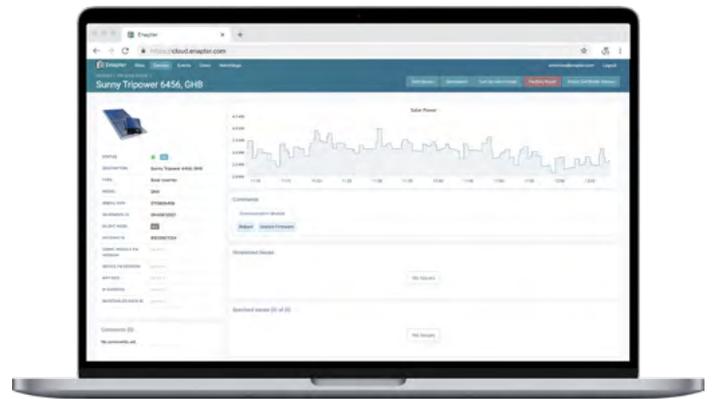
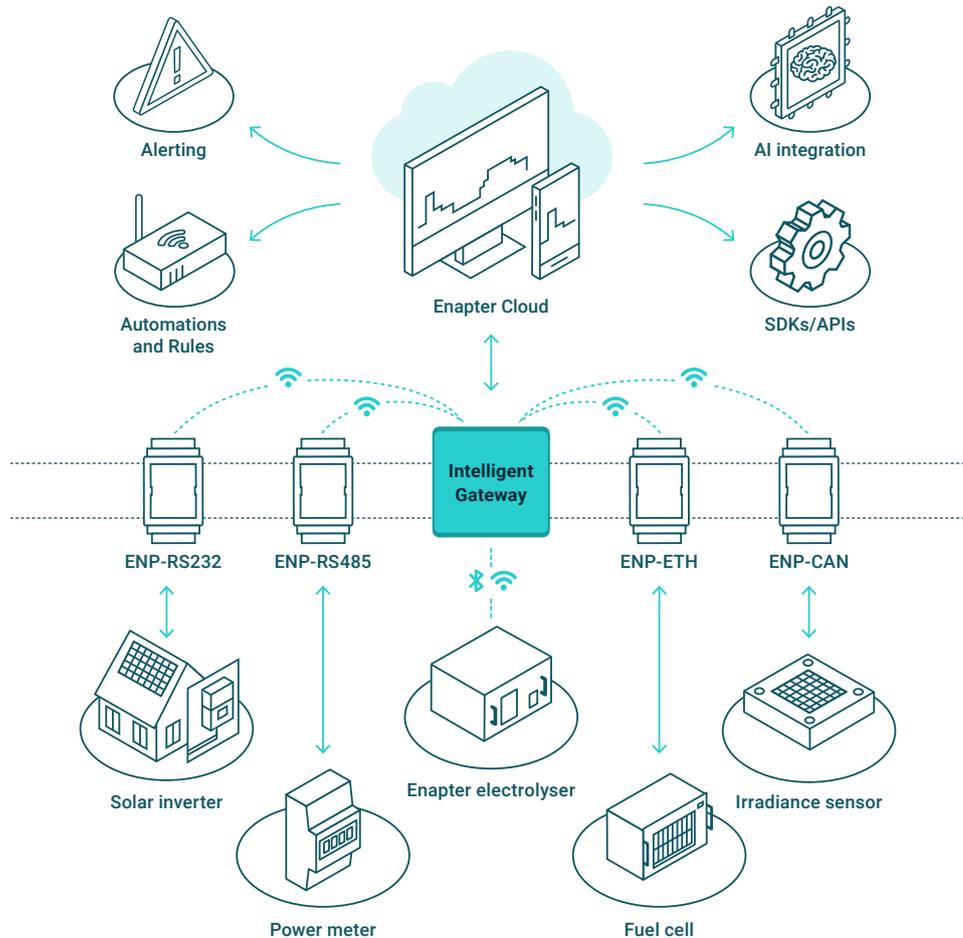


# Energy Management System (EMS)



Enapter's unique Energy Management System (EMS) allows for intuitive monitoring and control of the electrolysers and dryers, as well as easy integration with third-party devices (ie. fuel cells, sensors, tanks, solar, wind, etc.). The EMS takes energy system control software to a whole new level.



A comprehensive **web and mobile dashboard** is the face of the EMS. It provides full overview and control of all connected devices. It is not only the electrolyser that can be monitored and controlled; full analytics about the energy system are also available.

The EMS **maintains optimal performance** of the system, reducing both energy consumption and costs. If deviations are detected, customizable alerts (SMS, emails or calls) keep you informed to protect the energy system. A **rule-based management system** allows for the user to set and change the parameters of how different components of the energy system interact in an automated way. All Enapter products come with an **IoT communication module** for remote monitoring and control. Communication modules are also available to bring wireless connectivity to solar panels, hydrogen tanks, batteries, digital and analog sensors.

**Industry grade standards:** All software is equipped with MQTT and OPC-UA Interfaces to be Industry 4.0 compatible. Industry grade standards and protocols such

as RS-485, CAN, Modbus, SNMP, HTTP and others are available. Adding new devices to the EMS couldn't be any easier. Simply connect a communication device and scan a **QR code** to commission your new device. All data is stored in the cloud (military-grade encryption) which is equipped with a **predictive 24/7 monitoring system**.

**Mobile first.** We build all features on mobile platforms to provide full flexibility to customers.

The autonomous **Enapter IoT Gateway** mitigates Internet connectivity issues and stores data locally for up to a year. The highly modular and scalable architecture collects and integrates custom sensor data into the system. The gateway is based on open source software, allowing customization, broad acceptance and collaborative work across the industry.