



FEMS Technical Documentation

Version:2026.9.1

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2026.9.1

1. Internet connection

A permanent internet connection for FEMS 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 FEMS apps
- 3. Transmission of measurement data to FENECON server for remote access
- 4. Use of Online Monitoring via the FENECON portal access (e. g. on the go via smartphone)
- 5. Maintenance access for FENECON service employees
- 6. Use of FEMS apps with third-party services via the internet (e. g. Time-of-use tariffs)

2. Network configuration

In the standard configuration, the FEMS 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 FEMS 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)

4. API Communication

Service	Destination Address(es)	Destination Port
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)
Operating System Package Updates	144.76.42.217 (deb.fenecon.de)	80 (HTTP)
Remote Maintenance	168.119.5.99 (remote-service.fenecon.de)	2222
FENECON 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 FEMS is regularly updated as part of software updates.

These updates can be installed via the **Settings** **FEMS system update** tab.

6. Interaction with Other EMS Systems



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

To ensure that the FEMS 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:

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