sixData

YOUR DATA. YOUR INFRASTRUCTURE. YOUR CONTROL.

# luxData.connect

The independent infrastructure for smart municipalities.

NEW

# luxData.connect

## The independent infrastructure for smart municipalities.

**luxData.connect connects lighting, sensors and other public-space systems on an open, manufacturer-independent platform.**

The platform collects operational and energy consumption data, makes it centrally accessible, and enables secure, demand-based control – from individual luminaires to the entire municipal infrastructure.

**One platform. Endless possibilities.**

Control lighting today. Connect the entire municipal infrastructure tomorrow.

### What you can do with luxData.connect

- Monitor and control lighting centrally
- Automatically adapt lighting to movement, traffic and weather
- Analyze energy consumption, power demand and $CO_2$ emissions
- Connect controllers, sensors and luminaires from different manufacturers
- Continue using existing infrastructure and gradually expand it
- Integrate additional systems and smart city applications
- Keep data under your control—in the cloud, on your own server or within your own IT infrastructure

BASE

# Your lighting network.

## The starting point for urban intelligence.



01

### Utilize existing infrastructure

Instead of building a new network, use your existing lighting infrastructure as a solid foundation for additional digital applications.

02

### Consolidate data centrally

luxData.connect brings all relevant data together in one place. This gives you greater transparency, reduces complexity and provides a reliable foundation for coordinated control.

03

### Gain urban insights

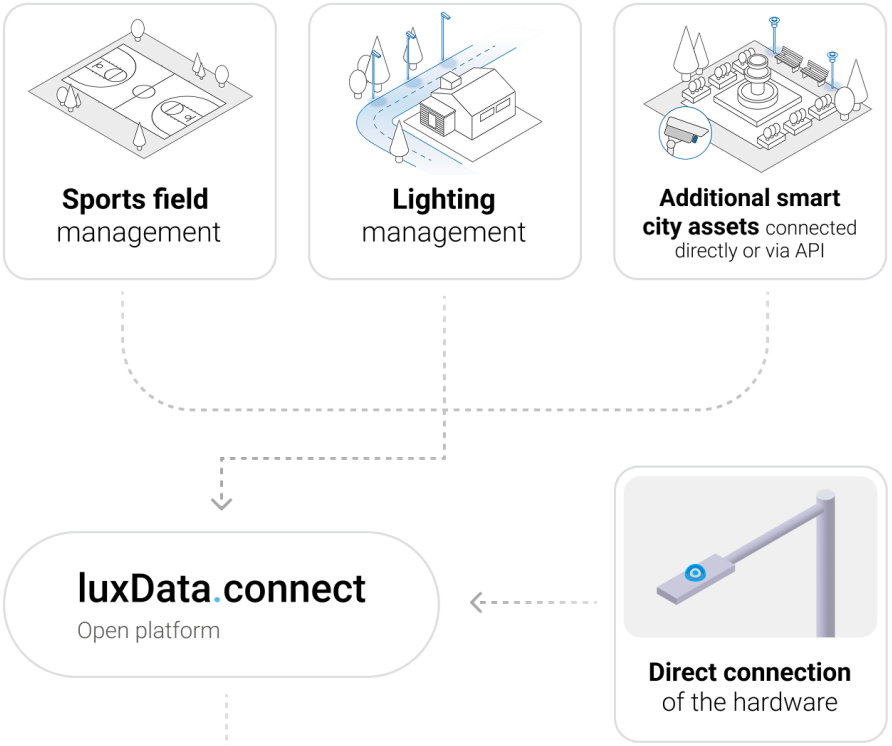
This provides the foundation for applications such as:

- ✓ Environmental monitoring
- ✓ Space utilization analysis
- ✓ Traffic patterns and flows
- ✓ Additional smart city services tailored to your needs

THE NEW SMART CITY PLATFORM

# **Open at its core.** Independent in operation.

luxData.connect is built on a proven IoT platform. It can be flexibly expanded to cover the entire municipal infrastructure and is specifically optimized for modern lighting control.



THE NEW SMART CITY PLATFORM

# luxData.connect

## The independent infrastructure for smart municipalities.

01

### Collect data.

Controllers, luminaires and sensors provide data on status, energy consumption, faults and usage. Other municipal assets can also be connected.

02

### Connect everything centrally.

luxData.connect brings the data together on an independent platform.

- ✓ **Independent:** The controller communicates directly with an independent server – not through the hardware manufacturer's cloud.
- ✓ **Directly connected**: Hardware from different manufacturers communicates via open standards such as MQTT and LwM2M, all under one control system – with no vendor lock-in or proprietary intermediary components.
- ✓ **Future-proof:** The open-source codebase can be expanded at any time and maintained independently.

03

### Optimize operations.

Lighting can be controlled automatically and according to demand. Faults are detected sooner, energy consumption is made transparent, and maintenance can be planned.

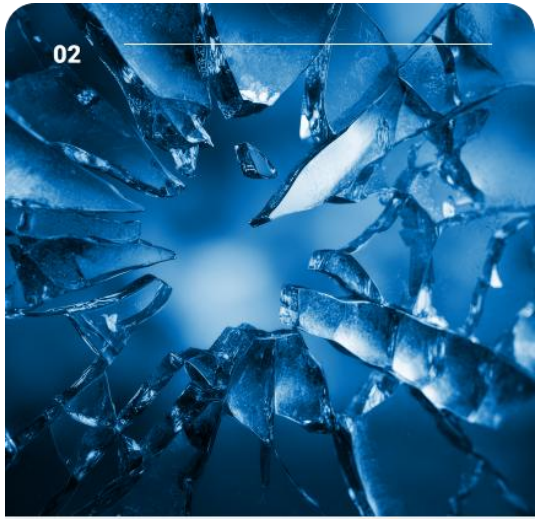
THE RISK TODAY

# **Smart today.**
# Stuck tomorrow?




## Risk of Downtime

If the manufacturer’s cloud or server becomes unavailable, lighting control may stop working.




## Proprietary Hardware

Components cannot be replaced with alternatives from other manufacturers.




## Data & Cyber Risks

Third-party platforms create additional vulnerabilities.

SOLUTION

# Digital sovereignty.
# By design.

luxData.connect is the open, manufacturer-independent control platform for public infrastructure—without proprietary vendor clouds or vendor lock-in and designed from the ground up to comply with EU regulations.



**No detours**
via a manufacturer-managed cloud.



**Independent. Secure.**
The server receives, processes and stores data centrally – independent of individual manufacturers.



**On-site assets**
Capture relevant operating data and transmit it directly and reliably to the independent server.

REGULATORY REQUIREMENTS

# Ready for today.
# Prepared for tomorrow.

**Since 17 March 2026**

## KRITIS

Resilient by design: continues to operate locally even when external services are unavailable. Fully auditable – no black box.

**Since 25 May 2018**

## GDPR

Control and operational data remain under the operator’s direct control—without any system-mandated transfer to third parties.

**From 1 December 2027**

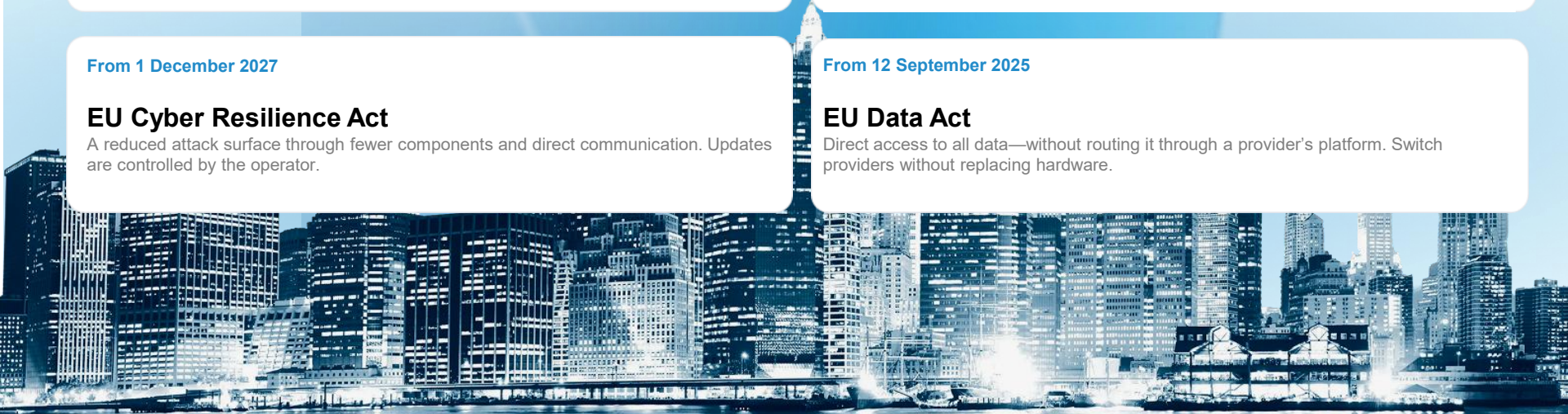
## EU Cyber Resilience Act

A reduced attack surface through fewer components and direct communication. Updates are controlled by the operator.

**From 12 September 2025**

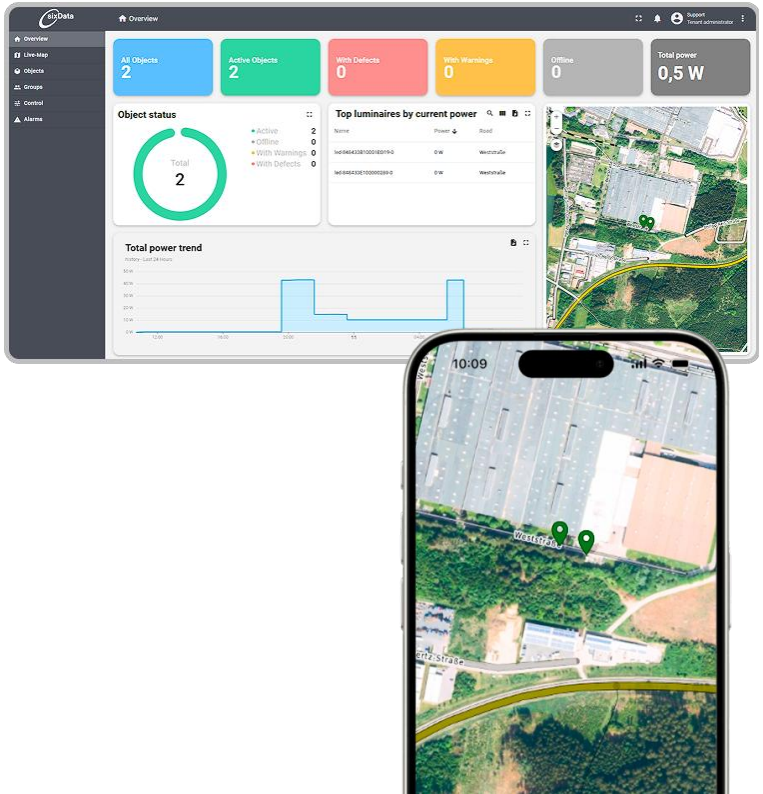
## EU Data Act

Direct access to all data—without routing it through a provider’s platform. Switch providers without replacing hardware.



DASHBOARD

# Everything at a glance.
# Everything under control.




The dashboard gives you an at-a-glance overview of your infrastructure and helps optimize operations:

- Detect faults early with clear alerts and information on their causes.
- Reduce downtime through faster response.
- Automate recurring processes—workflows take care of routine tasks.
- Adapt lighting to operating conditions, including traffic, weather and pathway usage.
- Monitor energy consumption, power demand and $CO_2$ emissions. Use transparent data to optimize operations and identify potential savings.
- Turn your lighting infrastructure into a foundation for data-driven control.

DAY-TO-DAY OPERATIONS

# Your infrastructure.
# Transparent every day.

luxData.connect is built for day-to-day operations.

### For maintenance teams

- ✓ Precise fault localization
- ✓ Immediate diagnostics
- ✓ Clear instructions for action.

### For energy and environmental managers

- ✓ Energy and $CO_2$ monitoring
- ✓ Consolidated data for reporting
- ✓ Environmental analysis based on existing infrastructure

### For lighting managers

- ✓ A complete overview of the lighting network
- ✓ Structured lighting control programs
- ✓ A scalable framework for additional connected assets

Each role has access only to the data and permissions it needs to take action.

SMART-CITY-READY

# Lighting that thinks ahead.
# For people, the climate and nature.

Energy prices fluctuate, regulations become more stringent and cities continue to evolve. This is where sensor technology comes in: it enables adaptive lighting, while luxData.connect makes that responsiveness visible and controllable.

**In harmony with people, the environment and nature.**
This provides the foundation for applications such as:

- ✓ **Motion-based control** – Activate lighting on demand and increase brightness only when people or vehicles are detected.
- ✓ **Traffic-responsive control** – Adjust lighting to current traffic volumes for greater safety and energy efficiency.
- ✓ **Weather-responsive control** – Automatically increase lighting levels in rain or when visibility is poor.
- ✓ **Environmentally responsive control** – Adapt lighting levels and colour temperature to ecological requirements, helping protect nature and biodiversity.
- ✓ **Tailored lighting strategies** – Develop lighting schemes to meet local requirements, accommodate events and support municipal goals.

**Reduce energy consumption**
Public lighting is a significant cost factor. Modern LED technology and intelligent control help reduce energy consumption and deliver substantial savings.

**Track $CO_2$ emissions and operational data**
Lighting responds to demand, and faults become visible sooner. luxData.connect provides reliable insights into energy consumption, savings and operational status.

SAVINGS POTENTIAL

# Street lighting.
Reimagined.

## Savings potential over 20 years
## Example: city with 10,000 luminaires

| | |
|---|---|
| **Starting point** | Existing 25 W LED lighting with static night-time dimming. |
| **Measure** | Retrofit motion sensors to existing LED luminaires. |
| **Energy savings** | **8,16 Mio. kWh** |
| **$CO_2$ avoided** | **3.484 $tCO_2e$** |
| **Savings in %** | **−57,3 %** |

**Up to 91% less energy and $CO_2$. Immediately.**
Intelligent motion-sensor dimming can dramatically reduce street-lighting energy consumption—whether you're replacing conventional luminaires or upgrading existing LED installations.

Switching 10,000 LEDs from static night-time dimming to demand-based motion-sensor dimming saves enough energy over 20 years to match the annual consumption of 1,813 households. The $CO_2$ reduction is equivalent to the amount absorbed by trees on 24 football pitches—and the luminaires last longer, too.

**Calculation assumptions**: Conventional luminaire: 83 W (dimming profile H1–H11: 100% throughout) · LED with nighttime dimming: 26 W (dimming profile H1=100 / H2=75 / H3=75 / H4=50 / H5=50 / H6=50 / H7=50 / H8=50 / H9=75 / H10=75 / H11=100%) · Motion-sensor dimming: 26 W (standby level H1=80 / H2–H10=10 / H11=80%; output at 100% when motion is detected; 5 dimming cycles per hour × 1 minute) · 11 hours/night × 365 nights/year = 4,015 operating hours/year · Electricity price: €0.30/kWh, with 3.5% annual inflation · $CO_2$ emission factor: 0.000427 t $CO_2$e/kWh (German Environment Agency, 2024) · Single-family home: 4,500 kWh/year (four-person household) · German mixed forest: approx. 833 trees/ha; $CO_2$ sequestration: 10 t $CO_2$e/ha/year, or 12 kg $CO_2$e/tree/year · Football pitch: 105 m × 68 m = 7,140 m² (FIFA standard) · Product basis: SITECO SL 11 iQ micro LED · All figures are provided without guarantee · © SITECO GmbH 2026

PACKAGES

# Three ways.
## One principle.

RECOMMENDED FOR CITIES & MUNICIPALITIES

### Start

Ready for immediate use on a shared, secure platform.

**SIMPLE PROJECTS AND PRAGMATIC SOLUTIONS**

- ✓ Controllers **directly connected** to luxData.connect – secure, stable, immediately usable
- ✓ **Vendor-independent**, can be transitioned to self-management at any time
- ✓ **Data neatly separated**, available at any time
- ✓ Critical infrastructure, EU Data Act, EU CRA, GDPR – **we support implementation**

### Pro

Own server – full control, clear separation

**LARGER CITIES & MUNICIPALITIES**

- ✓ **Own server** at sixData – completely separate from others
- ✓ **Custom logics**, adjustments, and integration of own systems
- ✓ Data in your **own server instance** at sixData
- ✓ **Updates**, monitoring, and backups via sixData
- ✓ CRITIS, EU Data Act, EU CRA, GDPR - **we support implementation**

ir

### Flex

Completely own system on your own servers.

**MAJOR CITIES & COMPLETE INFRASTRUCTURE**

- ✓ **Total freedom:** custom development and any integrations
- ✓ Data and hosting fully under **your responsibility**
- ✓ CRITIS, EU Data Act, EU CRA, GDPR **– self-defined and secured**

ASSET MANAGEMENT

# Capture lighting.
# Manage installations.

**luxData.easy is simple asset management that works instantly – from street lighting, sports fields and fire hydrants to inventory.**

Everything that is placed or located in public spaces, whether above or below ground, can be recorded and managed with luxData.easy. As part of the luxData.connect ecosystem, luxData.easy integrates seamlessly and can be connected to other applications at any time. Ideal for municipalities of all sizes, housing companies and businesses.



## luxData.easy

A simple introduction to asset management:

- **Book online – ready to go immediately**
  Account will be set up automatically.
- **Ready-made templates**
  from lighting to playground.
- **Table + map + easyApp**
  familiar in the office, mobile in the field.
- **Upgrade to luxData.pro**
  anytime, without data loss.

## The right solution for every requirement.

luxData.easy makes lighting operations simple. luxData.connect provides the stable, independent infrastructure behind it.

JETZT LOSLEGEN

# Open. Independent.
## Future-proof.

With luxData.connect, you make your infrastructure sovereign, secure, and scalable - independent of individual manufacturers and platforms.

Infrastructures evolve over the long term. Your lighting network is already in place today - and continues to grow.



### luxData.connect is:

- ✓ designed for increasing numbers of light points and additional connected assets
- ✓ prepared for new digital services
- ✓ suitable as a foundation for future smart city applications

### We are by your side.

Our team is here to support you:

- ✓ in the planning and implementation of luxData.connect and luxData.easy
- ✓ in the optimisation of control programmes and energy savings
- ✓ in error analysis, operation, and further development of your infrastructure

# **Choose**
# digital sovereignty.

Talk to us about how to achieve an open, future-proof lighting control system - one that’s tailored to your city and your infrastructure.

**Request your consultation now.**

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