PRODUCT DESCRIPTION

luxData.mobileApp

Applications for mobile devices – optimise workflows with Android or iOS-based devices.



OVERVIEW

About luxData.mobileApp

Mobility in processing business transactions leads to greater efficiency and quality. luxData.mobileApp was developed specifically for mobile use in street lighting and provides technicians with all the data they need on site.

Faults and operations can be processed and documented immediately – this minimises the time required and avoids sources of error.

Developed for **Android** devices (smartphones, tablets) as well as **iOS** devices. Configuration is easily done directly via luxData – settings can be applied to several devices at the same time.

Centrally configured

Apply settings to several devices at once via luxData – without having to configure each device individually.

Benefits of the mobile applications

- Defined or selected data is provided
- Route planning and navigation
- Processing maintenance tasks on site
- Recording faults on site
- Shorter lead times
- No post-processing time
- More transparency in operational processes
- Continuous data synchronisation with luxData
- Control function when using barcodes

Simplified workflow



Copyright sixData GmbH

BARCODES

Using barcodes

To work with barcodes, the devices must have a barcode scanner or a camera. Barcodes are a helpful way of changing or saving a wide range of instructions directly – without typing.

Identification

A barcode is attached to the asset/component and assigned by scanning. A scan retrieves the linked data quickly and reliably.

Command control

The technician scans a command from the laminated templates and the operation is processed. This prevents operating errors; a plausibility check specifies the correct sequence.

Control function

The use of barcodes creates a control function during processing. Which barcode is mandatory to complete an order can be configured individually.

Example

A comprehensive luminaire inspection is awarded to an external service provider. To be able to tick off the work on the affected luminaires with “OK”, the luminaire must be called up via the attached barcode.

The template can be changed and extended as required – you will find a sample template on the next page.



Command control via barcode scan.

Copyright sixData GmbH

NAVIGATION

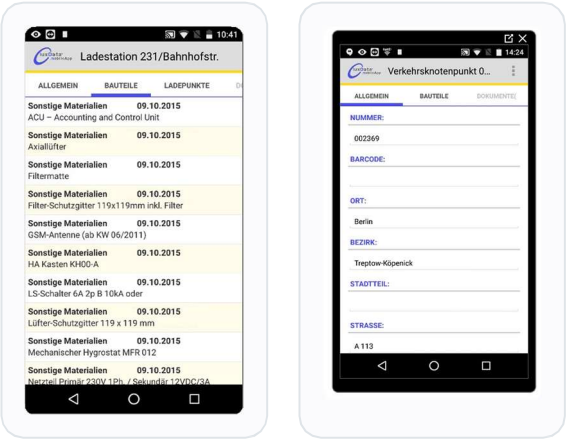
Route planning & navigation

If internet access is available, luxData.mobileApp uses Google Maps for route planning – no additional navigation software is needed.

Clicking on an asset automatically opens a menu view. From there, various commands can be executed – from simply setting coordinates to navigating to the asset.

If GPS coordinates are stored for the assets, they are displayed correctly on the map, making them easier to find. With internet access, you can even navigate from your location to the asset via Google Maps.

Within the map, a light point can be selected and moved to another position, or a fault can be created. A detail view provides information on the light point, installed components and stored documents.



Menu view and map display on an Android device.

Structure of different asset types

Street lighting

Capture and edit light points, poles, luminaires and lamps on the move.

Traffic signals

Document traffic light systems and associated components on site.

Charging stations

Manage EV charging infrastructure with an identical form structure.

Copyright sixData GmbH

TECHNICAL

Communication with luxData

Communication between luxData.mobileApp and luxData runs via a web server. Synchronisation takes place directly and immediately via the smartphone or tablet PC. A connection to the web server can be established in two ways.

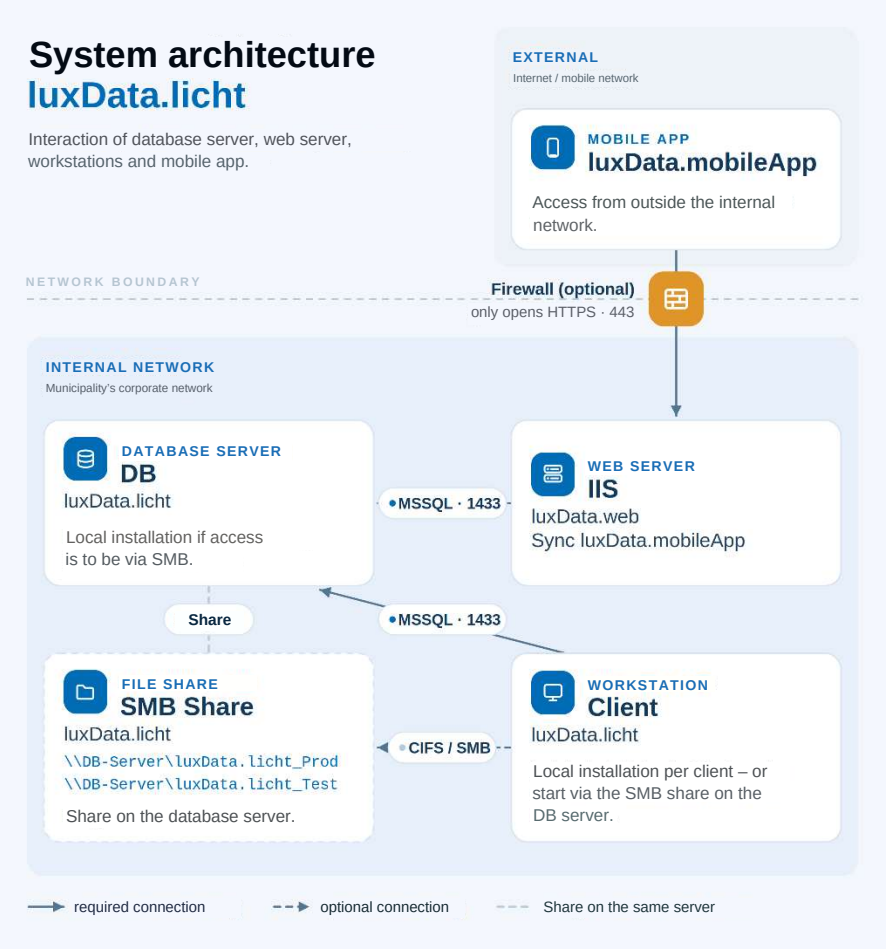
1. Wi-Fi

If the smartphone or tablet has access to the internal Wi-Fi, synchronisation between luxData.mobileApp and luxData starts as soon as it is triggered in the main menu.

2. SIM card

Alternatively, the connection runs via an integrated SIM card. However, this must have external access to the internal network (intranet).

System requirements & installation



APPLICATION EXAMPLES

Processing faults

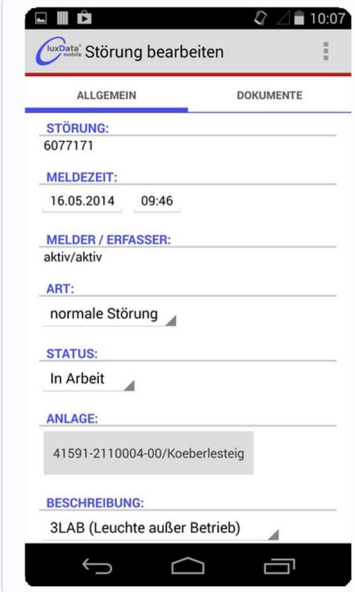
For on-site work, luxData.mobile and luxData.mobileApp replace the usual paper work orders. All relevant asset data is always available where it is needed.

The fault overview shows all faults – regardless of their status. Filtering is possible at any time; with internet access, an ideal route can be created for all faults.

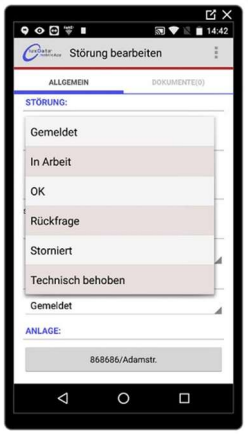
If all operations of a fault are set to “Completed”, the fault is automatically set to “OK” and closed. The status can also be changed manually.

> In luxData.mobileApp, documents can be stored: files or photos can be added to every light point, fault or operation.





Fault overview and detail view with map display.



Fault processing for charging stations.



Fault processing for traffic signals.

Copyright sixData GmbH

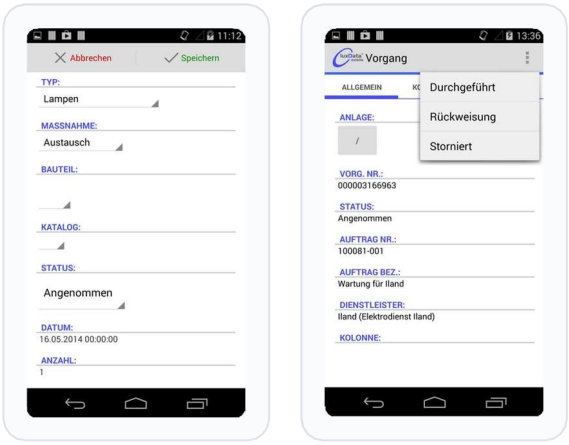
APPLICATION EXAMPLES

Maintenance – group lamp replacement

Tasks to be completed for a group replacement are planned and created as operations in luxData and assigned to each device. Depending on the settings, the technician on site can create new components or only change the status.

The main menu shows the total number of operations and the number of open operations. The operation overview shows the current status, and you can decide which operations to process – including ideal route planning via Google Maps and filtering.

Within the operations, components can be created or changed if this is permitted by the settings in luxData. Open operations initially have the status “Order” or “Accepted”.



Main menu and operation overview.

Information

The forms for operations and components have an identical structure for all asset types – whether street lighting, traffic signals or charging stations.

Using action buttons

Action buttons store recurring actions (e.g. lamp replacement, luminaire conversion) as a button. A click executes the stored function – this makes on-site processing considerably easier and faster.

The buttons appear when you switch to the “Component” tab within an operation.



Action buttons in the operation.

Copyright sixData GmbH

APPLICATION EXAMPLES

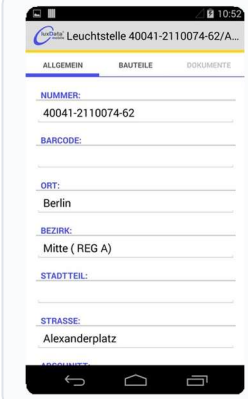
Attaching barcodes & capturing GPS

Barcodes are aids for the secure and fast identification of assets and components. They are best attached in conjunction with other tasks – such as a group lamp replacement.

Attaching barcodes

How barcodes are used depends on the smartphone/tablet. With a simple smartphone, the camera is used for scanning. In the detail view, you can see the corresponding barcode for each asset.





Capturing GPS coordinates

GPS coordinates have now been recorded for many light points and stored in a GIS. If coordinates already exist, they can easily be imported into luxData. Otherwise, you can capture them with the integrated GPS of luxData.mobile or luxData.mobileApp.

Select an asset and choose “Set coordinates (GPS)” in the menu view. A new point then automatically appears on the map. The position can be corrected manually at any time.



Setting GPS coordinates on the map.

Copyright sixData GmbH

INTERACTION

Data management – made simple

Process overview

With luxData, existing asset data is imported and edited centrally. Maintenance and repair work is then recorded, updated and processed on site via luxData.mobileApp. Flexible user management controls which information technicians and service providers can view and edit.

The asset data can also be made available to a fault reporting portal – stoerung24.de – so that faults can be reported directly at the affected objects. Incoming reports are processed by the field service and the measures taken, including the cause of the fault, are fully documented – for a transparent and efficient maintenance process.

Process overview

From the transfer of existing asset data to documented fault resolution.

1. **Data import**
   Import existing data and edit it in **luxData**.
2. **Field data capture & correction**
   Record or correct assets on site with the **luxData.mobileApp**.
3. **Data access**
   User management lets you control what users may see and edit.
4. **Fault export to stoerung24**
   Export assets from **luxData** so that citizens can report a fault on real assets.
5. **Fault resolution**
   The field service receives reported faults via **luxData** and documents the repair with the **luxData.mobileApp** – incl. cause.

Copyright sixData GmbH

HARDWARE RECOMMENDATION

PM95 · All-Purpose Mobile Computer

The device has an integrated high-resolution barcode scanner and is set up online – for fast configuration and rollout. Equipped with Puls Android: up to 7 years of free updates/patches.

System	
CPU	2.4 GHz Octa Core
Memory	6 GB RAM / 64 GB ROM (UFS); 8 GB / 128 GB optional
Operating system	Android 13, FOTA update, GMS-certified (updates up to Android 18)
Display	6″ IPS panel (500 nits), multi-touch, Corning Gorilla Glass

Ports & power	
Battery	4,950 mAh (standard); 7,020 mAh optional
Wireless WAN	GSM / GPRS / EDGE / HSDPA+ / 4G LTE / 5G
Wireless LAN	IEEE a/b/g/n/ac/ax, 2×2 MU-MIMO
Bluetooth / GPS	BT V5.2, BLE; A-GPS, GLONASS, Galileo, Beidou
USB / Camera	USB 3.0 Type C/OTG; 16 MP (rear) / 5 MP (front)



PM95 with integrated barcode scanner.

Field service & environment	
Scanner	1D/2D barcode scanner
RFID	ISO/IEC 14443 A/B, 15693; Mifare; UHF tag
Dimensions / Weight	164.8 × 78 × 17.6 mm; 283 g
Ruggedness	Drops from 1.8 m (rugged boot); operation −20 °C to 60 °C
Protection	IP68 against water, moisture and dust

Copyright sixData GmbH

TRUST

Data protection from the outset

As an owner-managed company based in Germany, compliance with the GDPR and contracts under German law are a matter of course for us. Software, hosting and support are “Made in Germany”.

Privacy by Design

During development, we make sure that personal data is only processed to the extent necessary – through minimal data collection, clear access controls and automatic deletion rules.

Privacy by Default

luxData is supplied with privacy-friendly default settings – a high level of data protection without additional configuration effort.

Detailed permissions and role concept

- Read, edit and delete rights per operation, object and file.
- Assignment at group or individual level.
- Fine-grained control down to individual field values – users only see the data they really need.

Implementation of GDPR rights

Data subject rights (access, rectification, erasure, restriction) are implemented via simple queries. Automated anonymisation after defined periods, including deletion logs, completes the function.

Copyright sixData GmbH

TRUST

Data protection in hosting (SaaS)

If you choose our hosting, we always process your personal data lawfully and transparently – with your consent and for the performance of the contract.

Technical & organisational measures

Access controls, role and permission concepts, logging, secure authentication (password rules, optional MFA) as well as monitoring and backup systems.

High availability

Modern cluster technologies ensure high system availability and resilience – even during maintenance or partial outages.

Minimisation principle

Only login data, timestamps, IP addresses as well as log and usage data are processed – required for provision and data security.

Processing in Germany only

Your data remains on secure servers in Germany. No transfer to third countries takes place.

Clear responsibility

You retain full control at all times. sixData GmbH processes personal data exclusively on instruction and on behalf of the controller in accordance with Art. 28 GDPR. Location data is only used to display the current location – without storing location histories.

Copyright sixData GmbH

TRUST

Security & transparency

Your data comes first with us – secure, transparent and always under your control.

Made & Hosted in Germany

Development and hosting in Germany – highest quality, full GDPR compliance and short paths for support and updates. No transfer to third countries.

ISO 27001 certified

For more than five years – including daily backups, 24/7 monitoring and regular security audits.

Fully secured

Systems behind firewalls, professionally monitored – confidentiality, integrity and availability guaranteed.

Microsoft Partner & DPA

Direct manufacturer support. Processing exclusively as instructed by the client – we support you with the data processing agreement (DPA).

Transparency

The full privacy policy is available at **www.sixData.de.**

Copyright sixData GmbH

ALL DATA ON SITE

luxData.mobileApp

Optimise internal workflows with Android and iOS devices – faults, maintenance, barcodes and GPS directly on site, continuously synchronised with luxData.

sixData GmbH

info@sixdata.de · www.sixdata.de · Registered office: Prien
Traunstein Local Court HRB 14666 · Managing Directors: Armin Mühlberger, Christian Lindl, Ralf Fürst
Copyright sixData GmbH · All rights reserved.