

CLEMAP Load Management

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

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.



Measuring and control unit

Dashboard CLEMAP Floem

- 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

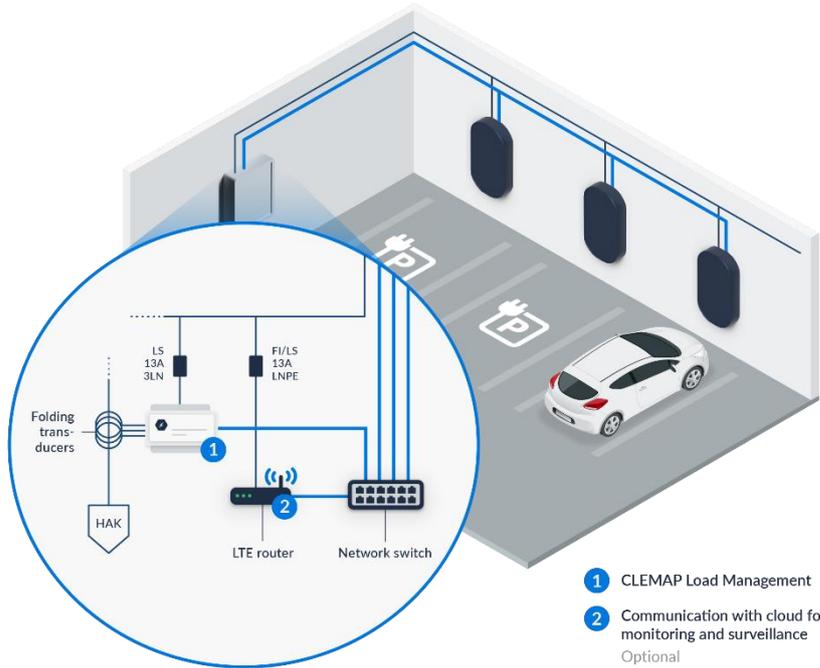
CLEMAP Load Management controls the following brands of charging stations. New models are added monthly:



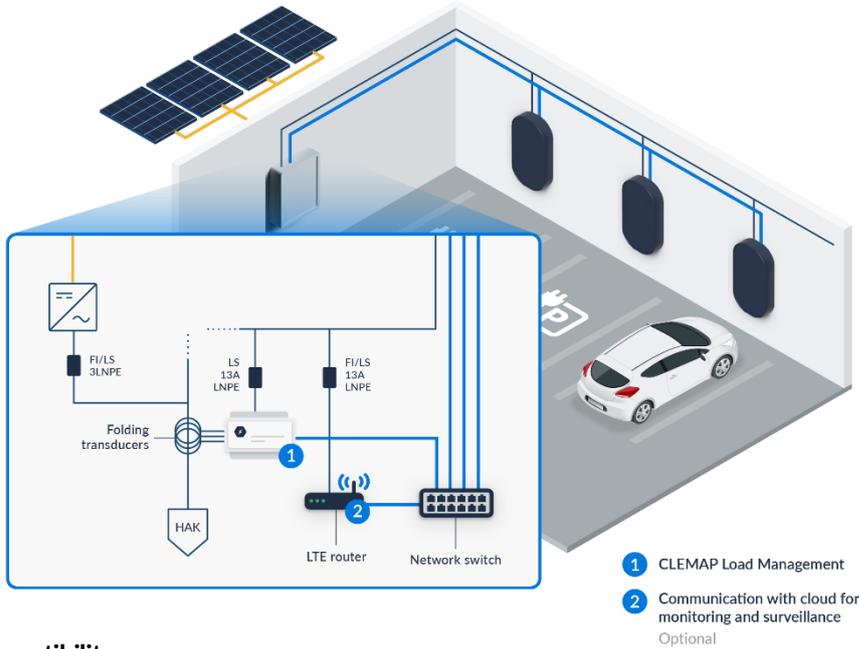
The most up-to-date list is maintained on the website under <https://en.clemap.com/dynamisches-lastmanagement>

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



M3PRO + Evison Adapter



CLEMAP Load Management

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

The screenshot shows the CLEMAP Floem interface. On the left is a navigation menu with sections: Overview (Smart Buildings, Smart Factory, Load Management, Self-Consumption), Data (Locations & Status, All Metering Points, Metering Point Data, Export Data), and Settings (Metering Points, Metering Groups, Load Management, Organizations, User Account). The main content area is titled 'Load Management' and shows a summary of station statuses: Charging (1), Maintenance (0), Connected (0), Error (0), Supplying (0), Idle (0), and Offline (0). Below this is a table of two main locations: 'Load Management' (Mythenquai 21, Zürich) and 'Bank Building' (Katzenbachstr. 23, 8000 Zürich), both with a 45.0 A main current limit. A detailed table below lists individual charging stations with columns for Status, Name, Behavior, Priority, Charging Current, and Actual Limit. A tooltip for 'Multiple values' shows L1 (45.0 A), L2 (46.0 A), and L3 (45.0 A).

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

CLEMAP Load Management

Hardware components

Order number	Product description
C-04A-WL-XXXX-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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