Smart Building, Smart Grid, E-Mobility

CLEMAP Load Management

Dynamic and static control for AC and DC charging stations of different manufacturers

Measuring and control unit

Dashboard CLEMAP Floem

To support tenants, property owners and energy suppliers, **CLEMAP Load Management** takes over the central **control and coordination function of the loads** to enable a cost-efficient and seamless integration of electric mobility and to relieve the electrical grid.

As soon as more than two charging stations are installed, a control system for the charging stations is required. **Dynamic load management** makes it possible to distribute the available power evenly among the charging stations.

This eliminates the need to increase the electrical connection to the main distribution board as well as the associated recurring costs. Interruptions in operation due to grid overloads are also a thing of the past.

The product comprises two components: **the measuring device**, which consists of a three-phase electrical sensor and a current transformer, and **the software**, which, with a free basic licence (Floem FREE), covers all functions necessary for operation. Various licence models are available for optional additional functions.

An internet connection is required to transfer the energy data (optional). This can be established wirelessly or via a LAN network. As soon as the connection is established, the meter connects to the **CLEMAP Cloud** (Floem) where all consumption data is presented.

The CLEMAP Load Management sends the allowed current consumption to the charging stations of the electric cars via the same IP network. The data can also be sent via the charging stations' cloud services.

- Local **dynamic** or **static** real-time charging management
- Integration of controllable and non-controllable charging stations (ON/OFF charging stations)
- Operation **with** or **without connection to the cloud**
- **Monitoring** via Dashboard for electricians and administrators
- **Monitoring of house/electricity connection** via online energy portal CLEMAP Floem
- **Remote control** of power availability, **prioritization** of charging stations, and **charging with solar energy**
- **Billing for property owners**
- Support for **multiple circuits**

The meter has two outputs and a digital input to receive broadcast control signals for control by the distribution network operator and accepts dynamic load reduction commands via API.

Compatibility

CLEMAP Load Management controls the following brands of charging stations. New models are added monthly:

The most up-to-date list is maintained on the website under https://en.clemap.com/dynamisches-lastmanagement

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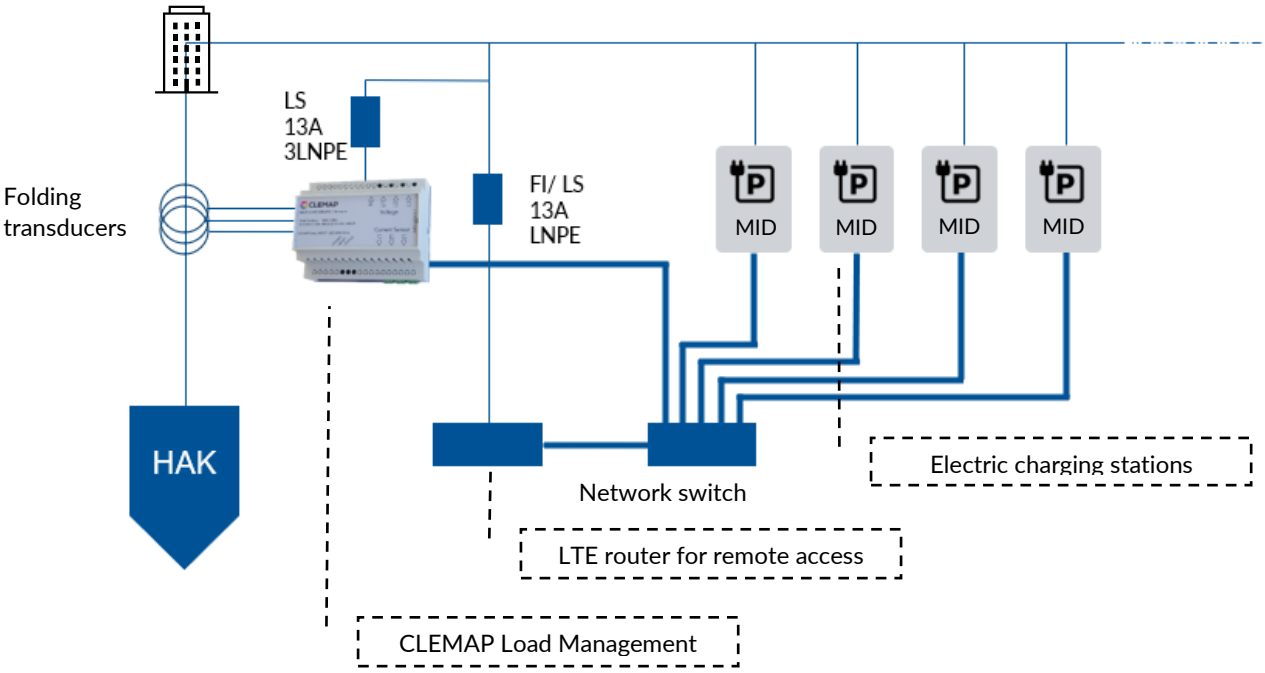
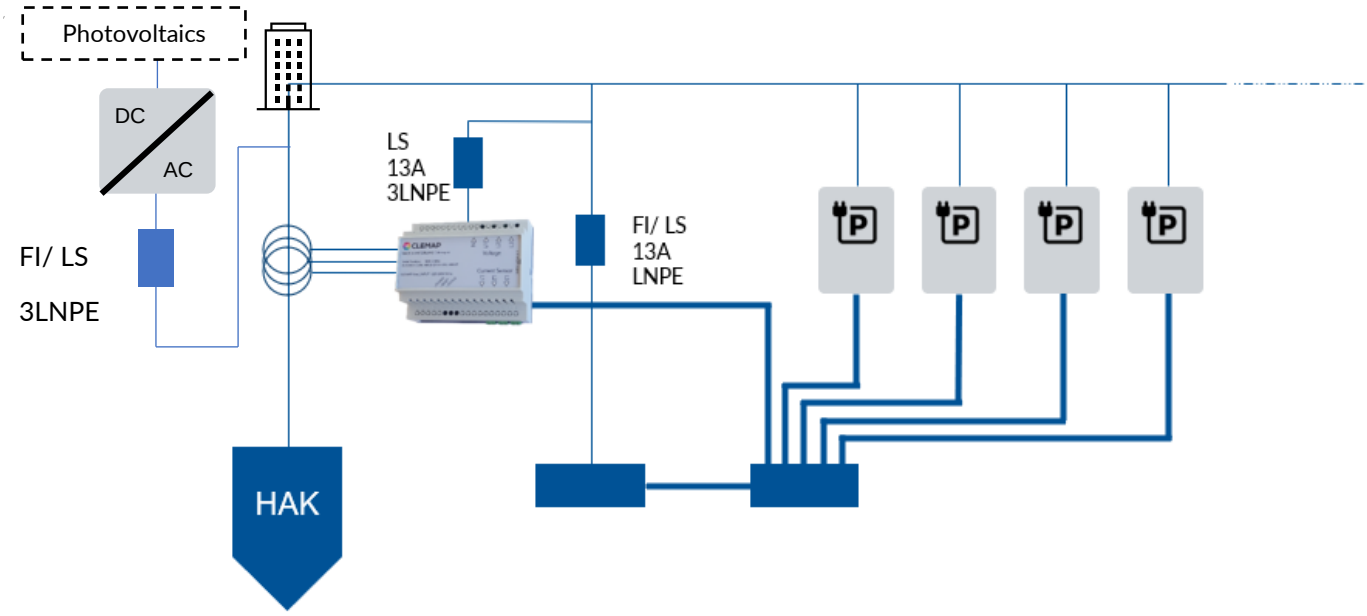
CLEMAP Load Management

Typical installation of the CLEMAP Load Management



Typical installation of CLEMAP Load Management with PV Integration



Compatibility

CLEMAP Load Management can be connected to the following system to enable solar charging:

Solar-log

SolarManager

Janitza

Shelly

CLEMAP

CLEMAP AG
www.clemap.com

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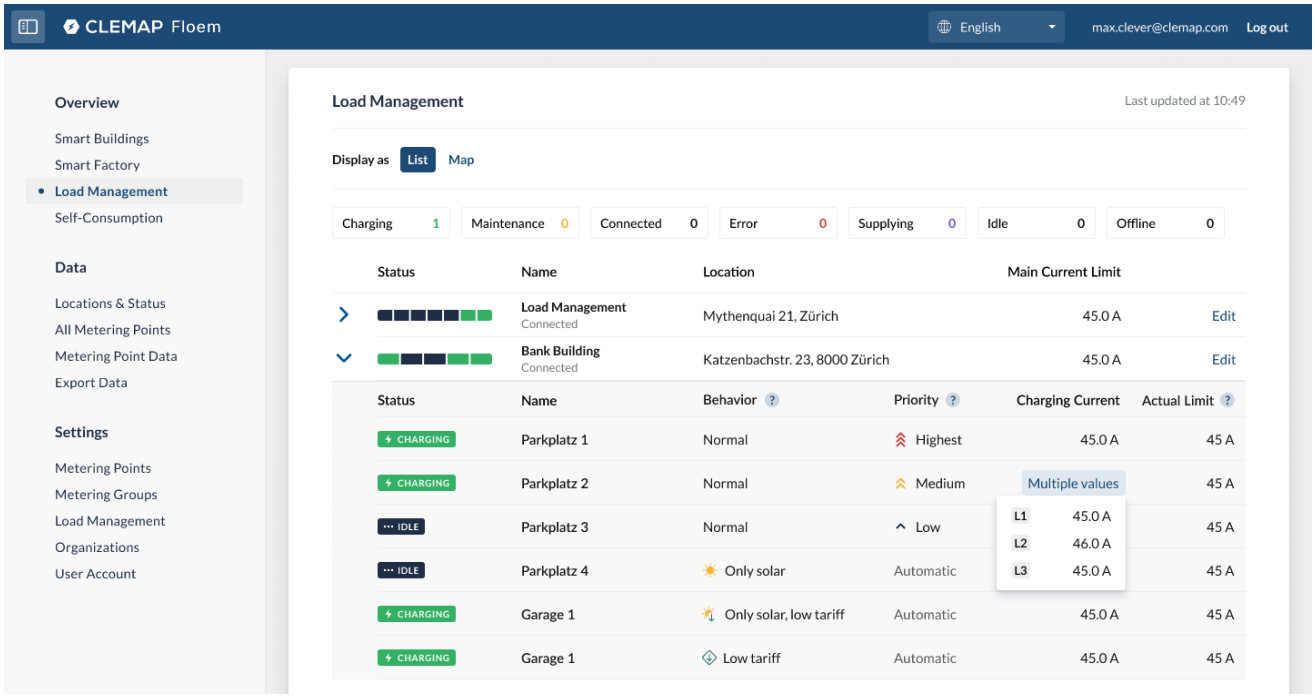
Monitoring via Dashboard

CLEMAP Load Management can operate in the local network and basically works without an internet connection. However, it is recommended to install an internet connection so that the status of the charging stations can be monitored remotely via CLEMAP Floem after commissioning.

The following information is available in CLEMAP Floem:

- Status of the charging stations: free, occupied, charging, discharging and not in operation
- Limits of the charging stations: can be dynamically controlled and adjusted in real time



Technical data

Rated voltage: 230 / 400 V	Warranty: 24 Monate
Voltage interface: L1, L2, L3	Dimensions: 105x86x59 mm
Rated frequency: 50 Hz	DIN Rail Montage
Power consumption: < 3 W	CE-certified
Maximum current per phase (A): 80/125/200/400/1000/2000/6000A	Data Interface: CSV, PDF, REST API, SDAT/EBIX
Real-time data with 10 seconds resolution for voltage, current, apparent, active, reactive power and power factor	Wireless 802.11b/g/n, LAN, 4G*, Communication with charging stations via: Modbus TCP and RestAPI. Digital input, 1-channel (ripple control signal input), digital output, 2-channel.
Positive and negative energy flows	* with external 4G modem

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CLEMAP Load Management

Hardware components

Order number	Product description
C-04A-WL-XXXA-ST	CLEMAP Load Management static
C-04A-WL-080A-CS	CLEMAP Load Management 80A
C-04A-WL-125A-CS	CLEMAP Load Management 125A
C-04A-WL-200A-CS	CLEMAP Load Management 200A
C-04A-WL-400A-CS	CLEMAP Load Management 400A
C-04A-WL-01kA-CS	CLEMAP Load Management 1000A
C-04A-WL-02kA-CS	CLEMAP Load Management 2000A
C-04A-WL-06kA-CS	CLEMAP Load Management 6000A

For prices and licence models incl. functions, please see the separate price list.

Your contact
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