

**Store Control Load** 



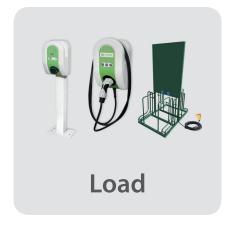
### **Under one roof**

SSL Energie GmbH is a young company specialising in the "storage, control and charging of electrical energy". Headquarters is Haag in Upper Bavaria. To complement the portfolio, the business operations of ECC Batteries GmbH in Geesthacht and automationNEXT GmbH (building automation) from Lustenau, Austria were acquired. Another important step in the company's future-oriented activities was the purchase of Schletter's P-CHARGE (Electric Car Charging Systems) product line.

The goal of SSL Energie GmbH is the successful continuation of these business operations and the introduction of innovative ideas in the divisions "Production of lithium-ion battery cells", "Building automation" and "Charging systems for EMobility".







## Store

### **Battery cells**

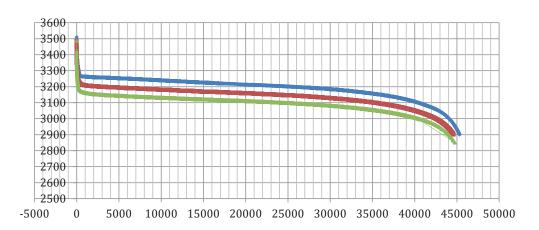
## **Lithium-Iron Nano-Phosphate Cell** 45 Ah / 148 Wh at 0,2 C

Lithium cells are the core of modern energy storage. Our gas-tight SSL-LFPP cells offer you a unique combination. In our state-of-the-art battery production facility in Geesthacht near Hamburg, we manufacture cells that achieve exceptionally good performance figures for a whole range of parameters.

Their key characteristics are longevity, safety, current load, energy density, price and environmental friendliness.

From the synthesis of chemical raw materials to the comprehensive final inspection and measurement of every single cell, our know-how is incorporated into the production of sophisticated products.

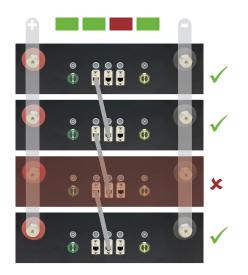




Load curves with i=1C; 2C and 3C charging up to 3600 mV at CV1 and discharge up to 2900 mV Resistance between 1C and 3C curve at SOC  $\approx$  90%  $R_{DC}$  (10C @ 30sec / 40sec) 1.2m $\Omega$ ;  $R_{DC}$  vs. OCV: 1.6 m $\Omega$ 

# Store

## Battery modul



Each module works independently with its own electronic fuse! As a result, there is never a complete system failure, if a module should not work correctly.

### eSafe 2,4 kWh

With eSafe you reduce energy costs, you can even consume self-produced solar power yourself. As in a "safe", eSafe safely stores the valuable energy until it is needed. The modules are scalable up to max. 16 units per string.

The eSafe is equipped with 16 gas-tight, cylindrical Lithium-Iron Nano-Phosphate cells from our own production. Our Battery Management System (BMS) is an innovative measuring, monitoring and control system with an integrated fuse device and independent control system.

For measuring, we use the high-precision shunt measuring method. The Pyrofuse protection ensures guaranteed power separation in every individual eSafe when safety-relevant operating limits are exceeded.



# Load

### **Consumption Control**

### SmartPvCharge "Refuel, but only with the sun!"

The ideal solution for optimising self-consumption in your household combining an electric vehicle with the SmartPvCharge charging method. Due to the high storage capacity and the temporal flexibility in the charging process through SmartPvCharge it enables you to achieve an overall PV selfconsumption rate of more than 80%. At the same time, depending on the desired priority of a full charge, the ideal of CO<sub>2</sub>-neutral electro mobility can be achieved.



### **Building automation**

#### automationNEXT

From a single apartment to complex commercial buildings - we have the right products and unique solutions for building automation for everyone. We have designed same in a way, that it is easy to install, operate and to maintain. Our system integrates devices and systems from different providers onto a common platform. We offer tailor-made products for single and multi-residential houses, office buildings, hotels, commercial and industrial buildings.



# Load

### **Charging technology**

## **Pay-Charge**For all accounting systems

For public and commercial use. With Pay-Charge, every modern electric vehicle with a charging control system according to IEC 6185122 can be steplessly charged from 3.7 kW to 22 kW. The entire control technology is installed in a weatherproof and robust housing. A stand made of galvanised steel with plastic coating ensures firm stability. The pay-charge charging station is also available as a wall-box solution for wall mounting, for example in parking garages.

### **Equipment**

- · Calibrated MID-Meter
- RFID Reader
- · Monitoring of internal hardware
- Possibility to scan a QR-Code at the charging point via app, so that charge or activation and payment can be made.
- OCPP communication protocol; OCPP 1.5 and OCPP 1.6 compliant
- Smart grid capable
- Peer group mechanism to distribute a set current within a group of charge controllers "Load management"
- Integrated 4G modem; supports 2.5G Edge and 3G UMTS mobile networks
- 2 USB interfaces; one to configure the charge controller or for software updates, a second for the connection of USB peripherals.
- Error handling to ensure a safe and successful loading process (including payment)
- Integrated DC module for DC residual current detection. Outside the charging box, only one Type A, FI circuit breaker is required.







## **SP CHARGE**Especially for use in the private sector

The charging stations type SP22L-804 and SP22L-904 are designed for the powerful three-phase charging of electric vehicles.

This means that all modern electric vehicles can be charged with a charge control unit according to IEC 61851-1 Mode 3. The charging stations are suitable for installation both indoors and outdoors. They have an Ethernet connection and a serial interface (RS232).

Furthermore, the charging station SP22L-904 offers a SO pulse / energy meter and instead of buttons a RFID card reader for authentication. Feedback is provided through the LEDs integrated in the three buttons.



## **Charge4Bike**Bicycle stand for e-bikes

Our Charge4Bike is a reasonably priced system for charging E-bikes. Four built-in sockets (protection class IP44, including child protection device) with 2 connections per side allow the simultaneous charging of up to 4 e-bikes. In addition, a FI circuit breaker, protection class IP54 integrated into the connection cable ensures maximum safety. All a guest has to do plug in their charger.

Charge4Bike is the ideal product for pups/restaurants, municipalities, cooperatives, beer gardens, tourist centres and shops, such as Bicycle dealer. The 2-sided generous advertising space offers enough space for your advertising message. We recommend to use weather- and UV-resistant foil.





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