

# ENERGY STORAGE

IOT DEVICES IN STREETLIGHTING

# STREETLIGHTING IN SMARTCITIES

- Streetlighting infrastructures are available all over the world – in every city.
- They are covering the entire city in a regular pattern.
- Also they are connected to power-grids.
- Because of these facts, streetlighting infrastructures are the perfect platform to roll-out new technologies and features in the sense of Smartcities.
- **But – in many cities around the globe, the streetlighting power-grids are off at daytime!**
- Turning on such grids 24/7 isn't that easy in many cases, because the entire structure off the grids interconnections have to be changed, including operating- and security-instructions, as well as operation diagrams and documentation.
- Further all the luminaires have to be exchanged against new ones with some kind of controls, as switching on/off is managed by the grids on/off.



(Coverage of Streetlighting)

- **To enable IoT-Devices in streetlighting, Urban Lighting Innovations established a energy storage solution especially for the use in streetlighting poles.**
- Construction and design are respecting the special measurements and inside-environment of poles perfectly.
- It is easy to install and free of maintenance.
- Charge controller included.
- The full stack is flexible, so it can be integrated trough the inspection-doors of poles.
- Outputvoltage and capacity are configured for each application scenario.
- Hard-Reset-Automatic possible!
- Also applicable for buffering LED luminaires in emergency off-grid-mode.



# TECHNICAL DATA

- Diameter of pole (insside): 10cm (minimum)
- Cells: LiFePO4
- Operating temperature: -20 to 60 °C
- Protection Class: IP64
- Over charge protection: yes
- Over discharge protection: yes
- Over current protection: yes
- Temperature protection: yes
- Output voltage: by design
- Capacity: by design
- Measurements: by design



# INSIDE POLES



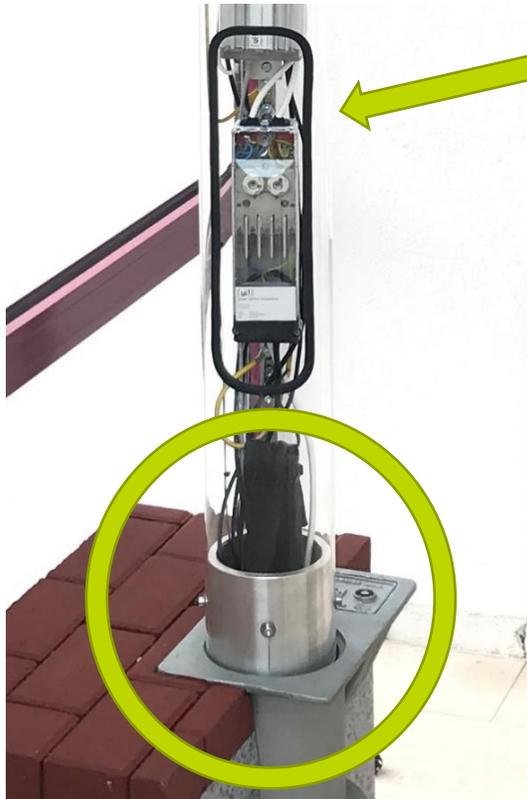
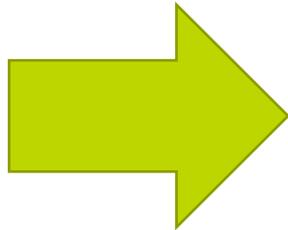
**NO POWER**

@ DAYTIME ?

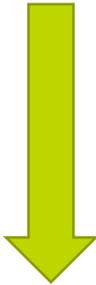
**NO PROBLEM**

- Especially developed for the usage inside of poles
- Minimum diameter needed only 10cm
- Up to 580Wh
- Free of maintenance
- Easy installation
- Various output-voltage realizable

# EASY TO INTEGRATE



Easy to integrate via the inspection flap of the poles, through flexible kink points!



# PROOVEN TECHNOLOGY

already in use for



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