



Application Solution **Integration With Third-Party Heat Pump**

Application Description Support for integration with third-party heat pump to enable one-stop energy management of PV, ESS, and heating.

Launch Region July 15, 2025, available in Europe.

Solution Diagram



Solution Configuration

FusionSolar App version: 25.2.100 or above
Networking requirements: include either an EMMA-A02 controller or SmartGuard-63A-S0/T0
EMMA version: V100R025C00SPC100 or above
EV-Charger compatibility list: [List link](#) **Communication protocol:** Modbus-TCP
User manual: [Manual Link](#)

Basic Functions

Space Temperature

- Indoor temp.
- Outdoor temp.
- Target temp.
- Supports multi-region division

Space Heating

- On/Off
- Auto mode

Current power

PV Preferred

Hot Water Temperature

- Water temp.
- Outdoor temp.
- Target temp.

Water Heating

- On/Off
- Auto mode
- Quick mode

Smart Energy Management

Notes

Load consumption optimization

- Low electricity price threshold setting
- Enable water heating to preset max temperature at low prices.

Load Priority

- Load priority setting
- In PV preferred, peak shaving, or off-grid scenarios, ensure critical loads are prioritized for power supply.

ESS discharge control

- Configure whether to allow ESS to power the heat pump.

* A maximum of one third-party heat pump can be connected.



Application Solution

Integration With Third-Party EV-Charger

Application Description

Support for integration with third-party EV chargers to enable one-stop energy management of PV, ESS, and EV-charging.

Launch Region

July 15, 2025, available in Europe.

Solution Diagram



Solution Configuration

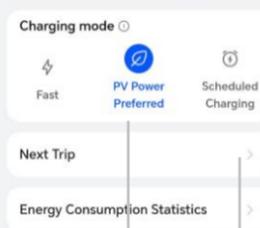
FusionSolar App version: 25.2.100 or above
Networking requirements: include either an EMMA controller or SmartGuard
EMMA version: V100R025C00SPC100 or above
EV-Charger compatibility list: [List link](#) **Communication protocol:** Modbus-TCP
User manual: [Manual Link](#)

➤ Basic Functions



Charging status

- Charging Power
- Charging Energy
- Charging Time



Charging mode

- Fast
- PV Preferred
- Scheduled
- Next Trip

Power consumption statistics

- Energy consumed by day, month, year, or lifetime

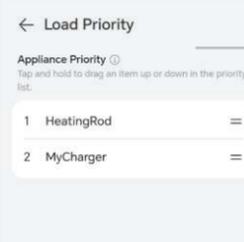
➤ Smart Energy Management

Notes



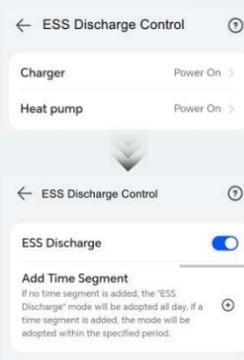
Load consumption optimization

- Low electricity price threshold setting
- Enable switching to fast charging during scheduled periods when a low price occurs



Load Priority

- Load priority setting
- In PV preferred, peak shaving, or off-grid scenarios, ensure critical loads are prioritized for power supply.



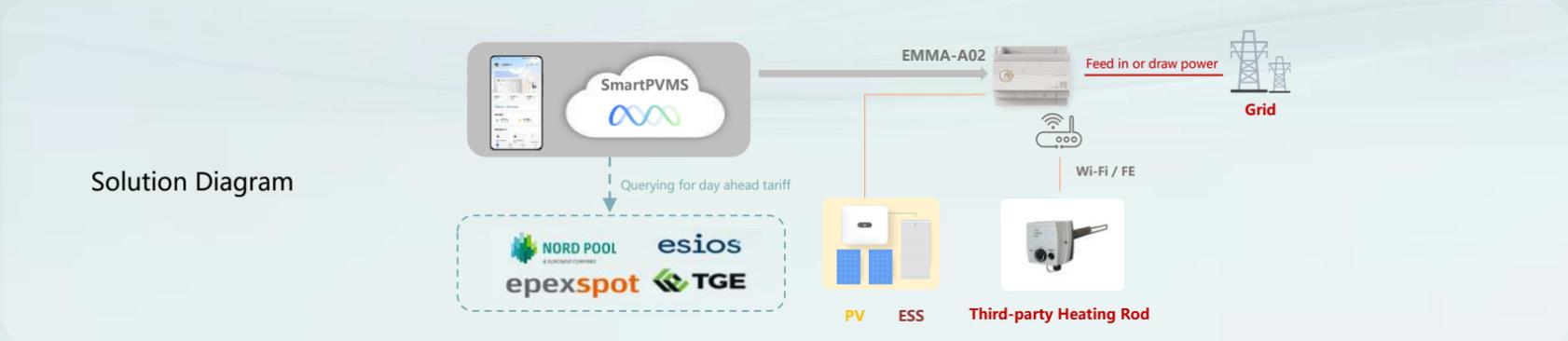
ESS discharge control

- Configure whether to allow ESS to power the EV-charger.

* 1. A maximum of one third-party EV-charger can be connected.
 * 2. Support for concurrent integration of: 1x Huawei EV-charger + 1x third-party EV-charger.



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|-------------------------|--|
| Application Solution | Integration With Third-Party Heating Rod |
| Application Description | Support for integration with third-party EV chargers to enable one-stop energy management of PV, ESS, and heating. |
| Launch Region | July 15, 2025, available in Europe. |



| | |
|------------------------|--|
| Solution Configuration | <p>FusionSolar App version: 25.2.100 or above</p> <p>Networking requirements: include either an EMMA-A02 controller or SmartGuard-63A-S0/T0</p> <p>EMMA version: V100R025C00SPC100 or above</p> <p>EV-Charger compatibility list: List link Communication protocol: Modbus-TCP</p> <p>User manual: Manual Link</p> |
|------------------------|--|

Basic Functions

Water temperature

- Current temp.
- Holding temp.
- Highest temp.

Hold warm

- Ensure the holding temp. is not lower than the preset value.

Current power
PV Preferred

Smart Energy Management

Load consumption optimization

- Low electricity price threshold setting
- Enable water heating to preset max temperature at low prices.

Load Priority

- Load priority setting
- In PV preferred, peak shaving, or off-grid scenarios, ensure critical loads are prioritized for power supply.

ESS discharge control

- Configure whether to allow ESS to power the heating rod.

* A maximum of one third-party heating rod can be connected.

Application Note –Third-Party Compatibility Test List

Revision History Version 1.0 Jun 20, 2025 – Initial release.



| Devices | Protocol | Vendor | Device Model | Number of devices |
|-----------------|------------|----------|--|-------------------|
| EV-chargers | Modbus-TCP | MENNEKES | AMTRON Professional (version 5.22 or later) | ≤1 |
| | | KEBA | KeContact P30 c-series, P30 x-series (DPC version 3.10.57 or later) | |
| | | ABL | Wallbox eM4 Single (version 2.2 or later) | |
| Heat Pump | EEBUS | Vaillant | aroTHERM plus (Vaillant Communication Gateway VR 940F version 5.22 or later) | ≤1 |
| Heater | Modbus-TCP | ASKOMA | ASKOHEAT+ AHIR-BI-plus 5.2 (version 4.8.4 or later) | ≤1 |
| Socket | Http | Shelly | Shelly Plus Plug S (0.12.99-plugsprod1, 0.14.4, 1.0.8, 1.1.0-beta3) | ≤20 |
| Relay | | | Shelly Plus 2PM (0.10.2-beta4, 1.0.8, 1.1.0-beta3) | |
| Circuit Breaker | | | Shelly Pro 2PM (0.10.2-beta1, 1.0.3, 1.0.8, 1.1.0-beta3) | |