

FEMS App Phase-Accurate Peak Shaving

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1. Introduction

Dear customer,

Thank you for choosing the "FEMS App Phase-Accurate Peak Shaving". You are welcome to send us your suggestions so that we can further improve the quality of our products.

2. Installing the app

When you ordered the "FEMS App Phase-Accurate Peak Shaving", you received a 16-digit license key. You can use this license key to redeem the app independently in the FEMS App Center.

Instructions on how to proceed can be found here.

3. FEMS App Peak Shaving

The "Classic Peak Shaving" refers to the total output at the grid connection point and reduces this in the 15-minute average in such a way that high output prices are avoided.

The "FEMS App Phase-Accurate Peak Shaving", on the other hand, regulates the actual power at any metering point in real time. This use case is particularly interesting in connection with high single-phase power - such as when charging EVs.

As soon as the measured value above a second threshold value allows charging again ("recharging power"), the battery recharges itself to be ready for the next load peak.

To ensure compliance with the peak load caused at the grid connection point, we recommend installing an independent, individually-configured load management system in addition to the energy storage system, which, for example, intervenes and reduces loads in the event of unplanned, higher loads for which the electrical energy storage system was not designed.

As soon as the "FEMS App Phase-Accurate Peak Shaving" has been activated on your FEMS, you will see this widget in your monitoring:

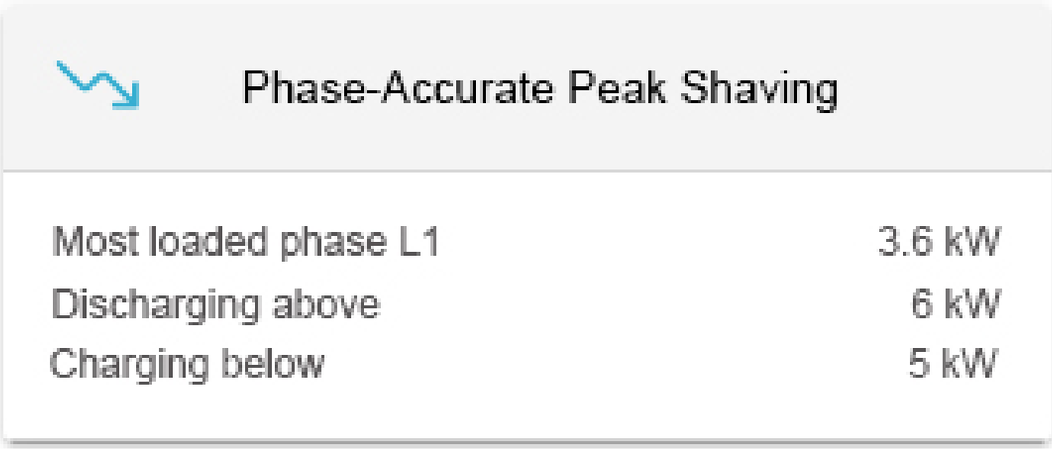

Image 1. Widget

The algorithm controls an electrical energy storage system in such a way that both the total power and the phase power at the measuring point do not exceed the limit values ("peak shaving power") and thus effectively prevents a miniature circuit breaker from tripping. In the example above, this value is 6 kW.

As soon as the grid consumption decreases again and falls below a second threshold value ("recharging power"), the battery recharges itself to be ready for the next peak load. In the example above, this value is 5 kW.

Click on the widget to open the detailed view of the app:

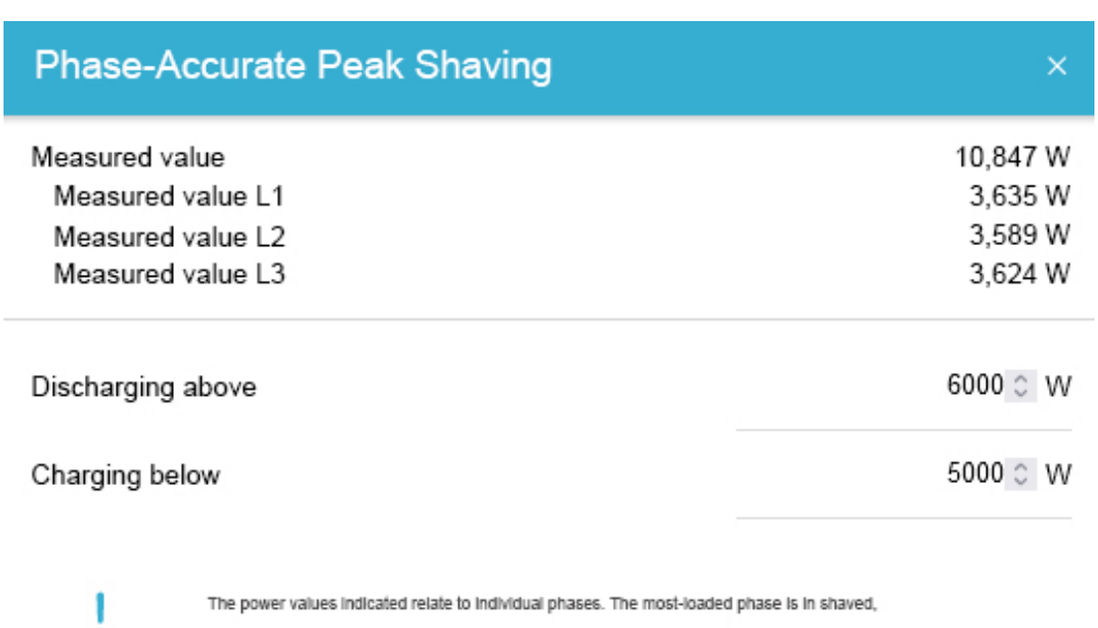

Image 2. Detailed view

Here you have the option of adjusting the "Peak Shaving Power" and "Recharging Power".

The value of the "peak shaving power" must not be less than the "recharging power"!

The "History" view shows a similar picture to the one below:

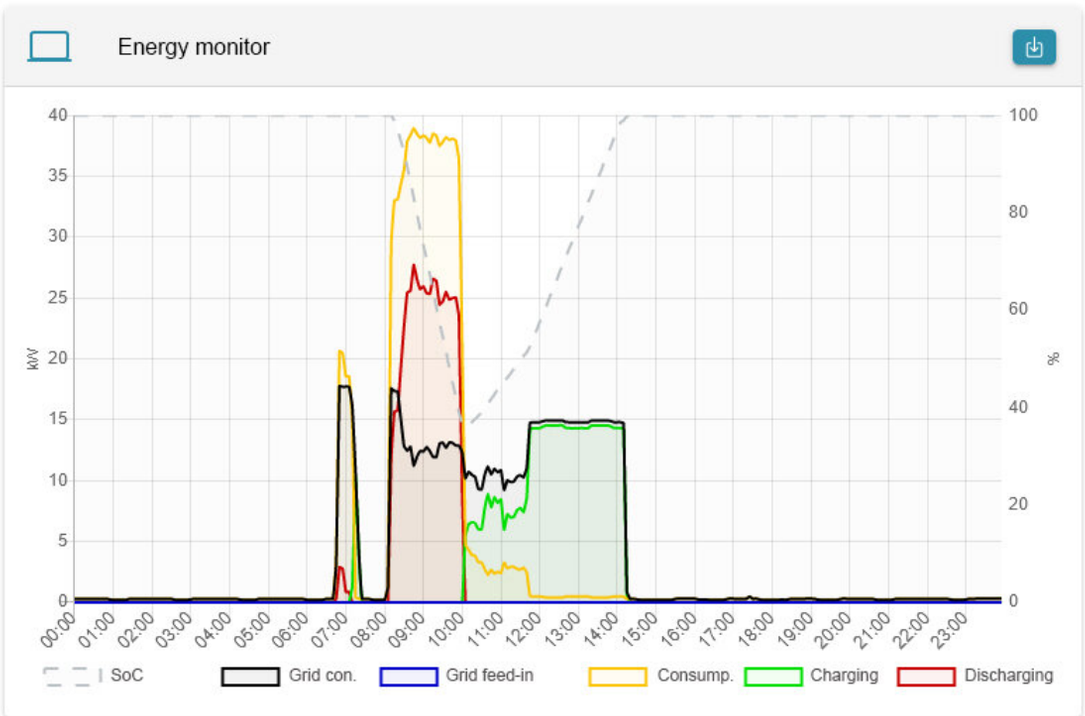

Image 3. Summarized representation of the entire energy system using the example of an EV charging park:

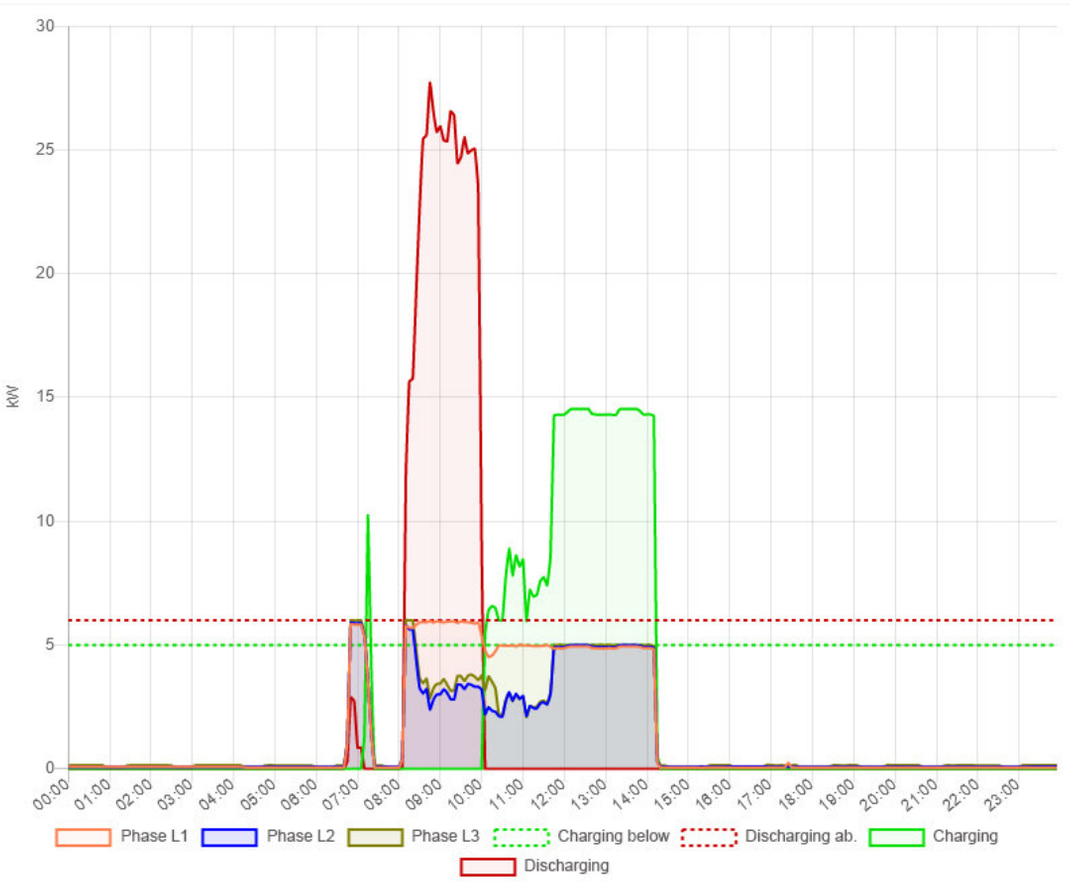

Image 4. Phase-accurate display in the detail view.

The two figures above show that the single-phase charging of an EV placed a greater load on phase L1 than on the other phases. Without the electrical energy storage system with the FEMS app, the miniature circuit breaker would have tripped.

4. Contact us

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5. Directories

5.1. List of illustrations

Image 1. Widget
Image 2. Detailed view
Image 3. Summarized representation of the entire energy system using the example of an EV charging park:
Image 4. Phase-accurate display in the detail view.