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FEMS App Multi-Use

Version:2026.7.1

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1. Introduction

Dear customer,

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

2. Description

2. Description

FEMS App Multi-Use combines functions of the energy storage system with those of various FEMS Apps. FENECON GmbH selects and configures the FEMS Apps according to customer requirements. The **FEMS App Multi-Use is designed for industrial applications** and offers a flexible solution for integrating energy storage systems into complex energy management systems—it can even be described as the “Swiss Army knife of FEMS Apps.”

The following FEMS Apps can be combined:

- [Self-Consumption Optimization](#)
- [Peak Shaving](#)
- [Manual Charging and Discharging](#)

FEMS App Multi-Use is compatible with the following FENECON systems:

System	Compatibility
FENECON Industrial S	✓
FENECON Industrial M (452-904)	✓
FENECON Industrial L	✓
FENECON Industrial XL	✓

2.1. Use cases

Click on the text to expand it.

Case Study — Foundry

Background:

- Annual electricity consumption: 2,400 MWh
 - Monday–Friday: 500–700 kW melting processes
 - Weekends: 100–120 kW base load
 - Employee vehicle charging with 8 charging points
- 1,000 kW grid connection
- 450 kWp rooftop PV system
- System: FENECON Industrial M 368 kW/656 kWh

Behind-the-Meter system for energy cost optimization

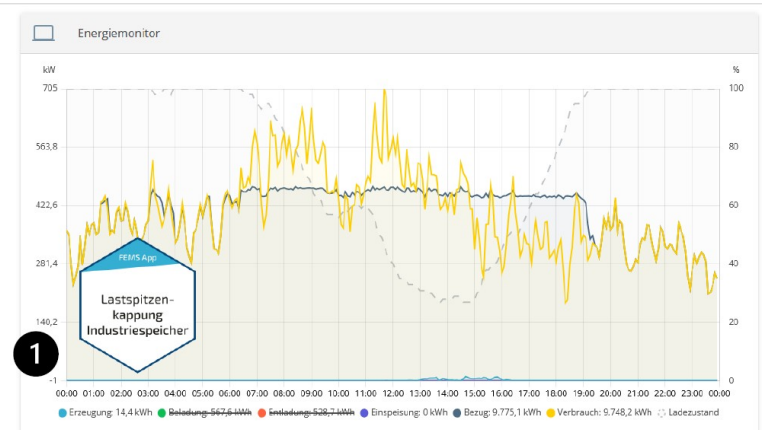
Challenges:

1. **Business day:** Peak loads have a particularly costly impact on electricity bills.
2. **Weekend:** Solar power is subject to lower remuneration and is fed into the grid.

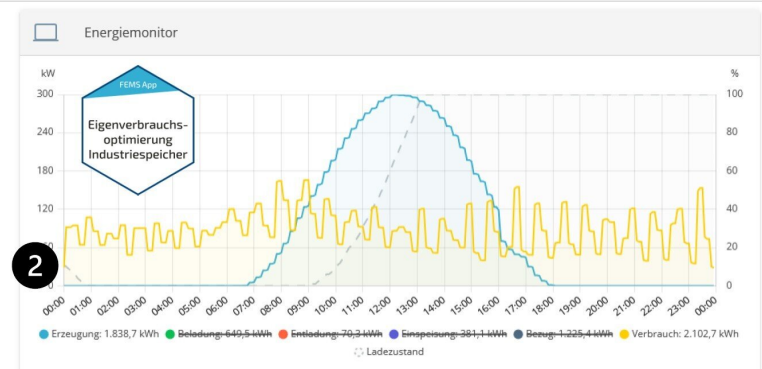


Solution:

1. **Weekday:** Peak Shaving Peak Shaving to 450 kW grid withdrawal (black)



2. **Weekend:** Self-Consumption Optimization 656 kWh from the PV system secured for weekend operations



Automatic Operation: Multi-Use with FEMS

3. Operation

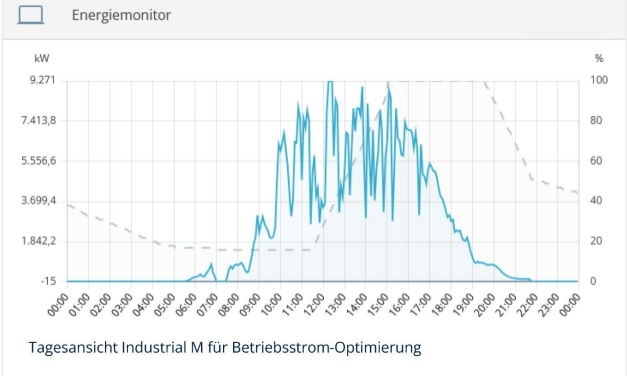
- Optimal utilization of the energy storage system
- Greater savings through the combination of standard applications

Reduction of peak loads by 250 kW

Increase in the self-consumption rate to 95%

- One-time setup, automatic operation

Case Study — Co-location Without Operating Electricity Costs

Background & Challenges: • Solar farm (10 MW) with a large grid connection point (8 MW) • Energy storage facility (8 MW 14 MWh) for arbitrage trading • Operating power must be purchased at a high cost from the grid	Amortization • Solar farm + Energy storage facility: 3–5 years • Industrial M for operational electricity: 2–3 years
Goal: Operational electricity bill = € 0 An auxiliary electrical energy storage system that charges slowly during the midday peak and shifts this energy to nighttime hours, when transformer losses occur and the facility’s cooling systems are running. At the same time, the electrical energy storage system feeds its “remaining” energy into the grid during the expensive evening hours. Solution: Industrial M with Multi-Use • At night, the system automatically discharges to meet consumption. • During the day, the customer can create recurring SmartEvents at any time to ensure optimal driving.	Energiemonitor  Tagesansicht Industrial M für Betriebsstrom-Optimierung

3. Operation

Click the *Storage System* main menu option and then the *Serial Multi-Use* chip to view an overview of the storage system’s configured tasks:



Image 1. Overview of the system's functions

To manage the storage system's tasks, click the *Schedule* tab. The following overview will appear in the main window:

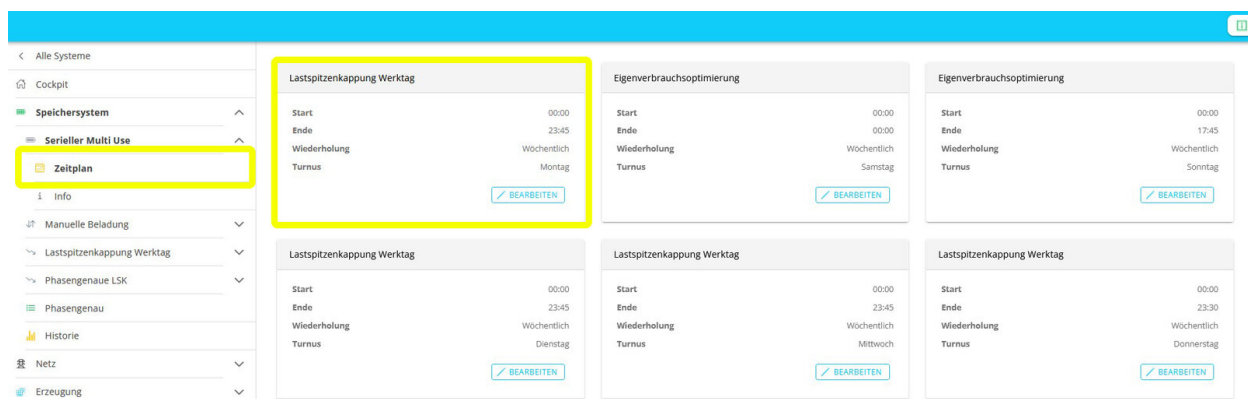


Image 2. Schedule of system tasks

Click *Edit*.

Here, under *Controller*, you can configure the type of task (e. g. Manual Discharging), the repeat interval, the start and end times, and the cycle:

3.1. Defining individual power values

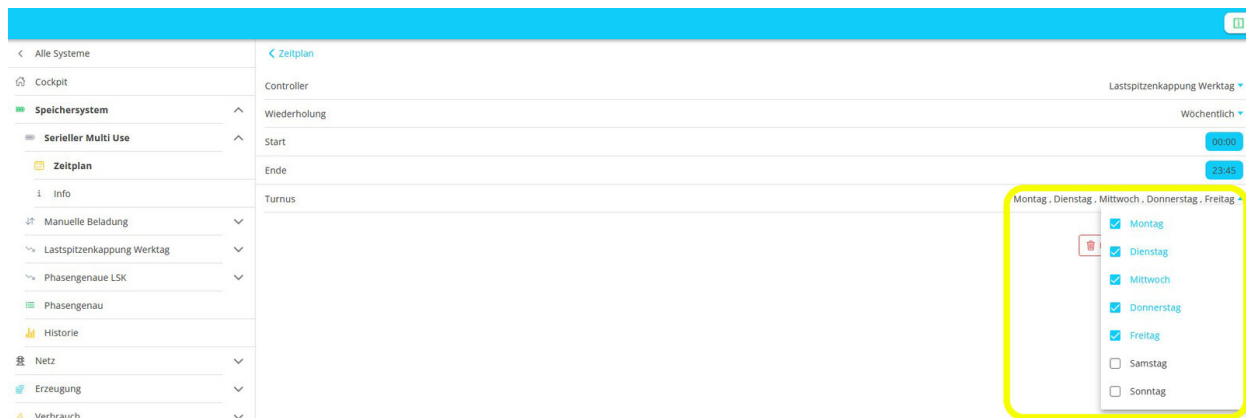


Image 3. Managing system tasks

3.1. Defining individual power values

Common performance settings are still configured in the respective FEMS Apps under the main menu item *Storage System* (using "Manual Charging & Discharging" as an example here):

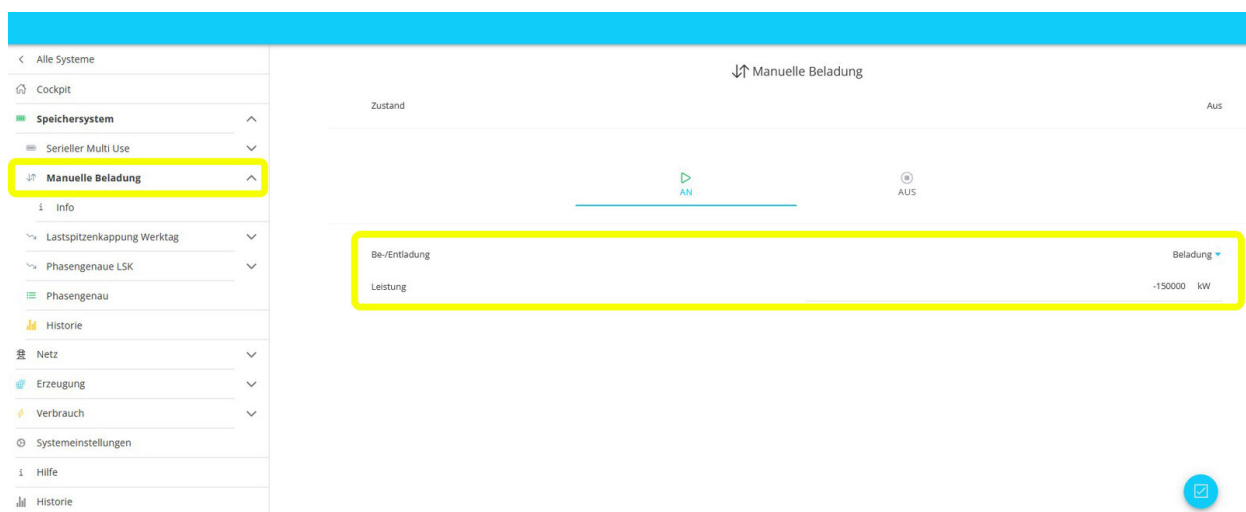


Image 4. Defining individual power values

Individual power values can be defined in the following FEMS Apps:

- Manual Charging
- Manual Discharging
- Peak Shaving
- Self-Consumption Optimization

FENECON configures the FEMS Apps according to customer requirements. It is also possible to install FEMS Apps multiple times. Please contact your representative at projekt@FENECON.de.

```
include::/workspace/FENECON/docs/docs/en/modules/ROOT/partials/themes/fenecon/OEM Contac-  
t_config.adoc[] include::/workspace/FENECON/docs/docs/en/modules/ROOT/part-  
tials/themes/fenecon/OEM Contact.adoc[] <<<
```

4. Directories

4.1. List of illustrations

[Image 1.](#) Overview of the system's functions

[Image 2.](#) Schedule of system tasks

[Image 3.](#) Managing system tasks

[Image 4.](#) Defining individual power values