaltstunden Gesamt | Vorletzte Einschaltstunden Gesamt |
|---------|--------------|---------------|----------------------------|-------------------------|----------------------|--------------|--|---|----------------------------------|---|--|---------------------------------|-------------------------|--------------------------------|-----------------------------------|
| CT 0005 | April 2016 | Februar 2017 | 03.12.2016 17:45 | 64658,12 € | 64658,12 € | 64658,12 € | 34,14 €/h | 34,14 €/h | 34,14 €/h | 40,52 €/h | 40,52 €/h | 40,52 €/h | 1893 h | 1893 h | 1893 h |
| SZ 0002 | April 2016 | Februar 2017 | 28.02.2017 07:00 | 32600,00 € | 32600,00 € | 32987,00 € | 12,42 €/h | 11,77 €/h | 11,20 €/h | 15,00 €/h | 14,17 €/h | 13,51 €/h | 2944 h | 2770 h | 2624 h |
| SZ 0003 | April 2016 | Februar 2017 | 11.02.2017 00:15 | 32957,31 € | 33116,28 € | 33116,28 € | 11,45 €/h | 10,48 €/h | 10,28 €/h | 15,84 €/h | 14,28 €/h | 13,97 €/h | 3222 h | 3156 h | 2877 h |



Fancy more knowledge?

Kostentransparenz mit dem Finanztool (DE)
24/7 Webinar auf www.mobileeasykey.de

Option: Indoor Locator EKS-119



A cost-effective and extremely easy-to-implement variant of indoor tracking provides this **access point-accurate Wi-Fi location**. The more access points are installed, the more accurate the device is to locate. The fleet manager thus has

a comprehensive overview of the entire operation. Which device is in which area in which state: logged in, powered, in crash, in workshop mode, etc. The only requirement is a current Mobile Easykey Wi-Fi module. **This solution comes without retrofitting and without interfering with the hardware!**

” *Now we start with real fleet management. We work on topics such as indoor location and utilisation analyses for scheduling. For this we get valuable data from the Mobile Easykey software.*

Dr. Ralf Hölper, Lufthansa Cargo



Option: Outdoor Locator EKS-118

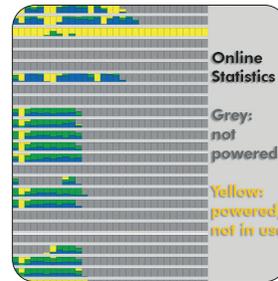
With our mobile phone GPS module, you have the possibility to **locate machines outdoors**. For this we regularly record the position data and even store it in the logbook if desired. With a simple click on the location data, you can view the exact position e.g. on **Google Earth**.

” *We always need to know which forklift is available where. Those who are not flexible as a niche provider are fighting a losing battle.*

Herbert Jacobs, Seaport Brake



Statistics live EKS-106



The Software Option Statistics Live shows processed, **visualised statistics** that are **automatically** updated in the background with each new logbook entry. This way you get an **up to date status of your fleet at all times**. All graphics and raw data can of course be **exported** and used for presentations or further processing.

MEKM Software License Agreement EKS-911 und 912 (includes EKS-100)

All around carefree for **1€**: This is the amount you pay – **per vehicle, per month**. In addition, there is a flat rate of **200 € per month per MEK instance**. This way, we ensure the smooth functioning of the software in your company.

- ▮ Use of the complete software incl. all software options
 - ▮ Support through the Help Desk with defined response times over the entire contract period
 - ▮ Software updates, at least 1 x per year
 - ▮ Firmware Updates
 - ▮ Software function control, 1 x monthly
- The terms of the contract, which we are happy to provide as a draft, apply to all services.

MEKM smart EKS-001

The ‘little brother’ of the MEKM is called MEKM smart – analogous to the smart lock module family. It is just as **simple and intuitive to use** as the MEKM and also meets the **requirements of the VDI standard 4458**.

- ▮ Control of Access Control
- ▮ Planning of UvW and G25
- ▮ Recording of cut-in and usage hours
- ▮ GDPR compliance
- ▮ Logbook for recording all operations
- ▮ Easy Translate



Software

Data Transfer W-Fi



The Mobile Easykey Wi-Fi module is an in-house development. In function and performance, we **exceed the requirements of the Federal Office for Security in Information Technology** by twice as much! Easy encryption with WPA2 or via a radius server and with certificates up to 4096 bits are no problem for us. Of course, we 'radio' if necessary, in the 2.4 and or 5 GHz range. An associated **configuration tool enables easy and fast commissioning.**

” *Especially the fast data transmission via our existing Wi-Fi infrastructure is a real progress.*

Dr. Ralf Hölper, Lufthansa Cargo



Bluetooth



The Bluetooth module is also an in-house development and is based on the same platform as our Wi-Fi module. All our **Bluetooth devices are delivered configured** and work immediately without any additional effort – of course secured and protected from third-party access. Our hardware only communicates among itself and after initial initialisation, only with a specific database!

Mobile | GPS



Our mobile network module is also an in-house development. It is ideal for all areas that cannot be covered by Wi-Fi or Bluetooth. **Optionally, you can equip the mobile phone modules with GPS** and display the current location of your vehicles in the MEKM. For operation, you need a **SIM card from any network provider** to send data to the module or to read it out. In normal operation, less than 250 MB of data per month is sufficient.

Easy Point 2

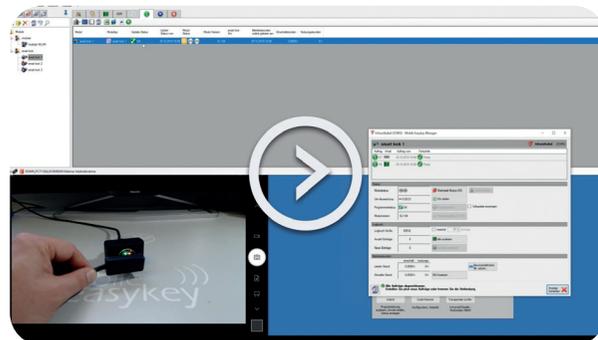


This **stand-alone PC** in the robust industrial standard is part of the easy²-concept, which greatly simplifies the **entry into fleet management** with Mobile Easykey. The **MEKM smart** software is pre-installed to control the smart lock modules. The Easy Point 2 can do **without integration into the IT infrastructure.** The smart lock 2 and 3 modules send or receive their data via Bluetooth as they pass by. With smart lock 1, transmission via infrared cable is possible.

Bluetooth Base Station



The compact Bluetooth Base Station is **mounted centrally**, e.g. at a gas station or battery charging station, so that each vehicle can **regularly transmit and receive data** from the Mobile Easykey software.



Fancy more knowledge?

Inbetriebnahme WLAN und Bluetooth (DE)
24/7 Webinar auf www.mobileeasykey.de

Transponder EKZ-001



The **passive transponders** (EM4100/4102/ 4200) give users access to the forklift trucks, if they are entitled to do so. We offer **different colours and styles**.

The transponder is also available in a special **EK**

protection version. With the transponders we offer, we guarantee that each ID has been assigned only once and that the module is activated even at a distance of up to 3 cm. With the optional Universal Card Reader, we support the following variants:

125 kHz

- EM4100/4102/4200 (Unique Standard Mobile Easykey Transponder)
- EM4150, EM4450
- HITAG 1
- HITAG 2
- HITAG S
- HID Proximity

13.56 MHz

- MIFARE Classic
- MIFARE DESFire
- LEGIC prime
- LEGIC advant
- HID iCLASS

The supported reading methods are constantly being expanded. In the run-up to a project, we check the customer's own transponders for compatibility and reading range on our own test stand.

Functional Coil EKZ-020



The Functional Coil is used for the practical attachment of the own transponder 'to the person'. The coil can be pulled out up to approx. 70 cm and carries the transponder back automatically and safely. The Function Coil is

available in different colours. **Lost transponders are thus a thing of the past.**



Basic Equipment per Location

smart

- EKZ-051 Programming Cable smart
- EKZ-006 Desktop Reader (or EKZ-007)
- EKS-101 Software MEKM smart
- EKZ-004 Bluetooth Stick (smart lock 2 und 3)
- EKZ-051 Infrared Cable (smart lock 1)



modular

- EKZ-050 Programming Cable modular
- EKZ-006 Desktop Reader (or EKZ-007)
- EKS-100 Software MEKM



modular plus

- EKZ-052 Programming Cable modular plus
- EKZ-006 Desktop Reader (or EKZ-007)
- EKS-100 Software MEKM



Desktop Reader Mobile Easykey EKZ-006



The **Mobile Easykey transponders** (EM4100/4102/ 4200) can be conveniently assigned to different users or batteries via the **Mobile Easykey Desktop Reader**. The Mobile Easykey software contains all the necessary drivers and functions.

All common transponders (125 kHz and 13.56 MHz) can be conveniently assigned to the different users or batteries via the **Universal Desktop Reader**. The Mobile Easykey software contains all the necessary drivers and functions.

The table readers can also be used as an additional **authentication point to log on to the software**.

Desktop Reader Universal EKZ-007



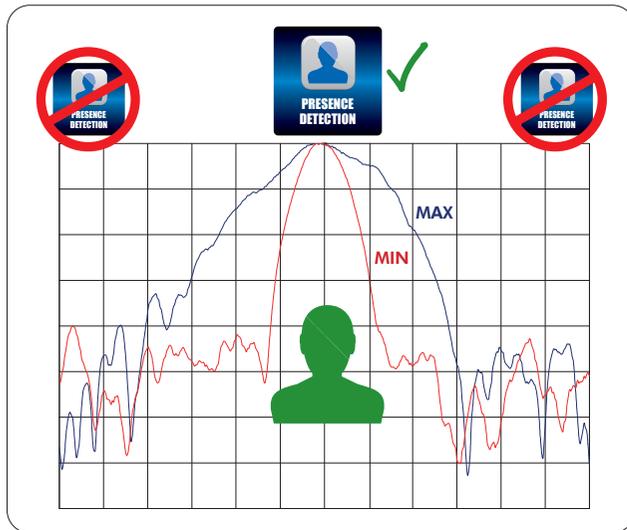
Data Transfer

Presence Detection EKZ-095



Radar Presence Detection is used for the safe detection of the presence of a driver and the **automatic shutdown** of the forklift truck when leaving and thus also to **save energy**. It is used when the vehicle itself does not have sensors (e.g. seat

contact switches) for detection or if you do not want to intervene in the vehicle electronics. With this Presence Detection, usage hours can also be displayed. **Plug & Play setup** is possible in a few minutes.



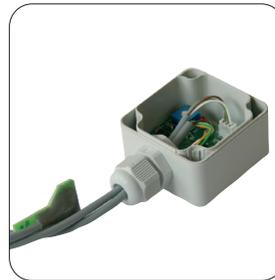
Crash Sensor Remote EKZ-140



The patented digital Crash Sensor remote is **unique worldwide**. The dual system has a **three-axis accelerometer and a body sound microphone**. Its settings are determined by a learning trip in operation and defined in **three crash**

stages in the Mobile Easykey software. Scheduled actions are defined for each level. For example, level 1 may only be documented in the logbook, an e-mail is sent to the safety officer at level 2 and, at level 3, the vehicle is shut down or placed in a crawl speed. The sensor can be used in conjunction with the modules **modular** and **modular plus**.

EBZ Power Sensor EKZ-056



The EBZ Power Sensor generates logbook entries for the hours of use in **electric vehicles**. These entries automatically appear in the logbook every 15 minutes and record the **used time during the 15-minute period**.

The data can be used to create **detailed evaluations of the actual use** of the vehicles. The efficient use of the EBZ Power Sensor is made possible by the software option 'Maintenance and UUV'.

LED Departure Control EKZ-048



With the departure control, drivers can log the condition of the forklift truck in the logbook of the Mobile Easykey software, before starting the journey by pressing a **green or red button**.

Event Tool EKZ-066



The Event Tool can be used to record the hours of use and two other events. **Channel 1 is used to record the hours of use of the vehicle**. These entries automatically appear in the logbook every 15 minutes and record the used time

during the 15-minute period. The data can be used to create detailed evaluations of the actual use of the vehicles.

Channels 2 and 3 can be freely assigned with a switching signal: e.g. journeys with and without load (corresponding sensor provided) or warning indicators of the vehicle. All data appears in the logbook and can be used for reports and statistics. The efficient use of the Event Tool is made possible by the software option 'Maintenance and UUV'.

NEW Loading Sensor EKZ-068



The Loading Sensor enables **new insights into the intralogistic processes**. An **ultrasonic sensor** attached to the fork carrier scans the fork prongs. It determines whether there is load on the fork. Each change is entered with a **time stamp**

in the logbook of the software. The data is transmitted from the sensor to the Mobile Easykey module via **Bluetooth**. The sensor can thus be **implemented without complex wiring**. The installed battery has a lifespan of several months.

NEW Battery Tool 2 EKZ-065



A unique battery-ID provides clarity about **which battery is in which vehicle**. **Electrolyte monitoring** increases service life and the battery lifetime performance check provides valuable data.

With corresponding **alarm profiles** for service life, battery replacement, constant power generation, etc., the Battery Tool 2 is the basis for **battery management without major investments**.

In addition to the vehicle, you now also have an eye on the battery. The Battery Tool 2 sends its data **wirelessly** to the module **via Bluetooth**. **Installation or retrofitting are easy and quick to perform**.

MEK Interface modular basic EKZ-708



The Mobile Easykey interface is used for the **simple implementation** of the system in the forklift. For new vehicles, the interface is already installed **ex works** by many vehicle manufacturers. The effort required to install the module is therefore very low. The interface also significantly **simplifies the conversion of our long-lasting hardware** in the event of a vehicle change. The installation and commissioning for the module is considerably shortened.

modular crash+remote EKZ-709



Base Plate Crash Sensor Remote EKZ-075



For **safe and easy installation** of the Crash Sensor Remote, we offer a base plate. This can also be installed in advance, so that the subsequent assembly is much faster.

Universal Holder modular EKZ-077M8



If the adhesive pad cannot be attached on the vehicle side, the attachment can be done with an **M8 thread**. On the module side, the attachment is done with an **adhesive pad**.

Universalhalter modular plus EKZ-082



This universal holder fits the **A-pillars** or tie bars of **all common forklifts**. It is securely fastened and is multiple adjustable for **optimum operability**.

Accessories

Implementation

The setup is possible by **your own employees** or service technicians of Mobile Easykey. Mobile Easykey offers **intensive training on installation and software**. **Technical documentation** and **installation instructions** are available for a variety of device types. Mobile Easykey supports you in the implementation with **project managers, network specialists and service technicians** – either remotely or personally on site, depending on the project size and the agreement you have made.

”

*It just went the way you want it to be.
Everything worked out perfectly.
And this during ongoing operation!*

Dr. Ralf Hölper, Lufthansa Cargo



Webinars (in German language)

With the Mobile Easykey webinars you get to know the system better and get the most out of it. We regularly train our customers in short **one-hour events** about the basics and features of the **Software Mobile Easykey Manager**. The aim is to use the sophisticated and diverse system effectively. Please register for our newsletter at www.mobileeasykey.de/newsletter to receive the invitations.

| Artikel | Preis |
|--|--------------------|
| Software mit allen Modulen für 3 Jahre | 2.600,00 € |
| MEKM | 520,00 € |
| Finanz | 520,00 € |
| Wartung | 1.000,00 € |
| Live-System | 700,00 € |
| Ortler | 300,00 € |
| Indoor Locator | 1.600,00 € |
| Outdoor Locator | 1.600,00 € |
| AM (für Apps) | 375,00 € |
| Unterstützung bei Updates (6x) | 2.100,00 € |
| Stundensatz für Wartung (30x) | 3.420,00 € |
| Gesamtkosten für 3 Jahre | 14.735,00 € |

Service Technician on Site

Hardware assembly is possible with **your own staff**, trained by us. On request, the Mobile Easykey modules can also be installed by our **service technicians** on site.

Software Installation

Software installation, initial setup of the MEKM, database, service and a client by remote access: As the leading technology company in the field of fleet management, we offer you the **competent support of our IT specialists**. For example, we can perform the **complete installation of a running system by remote maintenance**. Your IT provides us with access, we do the rest.

Training Specialist on Site

More than 1,000 customers in 25 countries: We live fleet management every day and that's why we are happy to share our knowledge with you. On request, we can carry out **training courses of all kinds on site or at our premises**: basic training on how to use the system, training for IT in the administration of large installations or special training in the field of reports and statistics.



Help Desk

If you have a **technical problem** – whether with the hardware or the software: **The fastest way to a competent contact person** is via our help desk. You can reach us via a link on the website www.mobileeasykey.com

HelpDesk / Mobile Easykey Kunden HelpDesk

Allgemeine Hilfe erhalten

Betreff *

Ihr Anliegen in Stichworten.

Beschreibung der Anfrage *

Eine detaillierte Beschreibung des Anliegens.

Rückrufnummer

Bitte eine Rückrufnummer angeben.

Softwareversion

nicht bekannt

Welche Software Version setzen Sie aktuell ein?

Ich bin:

Direkter Kunde von Domnick+Müller

Kunde eines Händlers von Mobile Easykey

Händler von Mobile Easykey

Keine

Bitte geben Sie hier ihren Status an.

Anhang

Dateien ziehen und ablegen, Screenshots einfügen oder Anhänge durchsuchen

Durchsuchen

Alternatively, simply send an e-mail to:
khd@mobileeasykey.de



Fancy more knowledge?

Kaufen oder mieten: Software Lizenzmodell (DE)
24/7 Webinar auf www.mobileeasykey.de

Sven Dreilich



Area Sales Manager / Sales Director

Germany: BB, BE, BW, BY, MV, SN, ST, TH
Northern and Western Europe, except Benelux

Mobile: +49 (0)172 6 19 55 67
sven.dreilich@mobileeasykey.de

Orders

bestellung@mobileeasykey.de

Technical Support

khd@mobileeasykey.de

Norman Seib



Area Sales Manager

Germany: HB, HE, HH, NI, NW, RP, SH, SL
Belgium, Netherlands, Luxembourg

Mobile: +49 (0)160 94 61 80 99
norman.seib@mobileeasykey.de

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Christoph Weinzettel



Area Sales Manager

Austria
Southern and Eastern Europe

Mobile: +43 (0)664 1 26 55 96
christoph.weinzettel@mobileeasykey.at

Domnick+Müller GmbH + Co. KG
Max-Planck-Straße 11
61381 Friedrichsdorf/Germany
Telephone +49 (0)6172 95 66-68

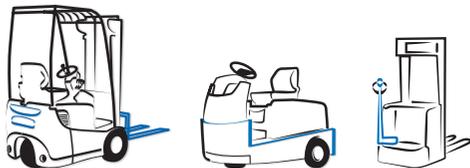
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Technology by

