

# Modern Street Lighting as part of Traffic Management



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- State of the art in street lighting
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- Combination of network and sensors
- Traffic data that can be retrieved







#### Founded

- In 2012
- by DI Günther Spath



#### Headquarter

Graz/Austria



#### In-House

- Sales and Project Management
- Research and Development





### About lixtec



Light Pollution



- Oil lamps
- Security and safety reasons

Before 19<sup>th</sup> century

#### 19th century

- Gas lamps
- Symbol of wealth

- Electric lamps
- Economic reasons

20<sup>th</sup> century

#### 21st century

LED technology "Digital lamps"

Digitalization brings much more application cases and functions for street lighting than "illuminating the dark"



## History of street lighting



### **Street Light Controller**



- ❖ LED street lights
- Standard-compliant light output
- ❖ No upside light emissions
  - insect protection
- ❖ Adequate light colour
- ❖ Dimmable driver (DALI-2)
- "Zhaga"-Interfaces for connecting with controllers and/or sensors

### "State of the art"

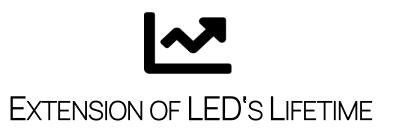




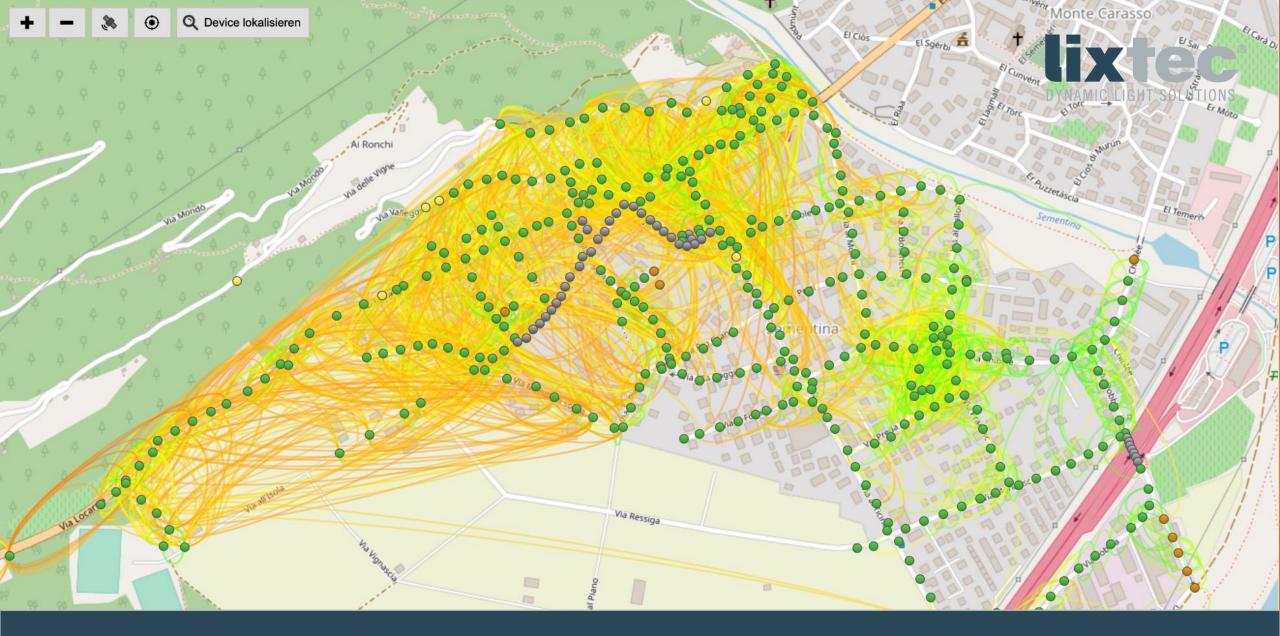








# Today's demands on street lighting



Network of street lights



#### Motion Sensors

- Radar or "Passive Infrared"
- Counting of objects
- Differentiation of objects

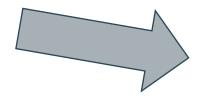
### Optical Sensors

- e.g. Cameras
- Detailed information about traffic
- Detailed information about parking situations

# Examples for different sensors



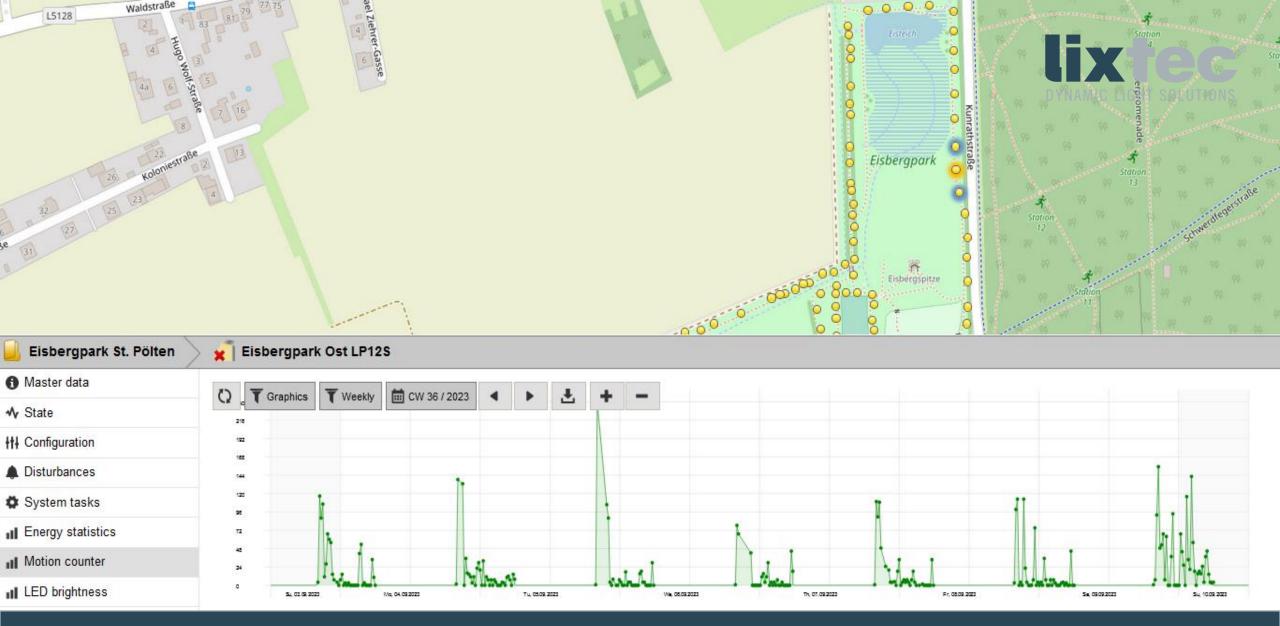
- Number of road users
- Category of road users
- Direction of traffic
- Speed of roas users



How to use this data?

- Heatmaps of public spaces
- Statistics of traffic volume
- Overall speed of vehicles

### Traffic data that can be retrieved



Example



- Transformation from "lanterns" to communication points
- Usage of existing infrastructure
- New technology enhances a trivial system to become part of a new industry
- Simple implementation for small entities
- Generating traffic data

### Conlusion



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### Thank you for your interest!

