



# Pay-Charge

Charging station with billing system

## The sustainable overall solution!

### CHARGING WITH STATE-OF-THE-ART TECHNOLOGY

With Pay-Charge, we have launched a charging station for public and commercial applications: continuous charging from 3.7 kW (1-phase) to 22 kW (3-phase)\*. All present-day electric vehicles with a charge controller according to IEC 61851-22 can be charged. The charge regulator complies with state-of-the-art technology. The complete control technology is located in a weather-proof and sturdy housing. An galvanized steel with plastic coated base ensures steady positioning. Pay-Charge is also very suitable for wall box solutions (wall-mounted), e.g. in car parks.

### HIGH LEVEL COMMUNICATION ALREADY INTEGRATED

Since the spring of 2014, the ISO/IEC standard 15118 has been governing the charging of electric vehicles with alternating current worldwide. While most manufacturers of electric cars and electric charging stations are still coming to terms with the new standard, we have already implemented it into our Pay-Charge charging station: The data exchange of the charging station with the charge controller of the electric car via the ISO/EIC 15118 Powerline Communication (PLC) for plug & charge and consumer management systems is an integral part.

A PLC modem makes an Ethernet connection available, which can be used to communicate with the Internet Protocol (IP), to implement activities such as authentication, certificate management and verification as well as changing the charging parameters and automatic payment processing. Error handling intercepts possible errors. This ensures ever safe and successful charging (incl. payment).

### ADDITIONAL FEATURES

The charge regulator takes care of monitoring the internal hardware such as meter, user interface module or socket. A calibrated MID-certified meter shows the customer in kWh the amount of electrical energy he/she "filled" into the car. Payment is made without the use of cash by means of the proven and tested RFID reader using a contactless RFID card. To start charging, an activated RFID card merely needs to be held to the reader. Depending on the provider or operator, charging/activation and payment can also be carried out using an app by scanning a QR code at the charging point. The provider's/operator's back-end system allows communication with the charge regulator.

Normally, back-end providers work with/according to the OCPP communication protocol. Therefore, the IT interface supports OCPP in the 1.5 and 1.6 versions. This makes the integration into modern billing systems extremely easy. Furthermore, the charge regulator is smart grid compatible because of the standard OCPP function. It also has an integrated 4G modem and supports 2.5G Edge and 3G UMTS mobile networks. A SIM card is required for online operation; this is not included in delivery.

There are two USB ports: One to configure the charge regulator or for the installation of software updates. The second USB port enables connecting USB peripheral devices. A peer group mechanism makes it possible to distribute a set current within a group of charge regulators - keyword "load management". Moreover, internal temperature sensors are integrated, with which the charge current can be reduced independent of the ambient temperature as well as internal current sensors, to measure the load current. If an error occurs, a report with the OCPP protocol is sent to the back-end system.

The device is equipped with a DC residual current detection. As a result, only one residual current circuit breaker type A is required on site.

\* The actual charging power depends on the respective electric vehicle, the use of a 1- or 3-phase charging process, as well as the power supplied by the network operator (connected load).

MID-certified meter



RFID reader QR-Code (Demo)



Available/vacant



Plug locked



Charging in progress



## TYPE

Item no.	Name	Loading boxes	Charging station	Integrated control unit	RFID	Electric meter	RRP plus VAT
PAY22L-0	① Pay-Charge Only	1	x	✓	✓	✓	1884 €
PAY22L-1	② Pay-Charge charging station mono	1	Single pedestal	✓	✓	✓	1994 €
PAY22L-2	③ Pay-Charge charging station duo	2	Double pedestal	✓	✓	✓	3884 €

Housing colour: RAL9003 (white), front middle section can be freely selected (basic version RAL6018)

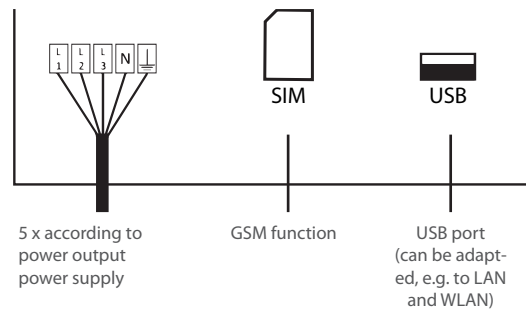


Pay-Charge has the eRoaming Technology seal from HUBJECT. The charging station can be unlocked via the digital platform interchange via navigation system or app. Even without a power contract can be paid by PayPal or credit card.

## TECHNICAL FEATURES

Nominal voltage:	3 x 230 V~
Nominal power	16 / 32 A
Terminal blocks:	6 mm <sup>2</sup> (L1, L2, L3, N and PE)
IP code:	IP54
Overvoltage category:	III
Impact resistance:	IK10
Charging operating mode:	according to IEC 61851-1 (Mode 3)
Charging capacity	Continuous charging; from 3.7 kW (1-phase) to 22 kW (3-phase)*
Charging connection	Charging socket type 2 with LED indicator
Communication	4G modem, OCPP, USB
Charging initiated	by RFID by scanning a QR code (optional) integrated electric meter

## CONNECTION SCHEMATIC



## ENVIRONMENTAL CONDITIONS

Operating temperature:	-25 °C to +80 °C
Barometric pressure:	860 hPa to 1060 hPa
Ambient humidity:	5% to 95% (non-condensing)

## DIMENSIONS / WEIGHT / HOUSING

h x w x d / weight:	403 x 278 x 171 mm / approx. 7 kg
Housing:	UV-resistant plastic housing

## ACCESSORIES

Mounting material

### Base

h x w x d / weight:	1294 x 330 x 222 mm / approx. 25 kg
Surface:	Galvanized steel with plastic coated

\* The actual charging power depends on the respective electric vehicle, the use of a 1- or 3-phase charging process, as well as the power supplied by the network operator (connected load).

This product may only be installed and connected to the power grid by suitably qualified personnel. This product requires routine maintenance according to the maintenance instructions supplied with the product. We therefore recommend the maintenance of the acquired product by respectively qualified personnel. There is no liability for damages beyond the cases stipulated in the General Terms and Conditions; in particular, no liability is assumed for damages caused by vandalism, lighting/electrical surges, consequential costs for automobiles/vehicles or liability according to technical connection requirements. In the event of warranty, the SSL Energie GmbH only bears the required transport, route-related transport, labour and material costs; bearing the costs is excluded insofar as additional costs arise from transporting the object in question to a location other than the place of performance or bearing these costs is unreasonable. In the event of warranty, the product must be returned to the SSL Energie GmbH for error diagnostics and possible supplementary performance. Furthermore, the General Terms and Conditions of Sale and Delivery of the SSL Energie GmbH ("T&C") apply.