

FAQ - EV charger LUMiCHARGER

What are the main differences between AC and DC charger station?

DC charger station

- faster (50 kW and more), bigger and very expensive
- from 20% to 80% capacity in 1h, from 80% to 100% capacity could take another 1h (because of overheating protection of battery, current is decreased)

AC charger station

- smaller dimension, slower

Deployment Cost Comparison LUMiCHARGER vs. Standard Charger

	LUMiCHARGER Level 2	Standalone Level 2 AC Charger	Standalone Level 3 DC Charger
Maximum charging power	11 kW	11 kW	50 kW
Average charging power	7 kW	11 kW	50 kW
Charging time 200 km range	5.1 hrs	3.3 hrs	0.7 hrs

At the price of one DC charger it is possible to build a network of more than 50 AC chargers in the lighting poles in residential area.

What are the main differences between Type 1 and Type 2 AC connector?

Type 1 connector is most used in USA and it has one pin only for one phase and two control pin. Type 2 connector (Mennekes) is most used in European countries as it has three pins for three phases and two control pin. LUMiCHARGER has Type 2 connector (Mennekes).



What if I do not have a cable compatible with Type 2 connector (Mennekes)?

Adapters are widely available.

How many phases will be used for charging?

It depends on the type of car that is charged. For example Nissan Leaf uses only 1 phase, Tesla uses 3 phases. LUMiCHARGER can provide all 3 phases.

What does the average charging time depend on?

It depends on the type of car that is charged, number of phases and current. According to IEC standard is the maximum current for charger 3x32A. Nissan Leaf has been limiting the current 1x32A. Current Teslas are limiting the current 3x24A. LUMiCHARGER is limited for 3x25A.

Can LUMiCHARGER work without lighting control?

Yes. it can work independently or communicate with Seak lighting control system to negotiate the power available for electric vehicle (EV) charging.

What is the charging principle when LUMiCHARGER is integrated with public lighting and compatible with SEAK smart lighting control?

During the day, street lighting remains in standby mode and we use full line capacity for EV charging. At night part of line capacity is used for lighting and the rest for cars. Further, the power saved by dimming of luminaires is used to increase the charging rate we can deliver to the EVs.

What are recommended components for automatic balancing feature?

For control and balancing features it is recommended to order control unit LUMiMASTER SLC-NOM rev. 2018 and modulation unit LUMiBOX SLM-140 or higher.

How does available current distribution work when charging cars with integrated lighting control?

The LUMiMASTER control unit is responsible for the distribution current thanks to balancing feature. Distribution is based on free available capacity and type of car.

What are the placement options for LUMiCHARGER charging stations?

Stand-alone EV charger (one or two sockets), wallpoint EV charger or EV charger sockets integrated into public lighting.

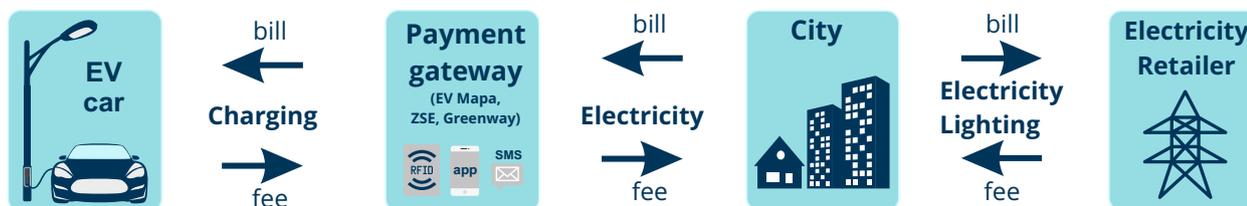
What are the minimum required parameters for light pole for charger?

Minimum inner diameter of the pole is 120 mm. LUMiCHARGER, contactor and circuit breaker is mounted on DIN rail. The mounting position in the column is vertical.

What is the typical material for LUMiCHARGER?

LUMiCHARGER can be made of Metal, stainless or plastic.

What is main principle for charging conditions and payment?



What is Payment gateway?

A payment gateway is an ecommerce service that processes credit card payments for charging. Companies as EV Mapa, Greenway also create regular report for municipalities about number of charging cars, how much electricity car consumed, how much dit it cost.

How authentication works before charging?

You touch RFID cards to EV charging station, scan QR code sticker in special application or pay by SMS and plug in and charging.