



Kempower

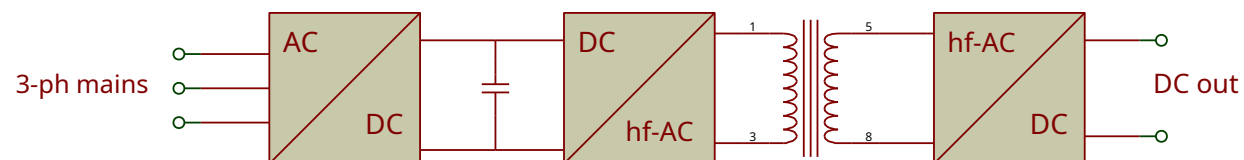
Defining charging



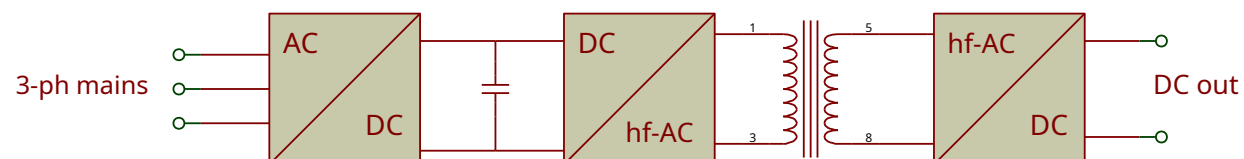
What is the bridge between the welding machine and the EV charging station?



Welding power source topology:

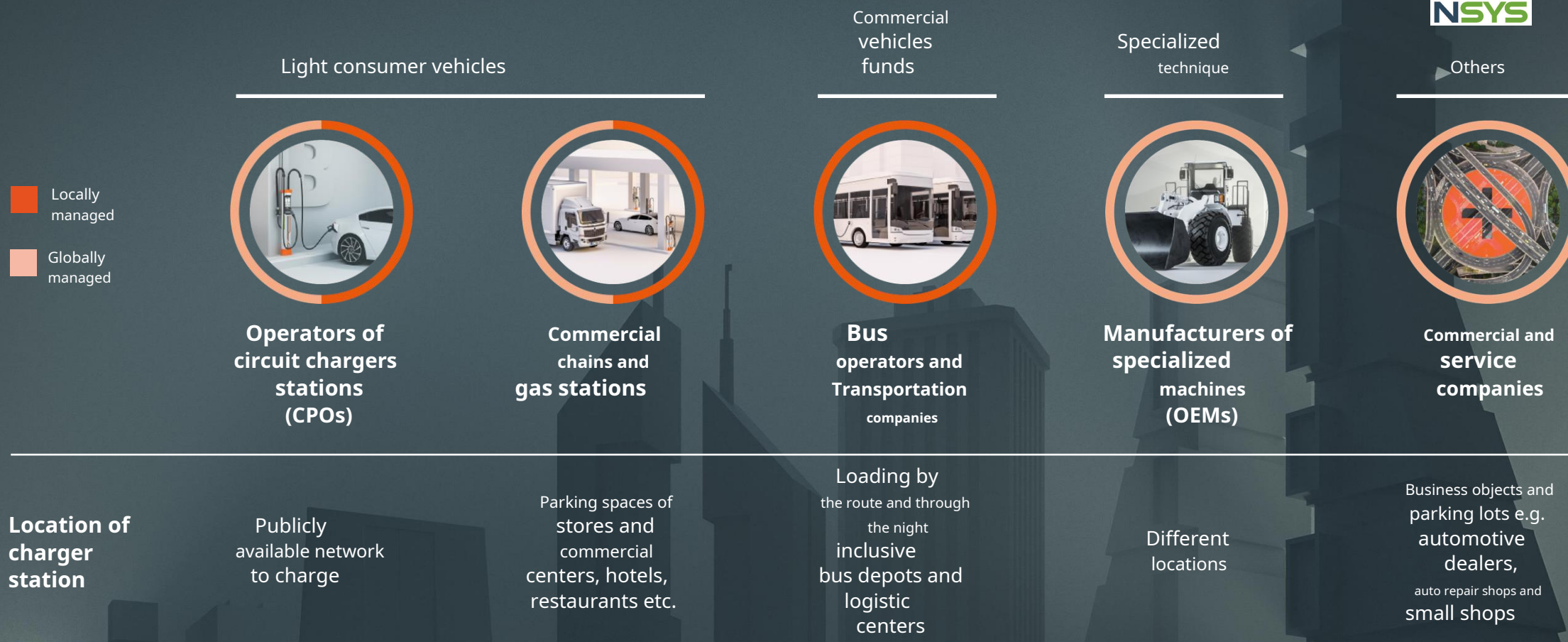


EV DC charging station topology:



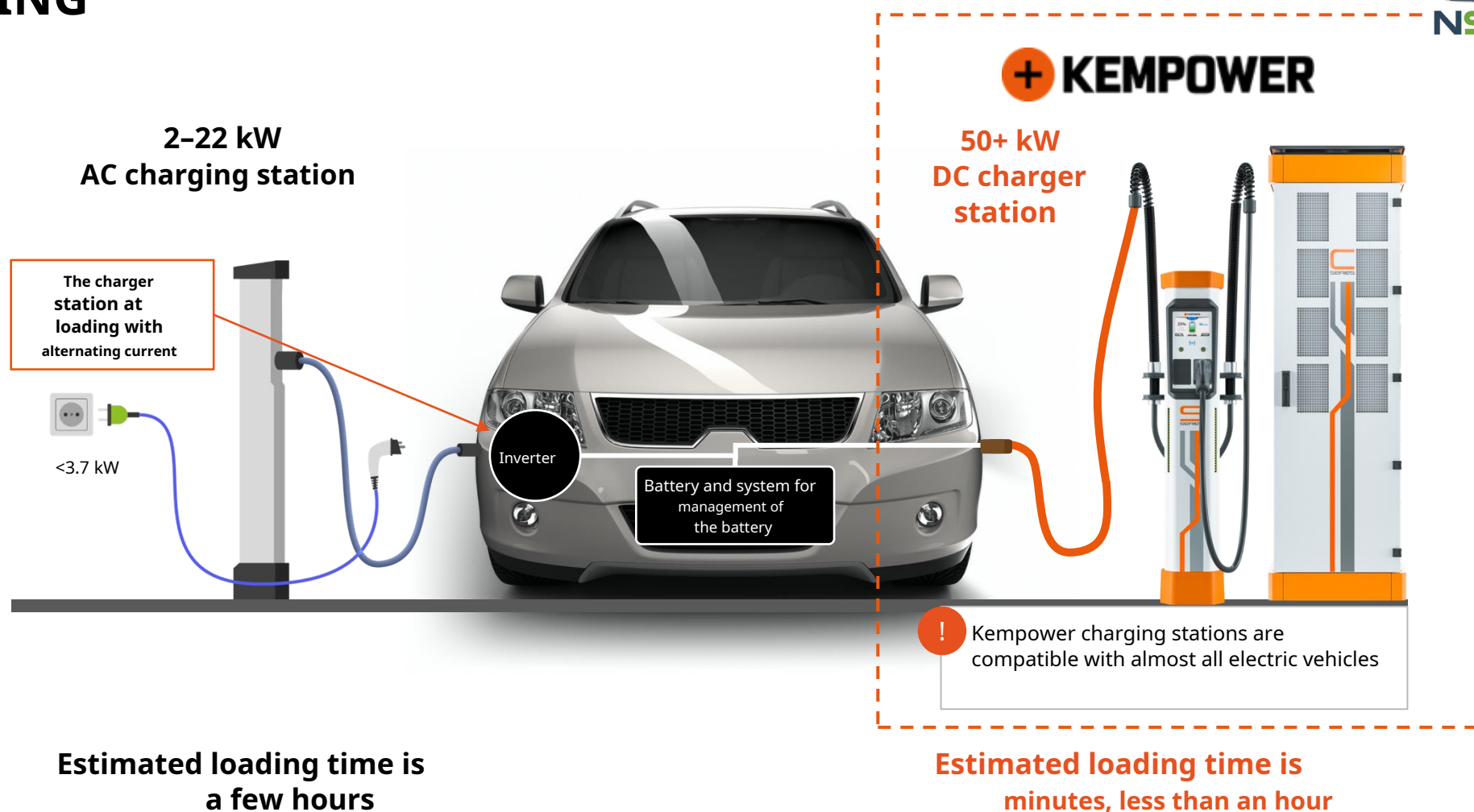


WIDE RANGE OF EV CHARGING SOLUTIONS

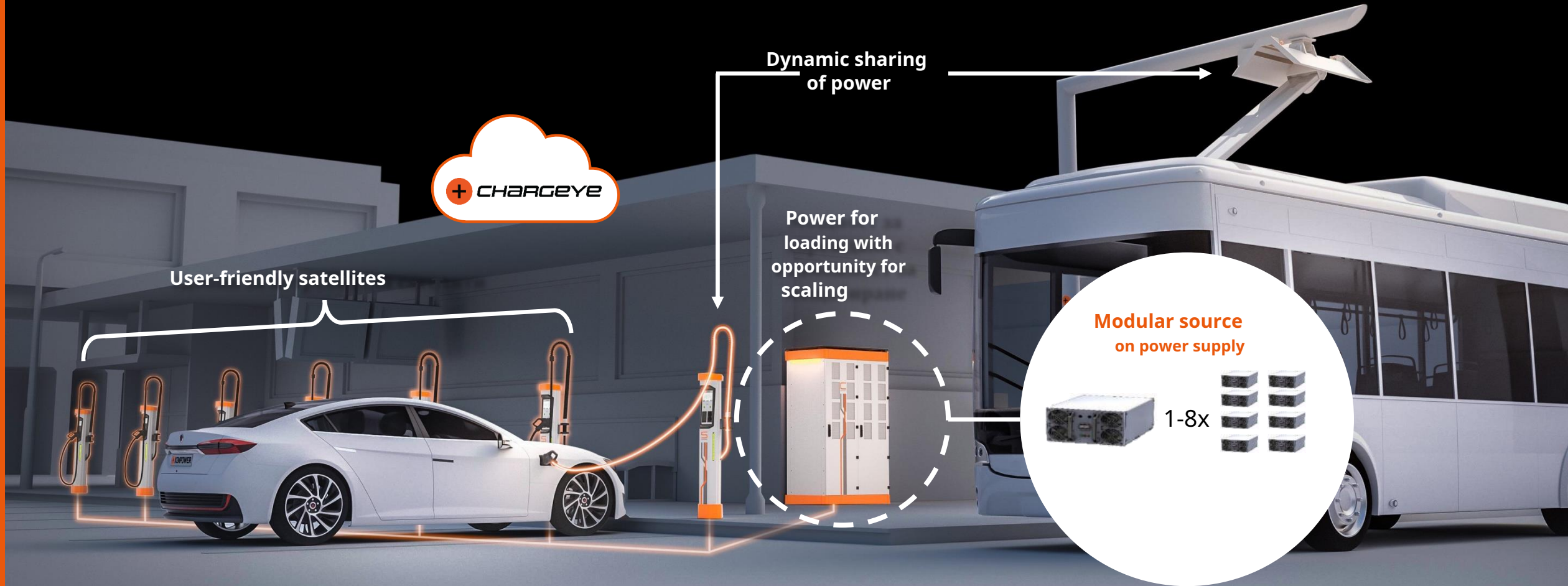


 Locally managed
 Globally managed

DC CHARGING **IT'S MUCH FASTER** FROM VARIABLE AC CHARGING



KEMPOWER SOLUTIONS IN BRIEF: MODULAR, DYNAMIC AND USER FRIENDLY



How to be **profitable**?

- **Prevention the resizing**
- Optimize and **increase maximum use** on the points for charging (Kempower Dynamics)
- Find it **good locations** with services nearby
- Providing 30-50% **higher ROI** by creating lower idle power



How to we maximize uptime and charging capabilities ?

- Impressive **reducing loading time** by means of multi-channel power modules
- **Power sharing** and redirection by means of Kempower Dynamics
- Design: **using more connectors at the same time**
- Product Reliability: **Made in Finland** (including communication boards and power modules)
- **Easy maintenance** (cleaning and changing the filters several times a year)
- **Remote monitoring** by means of Charg Eye
- **Service levels** for maintenance



Product range



Advanced satellite charging system

Centralized power combined with dynamic distribution of power to the satellite posts

S-series satellite charging stations, to which the power can be:

1. **Static binding** (fixed power for any charging outlet)
2. **Dynamic connection** (power can to be dynamically distributed among the charging outlets)



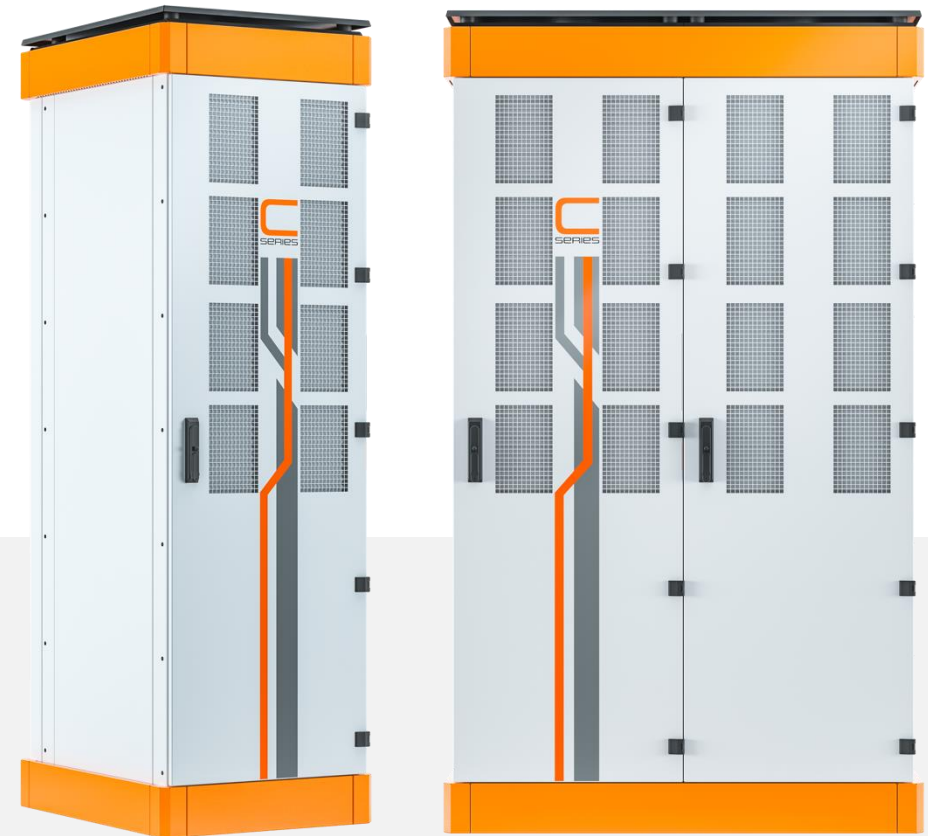
Any Kempower C-Series charging station can be

equipped with from 1 to 4 power modules of 50 kW each

C-Series - power supply

Standard options

- Three output voltage options
 - 500 VDC for cars
 - 800 VDC for buses, cars
- Combined 500/800 VDC
- Power output options:
 - 50...200 kW total power from unit
 - 250...400 kW total power from e
 - 450...600 kW total power from
- Ready to use on satellites
- Maintenance of standards CCS2, CHAdeMo
- Cloud connectivity
- Remote software updates
- Environmental protection in case of severe



S-Series - Satellites

Standard options

- Variety of models
 - CCS2, 1 or 2 outputs
 - CHAdeMO, 1 or 2 outputs
 - Type 2, 1 or 2 outputs
 - CCS2 & CHAdeMO, both simultaneously and separately
 - Type 2 output in combination with CCS2 & CHAdeMO
- Output current options:
 - 80...400A CCS2
 - 125A CHAdeMO

- 7" inch touch screen with friendly
- Environmental protection in severe c

+ KEMPOWER



C-Station - combined

Standard options

- Three output voltage options
 - 500 VDC for cars
 - 800 VDC for buses, cars, etc
 - Combined 500/800VDC
- Power output options:
 - 50...200 kW total power from one module
 - 250...400 kW total power from two modules
- 1 or 2 fixed cables + max. 2 satellites
- Maintenance of standards CCS2, CHAdeMO and you
- Cloud connectivity
- Remote software updates
- Environmental protection in severe external



T-Series - removable charger

Standard options

- Three output voltage options
 - 500 VDC for cars
 - 800 VDC for buses, cars and more
 - Combined 500/800VDC
- Power output options:
 - 40 kW to one cable
 - 20 kW to two cables
- Input link from 32A or 63A three-phase Euro socket
- Possibility of simultaneous dual charging
- Maintenance of standards CCS2, CHAdeMO and Type 2
- 7" inch touch screen
- Cloud connectivity



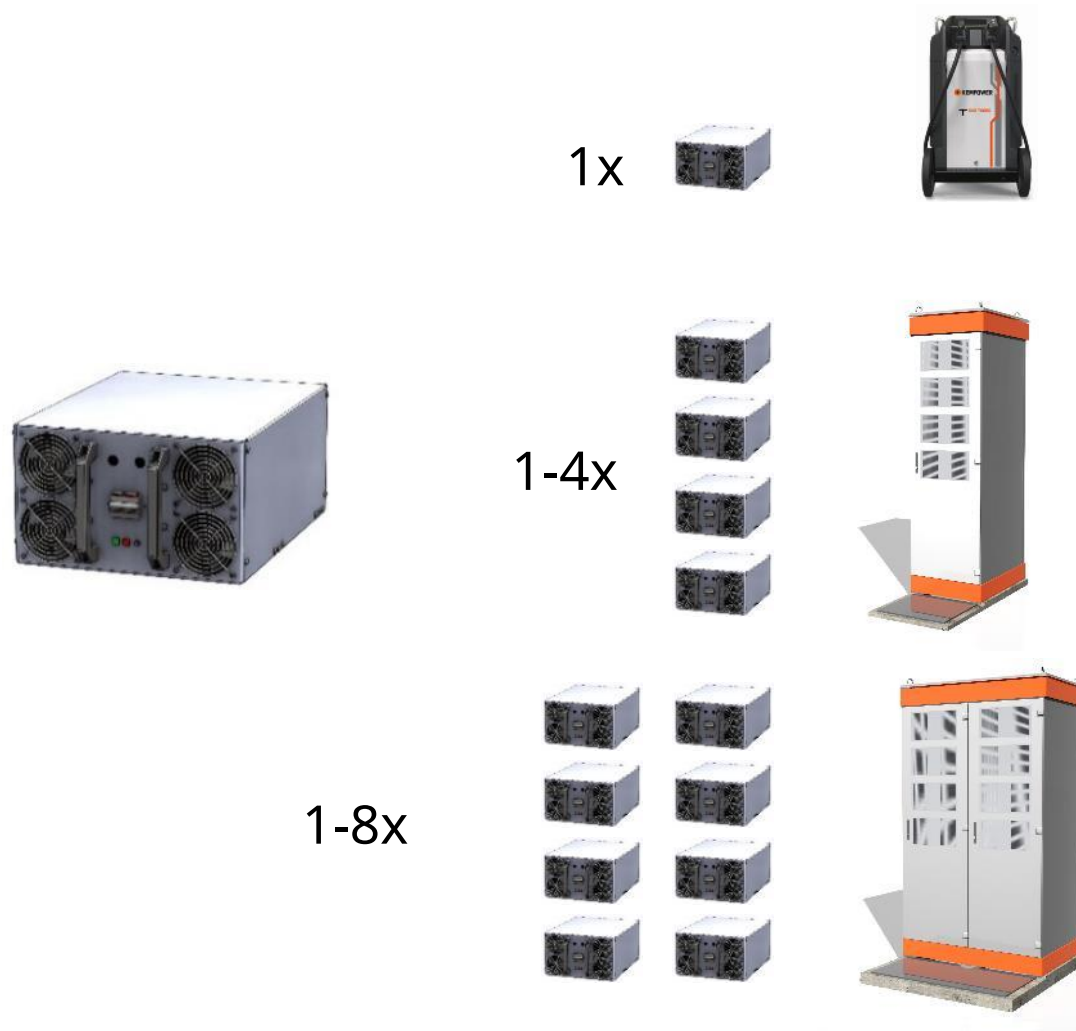
- Sturdy wheels and chassis

The value proposition of Kempower



1. One module – Many opportunities – True modularity

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T-Series mobile charging station
40kW

C501 – central inverter unit: 50 – 100
– 150 – 200kW

C502/3 – central inverter unit: 50 – 100
– 150 – 200... up to 600kW

...Up to 600 kW are possible.

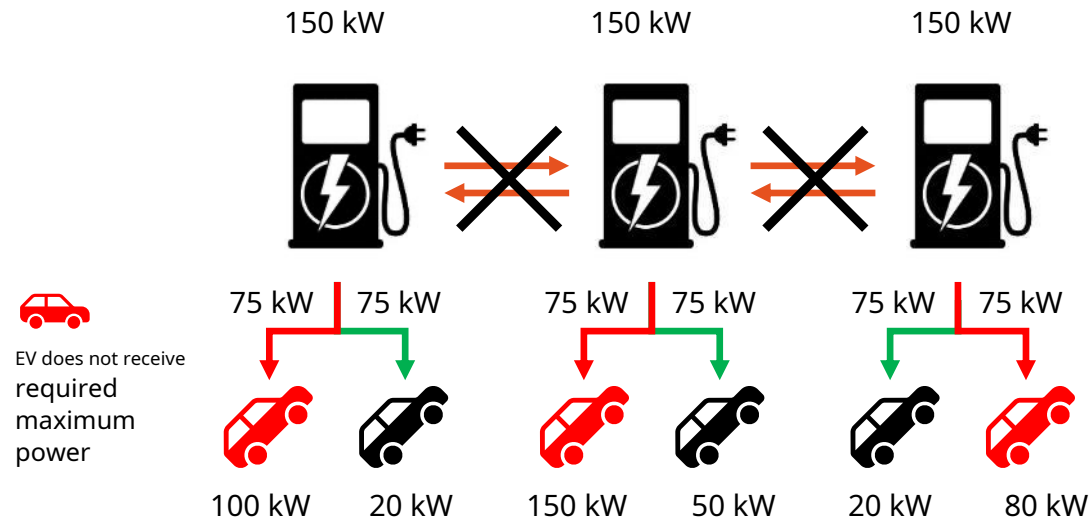
2. THE KEMPOWER FAST CHARGING SOLUTION COMPARED TO THE TRADITIONAL QUICK CHARGE SOLUTION

+ KEMPOWER



A traditional fast charging solution

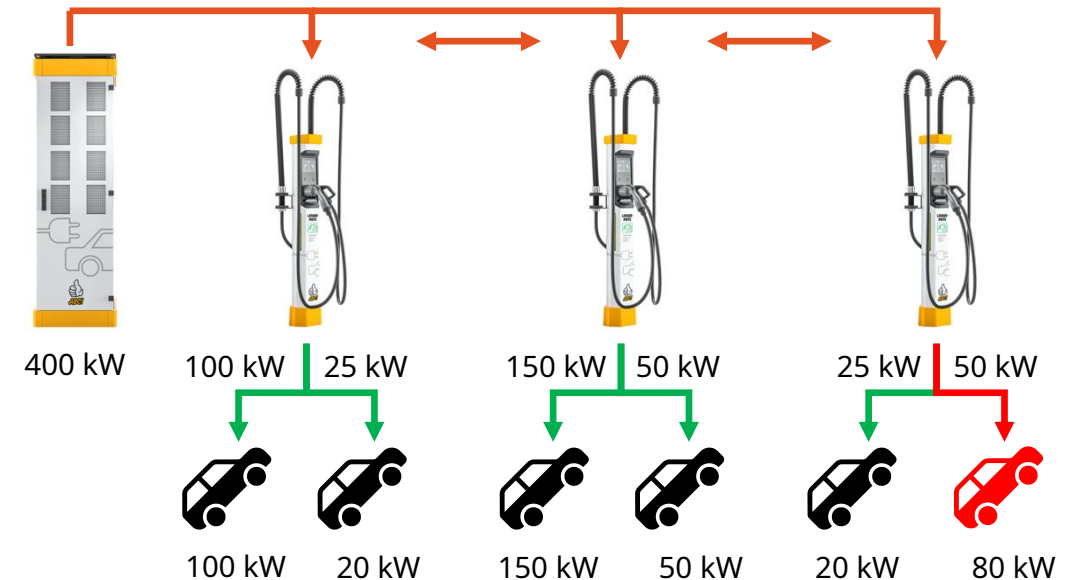
→ The power module from 150 kW (450 kW total) provides 315 kW power for charging, 135 kW unused power



Load capacity is low, cars are not get the power they want

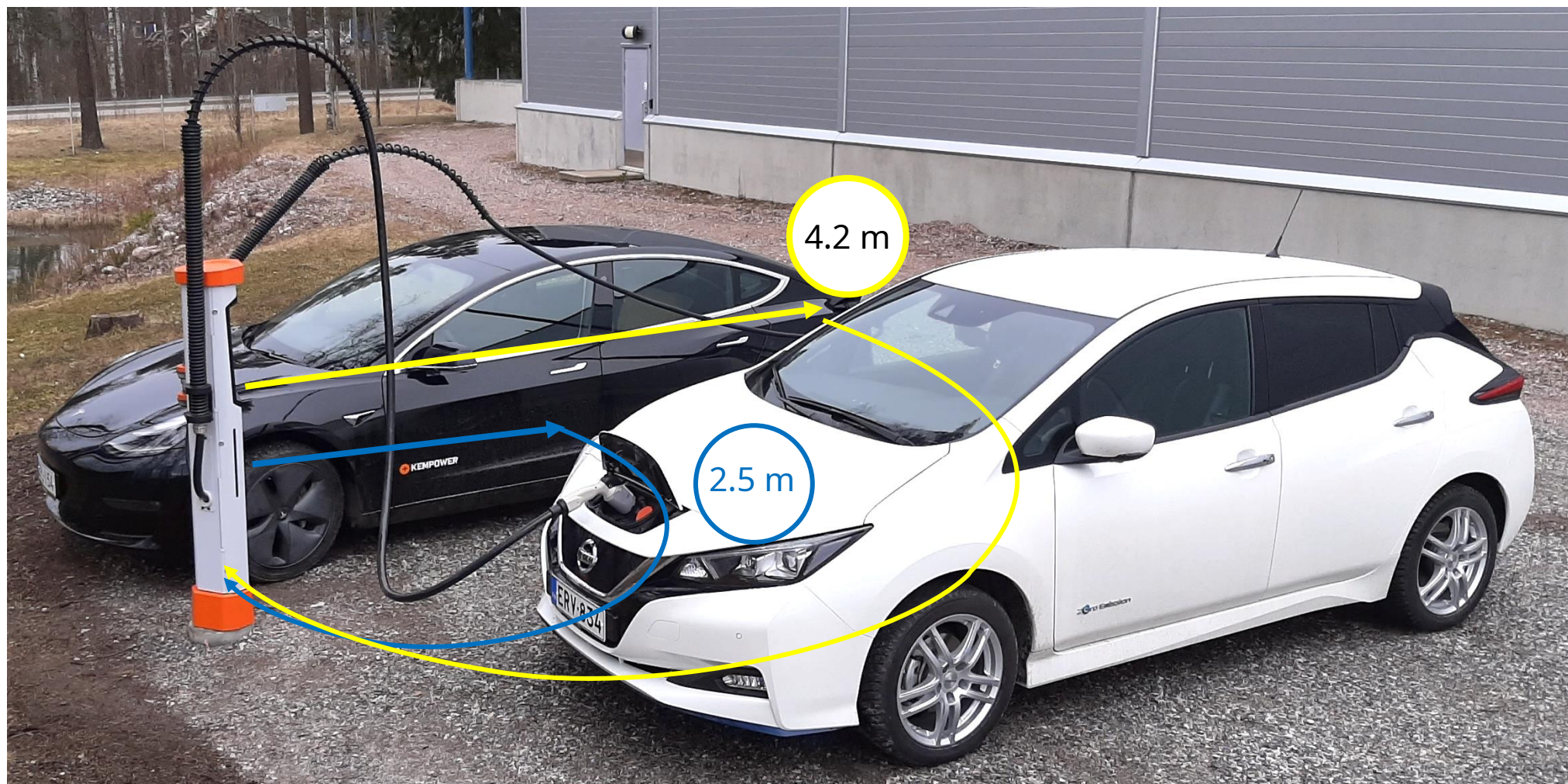
Kempower's fast charging solution

→ The power module 400 kW provides 400 kW charging power, 0 kW unused capacity

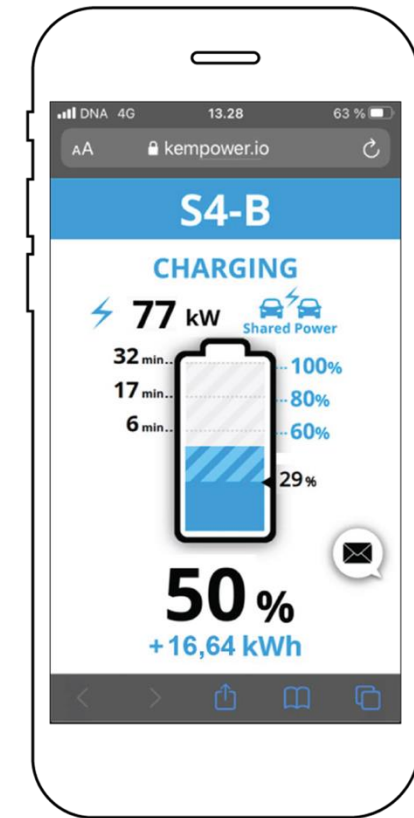
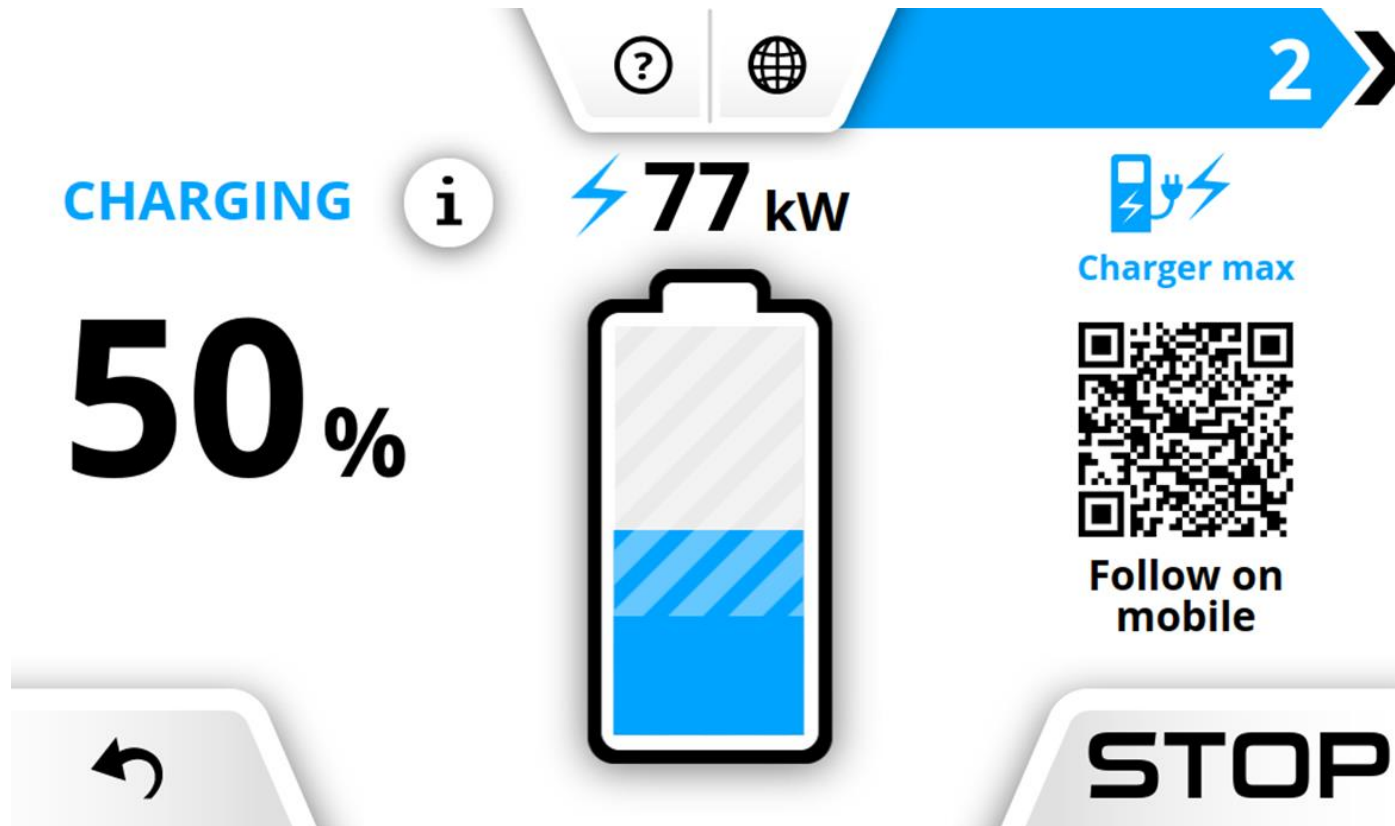


Charging stations distribute power dynamically, allowing charging of multiple vehicles with optimal power and minimizing the unused capacity

3. Advanced cable management- 5 meters



4. Friendly **user interface** for the phone



SNG (Fuel) Sofia Vrazhdebna got a C-Series 150kW module with 4 charging ports



- The first charging station of A high-powered EV powered by SNG is available at a gas station in Bulgaria, Sofia, 89 Vladimir Vazov Blvd. The total power delivered by the charging system is 150 kW and can charge four cars simultaneously.
- 3xCCS2 and 1xCHAdemo adapters
- There are plans to increase the power to 200kW
- Development of the network of charging stations is pending the sites of SNG in Bulgaria
- No registration or installation required application
- payment at the site's cash desk

ReCharge station in Espaa, Norway



- Charging station ReCharge in Espaa, Norway was the first of several Kempower charging stations in Norway

PHOENIX PETROL 7 Vratsa provides its customers with 50kW electric vehicle charging



- The first oneDC charging station for EVs in the city of Vratsa, operated by the regional gas station chain PHOENIX PETROLEUM
- 50kW of power with plans to upgrade to 200kW
- CCS2 and CHAdeMO adapters
- No registration or installation required
application - payment at the site's cash desk

DC charging for **Finland's largest retail chain:** **S-Group**



- S-Group is building a national charging network of electric cars in 2021–2024.
- S-Group is a Finnish cooperative organization for customer-owned retail, which has more than 1,800 sites and nearly 40,000 employees in Finland.
- In addition to the development of extensive electrical network for charging, are being developed and other forms of transport energy.



KEMPOWER

Defining charging

www.kempower.com