Symphon·E

EMS Technical Documentation

Version:2026.9.1

Table of Contents

1. Internet connection 1
2. Network configuration 1
3. Firewall 1
4. API Communication 2
5. System update 2
6. Interaction with Other EMS Systems 2
7. Contact us 3

2026.9.1

1. Internet connection

A permanent internet connection for EMS is recommended. In principle, offline operation is also possible. In this case, however, the following functions cannot be used:

1. System updates
2. Installation of new EMS apps
3. Transmission of measurement data to Heckert Solar server for remote access
4. Use of Online Monitoring via the Heckert Solar portal access (e. g. on the go via smartphone)
5. Maintenance access for FENECON service employees
6. Use of EMS apps with third-party services via the internet (e. g. Time-of-use tariffs)

2. Network configuration

In the standard configuration, the EMS obtains the IP address via a DHCP server (e. g. FritzBox). The network configuration can also be adjusted in Online Monitoring under `Settings` → `Network configuration`. More information can be found here.

3. Firewall

The following services are active on the EMS and require an Internet connection to the respective target addresses and ports.

Service	Destination Address(es)	Destination Port
DNS	(IP address of the DHCP-assigned DNS server)	53 (DNS)
Online Monitoring	144.76.42.217 (fenecon.de) 162.55.102.78 (www1.fenecon.de)	443 (HTTPS)
Time Synchronization	144.76.42.217 (fenecon.de)	123 (NTP)

Service	Destination Address(es)	Destination Port
Operating System Package Updates	144.76.42.217 (deb.fenecon.de)	80 (HTTP)
Remote Maintenance	168.119.5.99 (remote-service.fenecon.de)	2222
Heckert Solar Service	185.145.190.0/24	

Table 1. Firewall and target addresses



If you have problems with any of these steps, please check the port release of the router or contact service@fenecon.de.

4. API Communication

Some FEMS Apps may require additional access, e. g.:

- FEMS App Time-of-Use Tariff to access Entso-E (`web-api.tp.entsoe.eu`).
- FEMS App Weather to access weather data (`customer-api.open-meteo.com`).
- FEMS App clever-PV to access the clever-PV Connect API (https://connect.docs.clever-pv.com/introduction).

5. System update

The EMS is regularly updated as part of software updates.
These updates can be installed via the `Settings` → `EMS system update` tab.

6. Interaction with Other EMS Systems



General note on the functionality of EMS in connection with other Energy Management Systems: There is a possibility that unwanted interactions may occur if another EMS is installed alongside EMS.

To ensure that the EMS functions optimally, even when used in connection with hardware components from other manufacturers, no other EMS must be installed on the system at the same time.

7. Contact us

For support, please contact:

Symphon-E Service

Service phone: +49 (0) 371 45 85 68 - 100

E-mail service: symphon-e@heckert-solar.com