

AMTRON[®]

Intelligent energy management in Smart Homes - Connection to PV systems

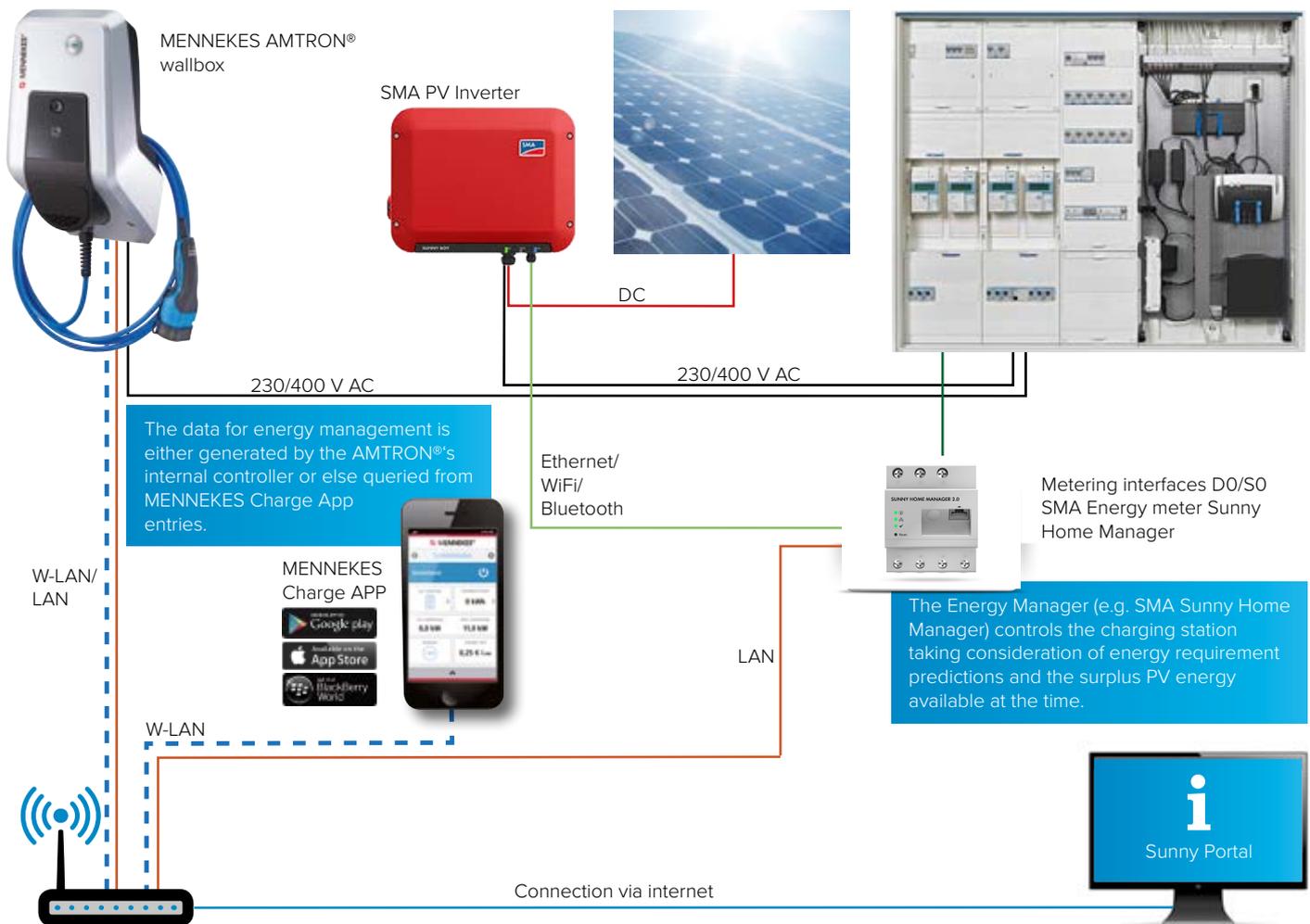


EU Product Range

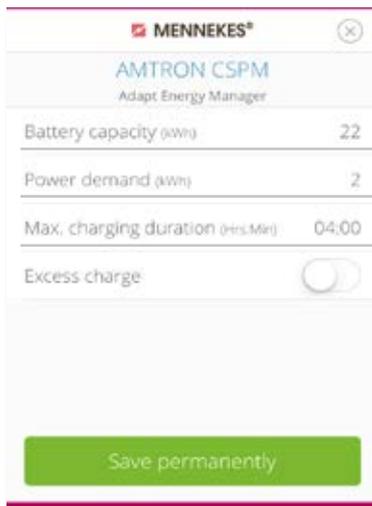


					RFID with local White List
			key switch	control via App	control via App
		calibrated energy meter	calibrated energy meter	calibrated energy meter	calibrated energy meter
	Stop button LED-status bar	Multi-function button LED-status bar			
Mode 3 charging	Mode 3 charging	Mode 3 charging	RCCB (Basic R) Mode 3 charging	RCCB (Xtra R) Mode 3 charging	RCCB (Premium R) Mode 3 charging
Start E	Light E	Pro E	Basic E, Basic R	Xtra E, Xtra R	Premium E, Premium R

System set up



Operating WITHOUT Surplus Charging



„The EV driver returns home and would like his EV to recharge a minimum 2 kWh in 4 hours time.“

Overall battery capacity

Here the minimum charge in kWh is set

Here the time period is set within which the minimum charge must be completed

- The Energy Manager ensures the cost optimised allocation of the requested 2 kWh of energy. **In there is insufficient PV energy available, the balance may be drawn from the grid.**
- If more PV energy is available or the electric vehicle remains on the charger beyond the 4 hours, the battery continues to be recharged with PV energy to capacity. The energy mix is configurable in the SMA Sunny Portal.

Operating WITH Surplus Charging



„The EV driver returns home with no further journeys planned. He would like the EV battery to be recharged to capacity with PV energy.“

Overall battery capacity

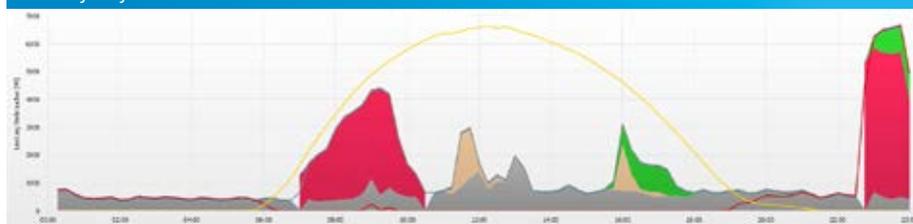
Not activated (due to surplus charging)

Not activated (due to surplus charging)

- The Energy Manager allocates all the available PV energy to the car battery via the charging station. (The energy mix is configurable on the SMA Sunny Home Portal)
- The charging process will be automatically discontinued as soon as the battery is fully recharged.
- If the user needs the car in between, it may be that the available PV energy was not enough to fully recharge the car.
- If the pre-condition for the energy mix (set by the user in the SMA Sunny Portal) is not met, it is possible that the car battery is not recharged.



A sunny day



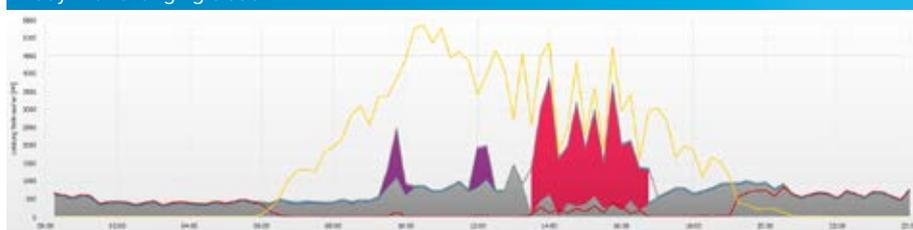
■ AMTRON® — PV generation

07:00 h The Sunny Home Manager is in control of the charging process: 100 % PV surplus energy.

From 09:30 h The electric vehicle starts limiting the charging current, in response to the high state-of-charge of its battery.

22:30 h A manual recharging cycle at the user's request.

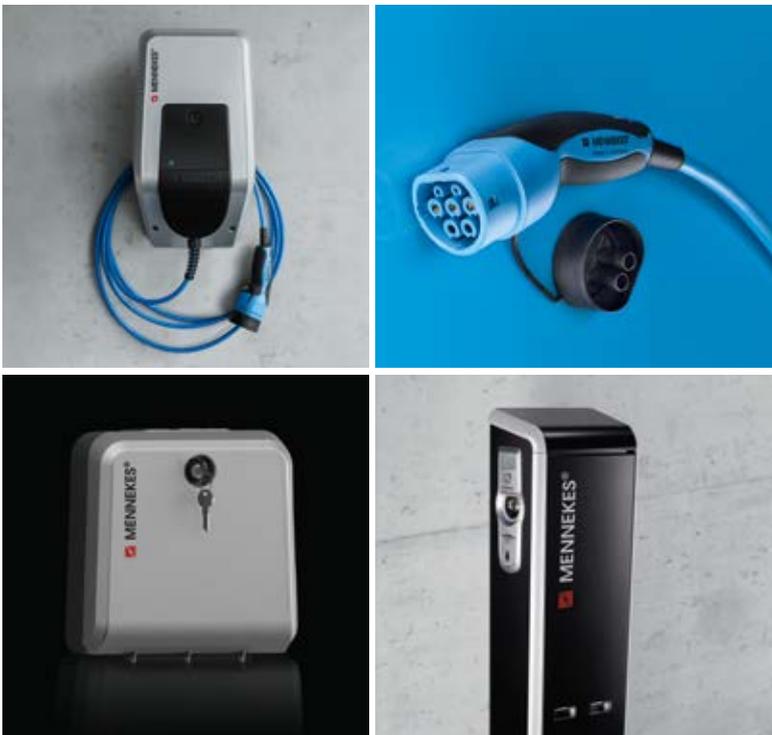
A day with changing cloud



13:15 h Charging process commences with 100 % PV surplus energy.

16:30 h The electric vehicle's battery is fully recharged.

CHARGE UP YOUR DAY!



Thousands of MENNEKES charging points are in daily use in Europe, delighting users in their diverse life situations.

As an innovative leader we offer a broad portfolio of charging solutions for the private and public applications



Charge up your day with MENNEKES, the specialist for **intelligent eMobility charging solutions.**

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