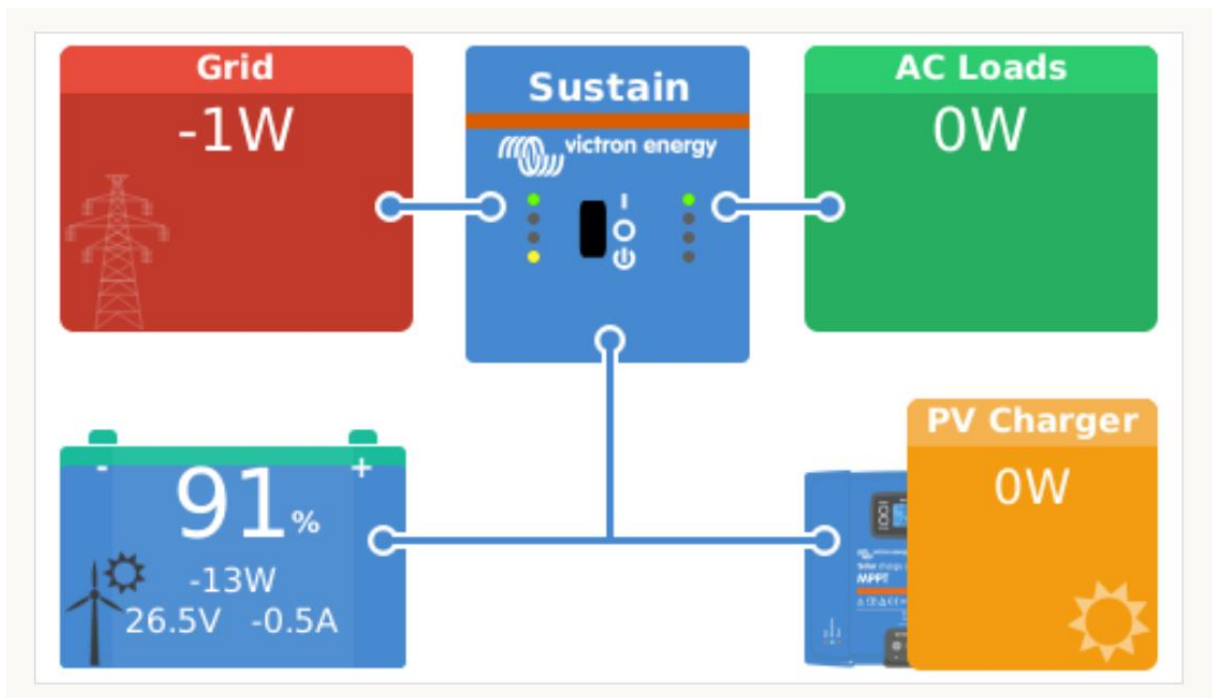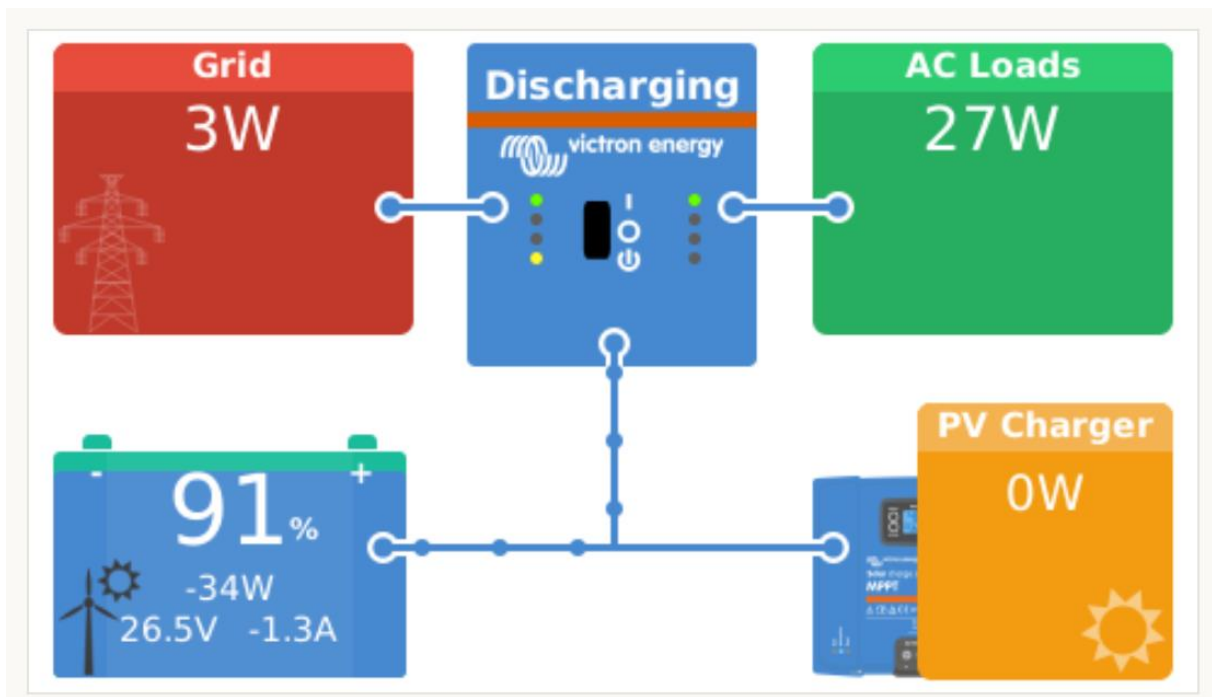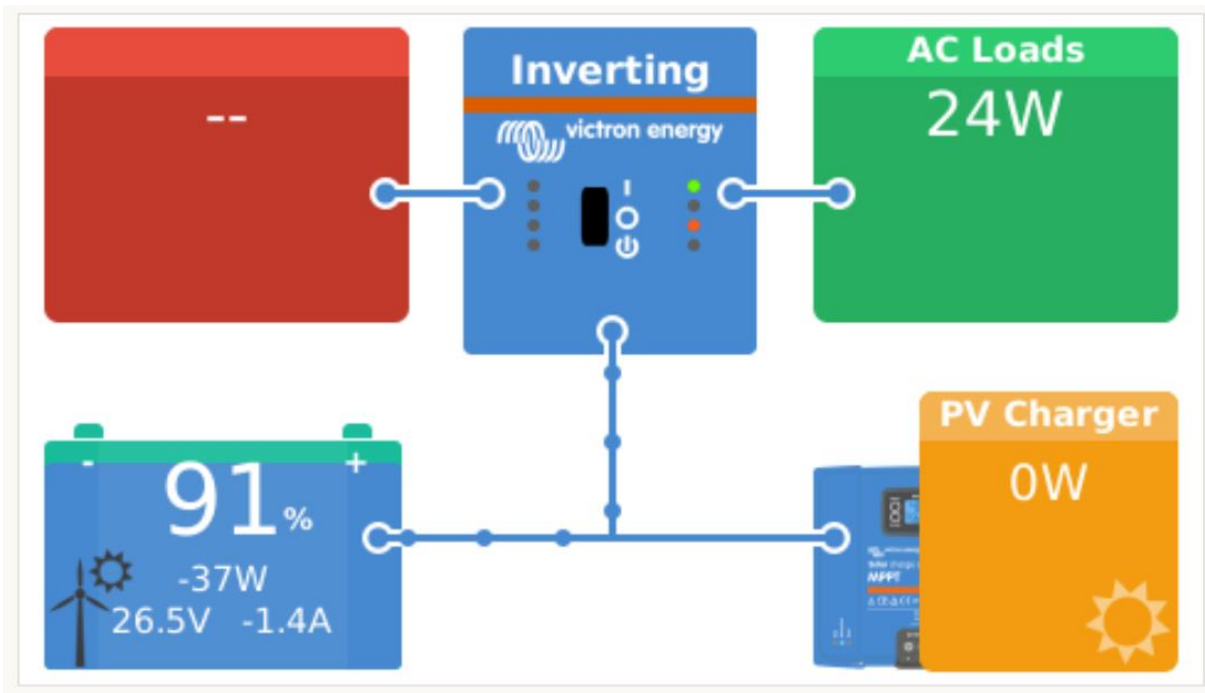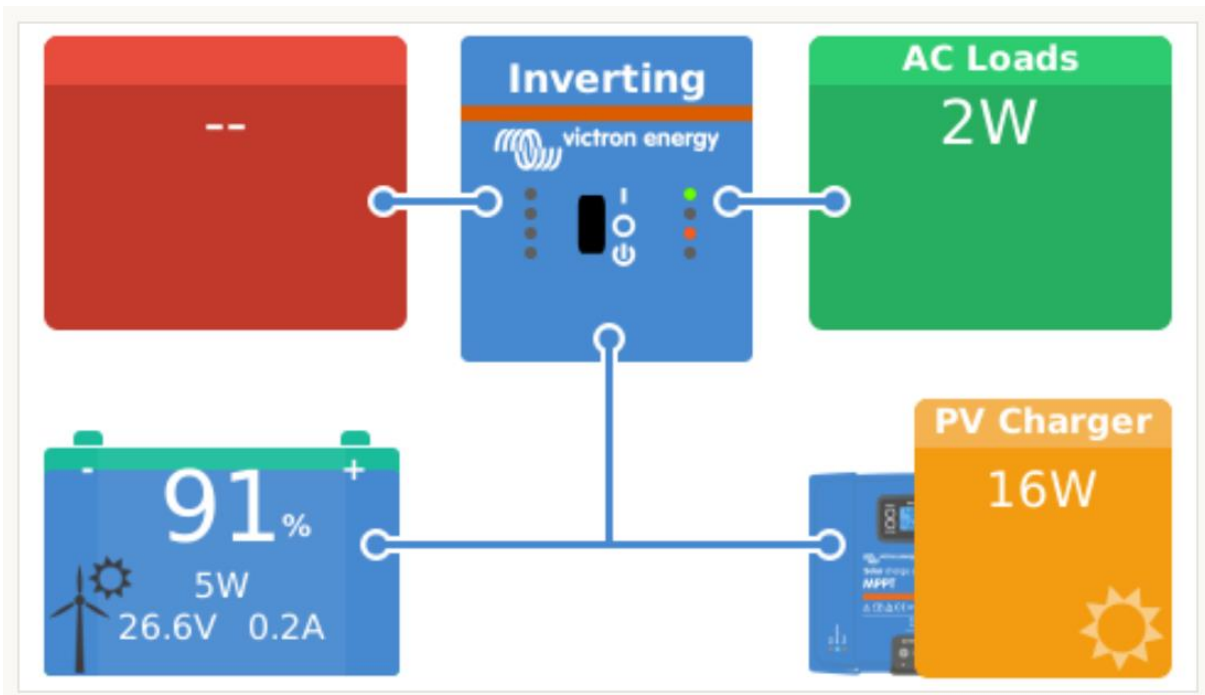After ~24h, sun already up:

After ~24h, sun already up, with some load:

Disconnecting ACin:

Suddenly, PV was activated (small PV panel attached, later I used a large PV panel), no load:

After some time, battery was full (large PV panel which gets "throttled down"), some load:
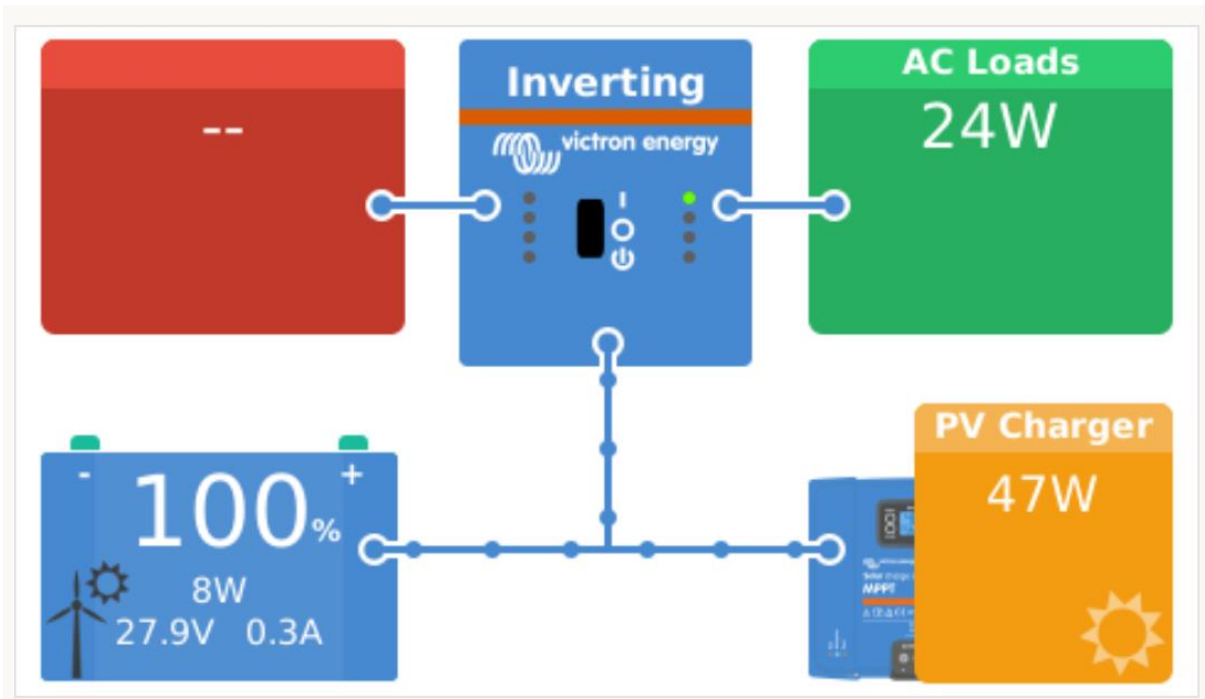
Connecting AC, PV gets disabled again (power to load comes from grid + battery) - inverter:
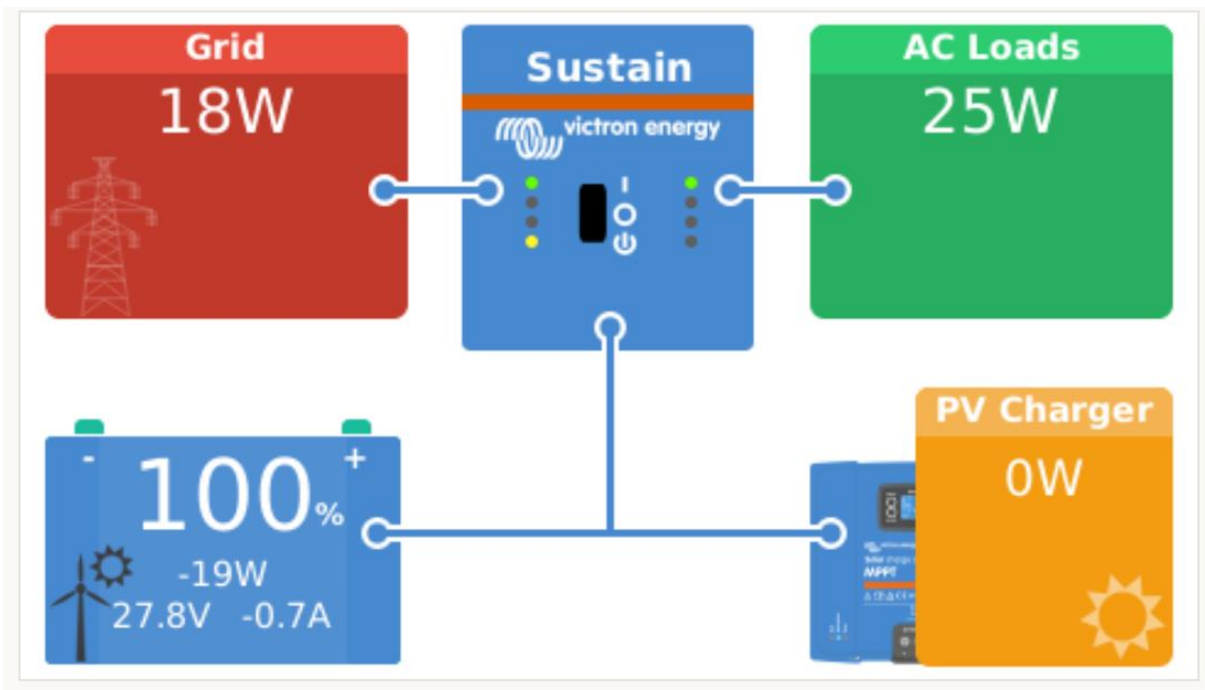
Slowly grid power is reduced…

Until we are close to 0W on grid again – power comes solely from battery again:

Disconnect ACin again:

After some time, PV started to work again (large PV attached):

Alarm and related battery status:

AC Input Power [276]

〰 Input power 1 (W)

(graph: y-axis from -20 to 10, x-axis from 28. Jan through 12:00, with "Reset zoom" button)
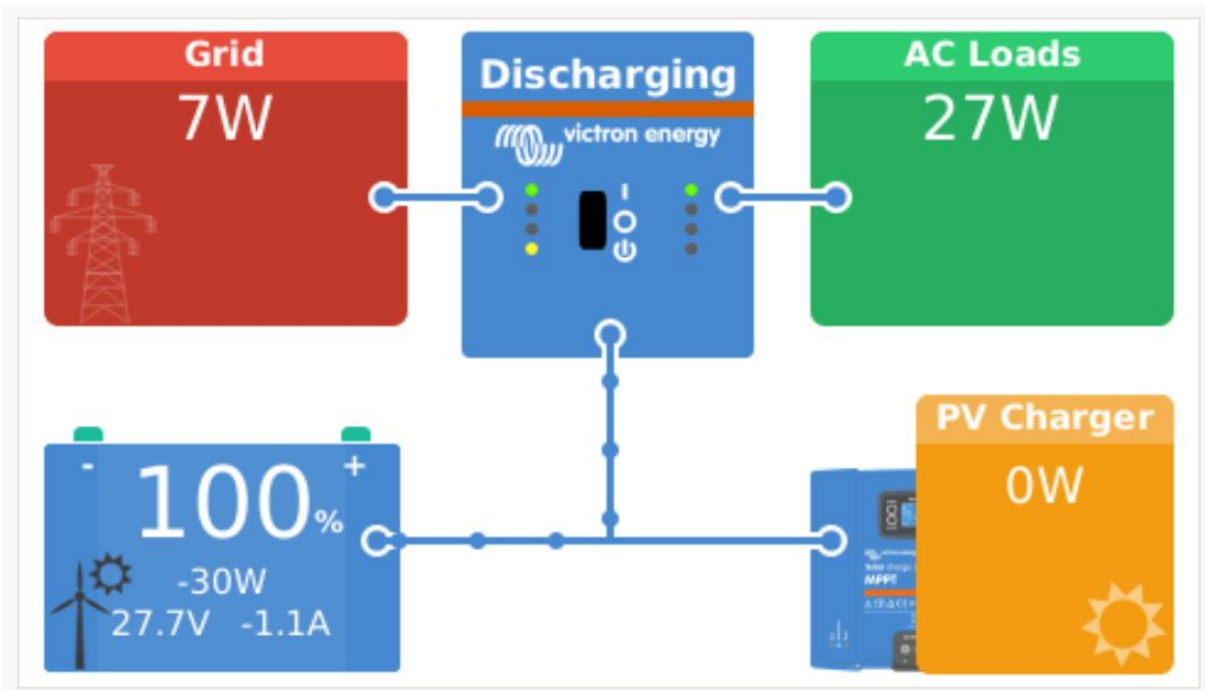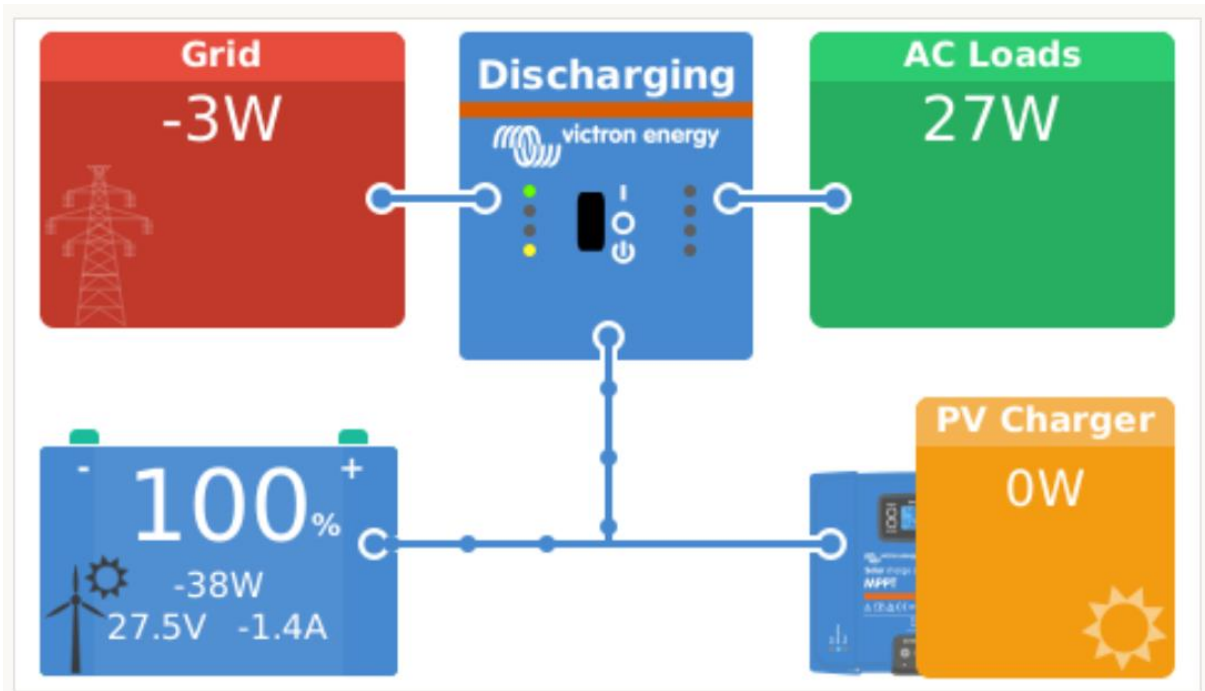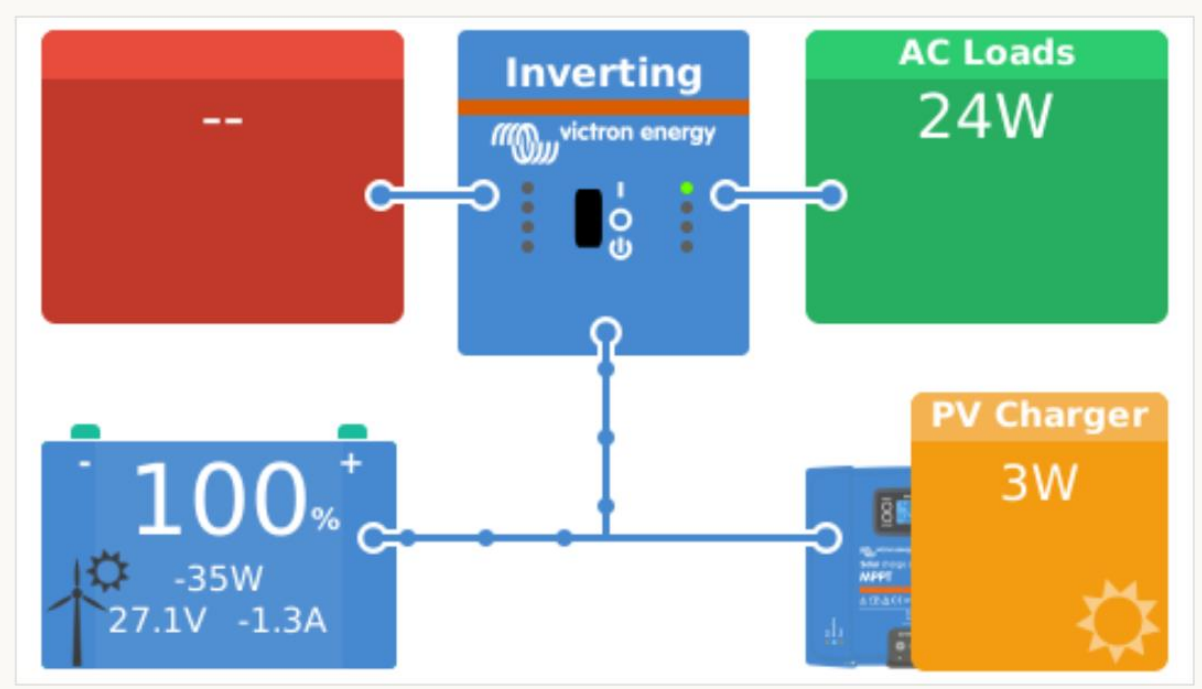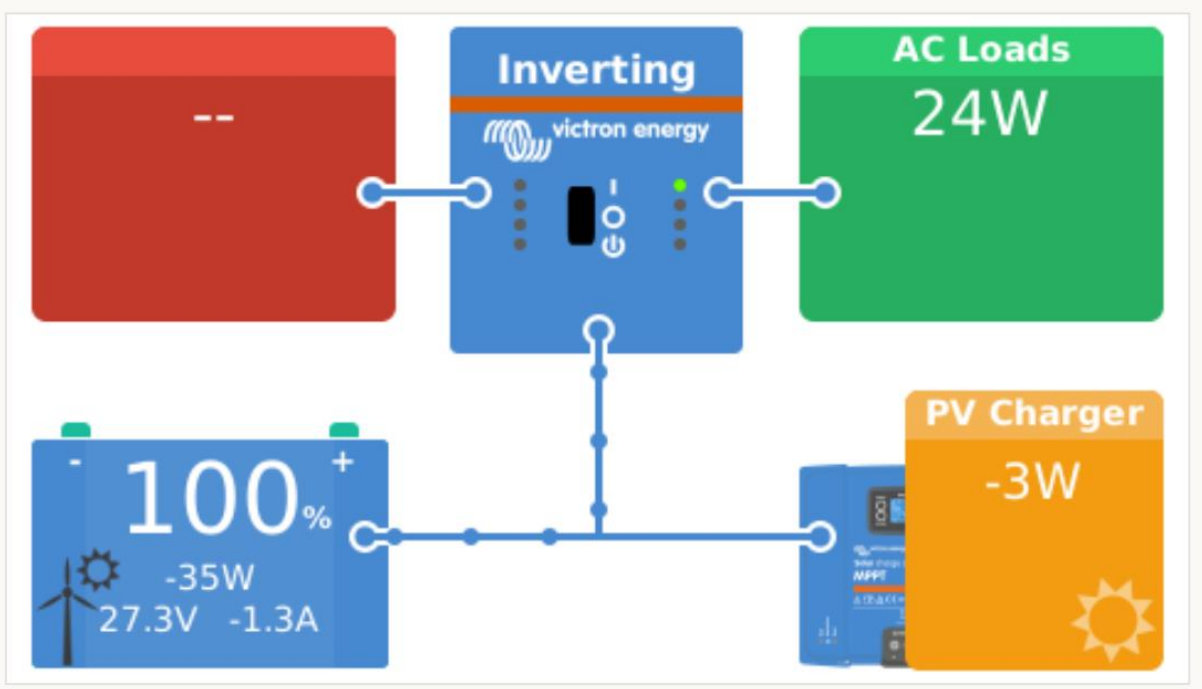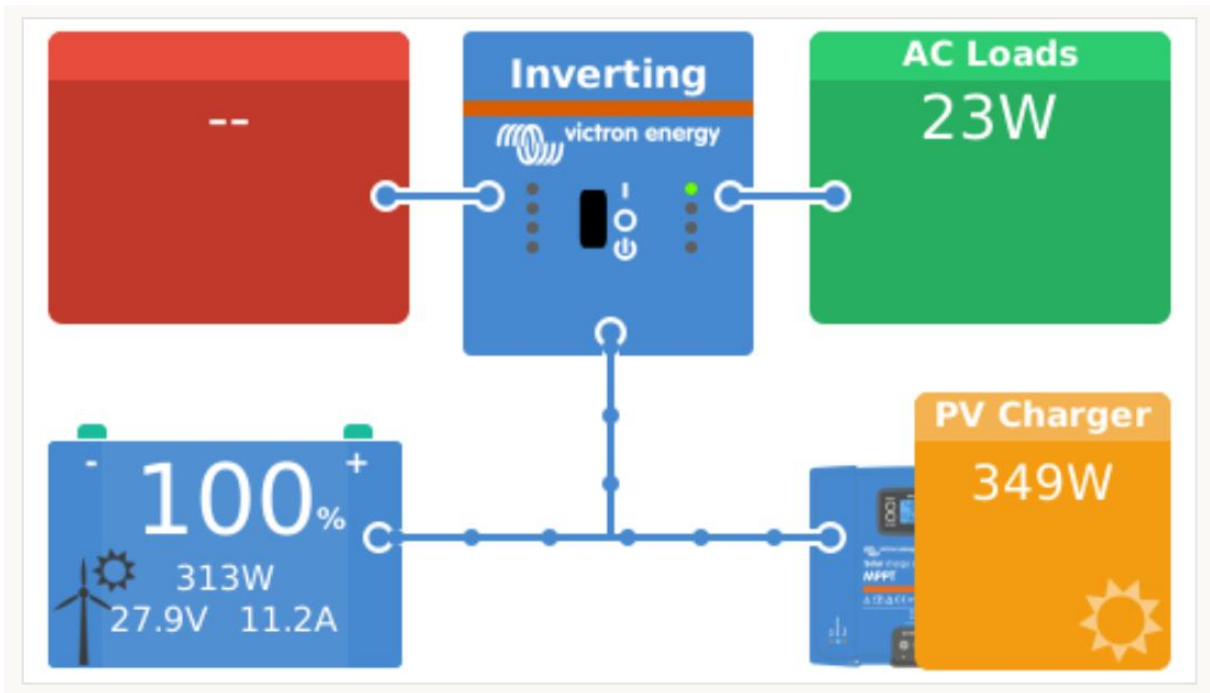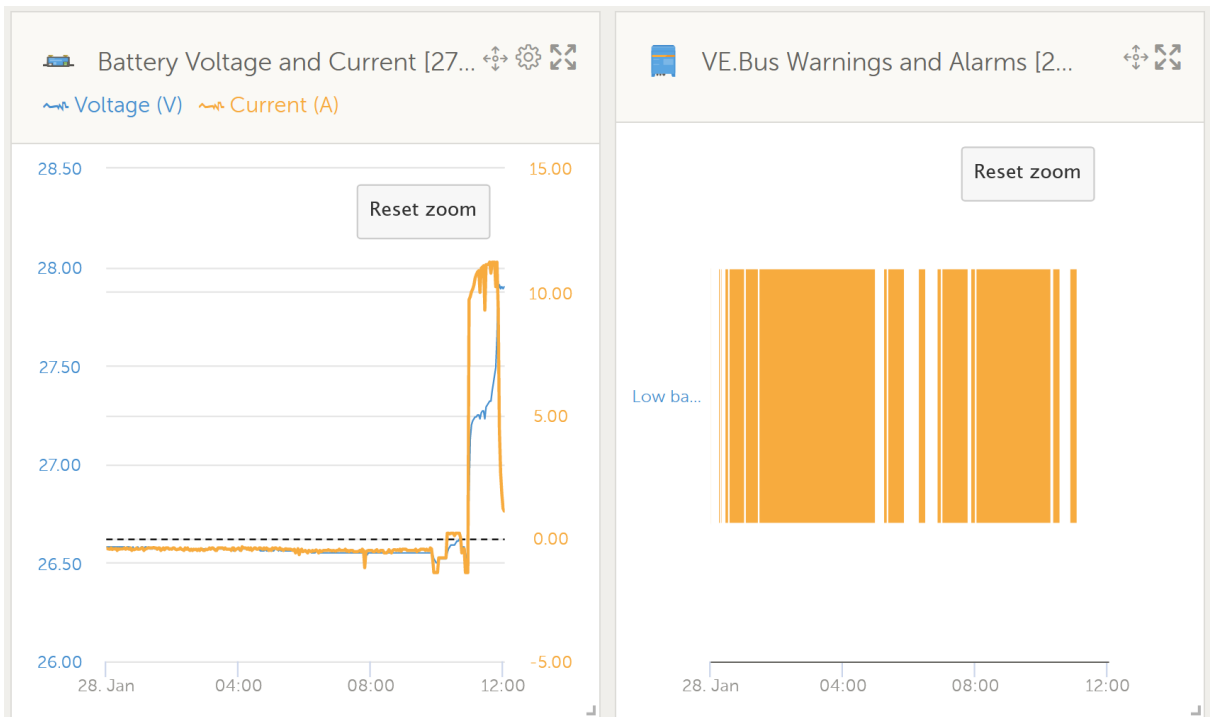
VE.Bus DC Voltage And Current...

〰 Voltage (V) 〰 Current (A)

(graph: left y-axis Voltage 26.00 to 28.50, right y-axis Current 0 to -1.5, x-axis from 28. Jan through 12:00, with "Reset zoom" button)
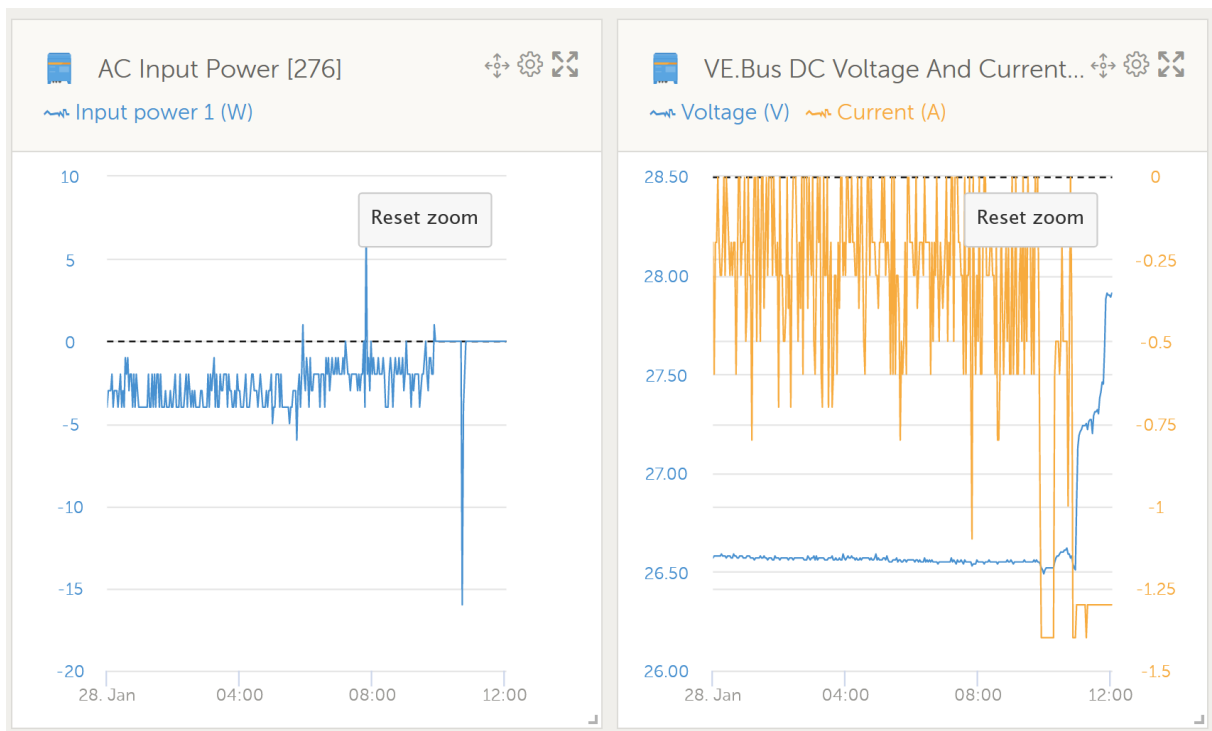
Settings:

ESS (Energy Storage System) (size:978)
*)   System uses LiFePo4 with other type BMS
         (This can be either a BMS connected via CAN bus or a BMS system in which the
         batteries are protected from high/low cell voltages by external equipment.)
*)   The battery capacity of the system is 100 Ah.
*)   Sustain voltage 25.00 V.
*)   Cut off voltage for a discharge current of:
         0.005 C= 26.00 V
         0.25 C= 25.00 V
         0.7 C= 24.60 V
         2 C= 24.00 V
*)   Inverting is allowed again when voltage rises 0.60 V above cut-off(0).
*)   Relevant VEConfigure settings:
            - Battery capacity 100 Ah.
            - PowerAssist unchecked
            - Lithium batteries checked
            - Dynamic current limiter unchecked
            - Storage mode unchecked

Total size of all assistants including the required
(hidden) system assistants is: 1037

| General | Grid | Inverter | Charger | Virtual switch | Assistants | Advanced |

System frequency

- ◉ 50Hz
- ◯ 60Hz

Shore limit

AC input current limit   `1.0`   A   ☐ Overruled by remote

☐ Dynamic current limiter

☑ **Enable battery monitor**

State of charge when Bulk finished   `95.0`   %

Battery capacity   `100`   Ah

Charge efficiency   `0.95`

| General | Grid | Inverter | Charger | Virtual switch | Assistants | Advanced |

Inverter output voltage [230] V

☑ Ground relay

☐ PowerAssist

Assist current boost factor [1.5]

DC input low shut-down [21.60] V

DC input low restart [24.80] V

DC input low pre-alarm [24.80] V

☑ shut-down on SOC

SOC low shut-down [6.0] %

SOC low restart [10.0] %

☐ Do not restart after short-circuit (VDE 2510-2 safety)

☐ enable AES

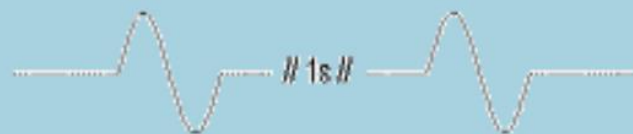Start AES when load lower than [7] W

Stop AES when load [30] W higher than start level.

AES type

◉ modified sine wave

○ search mode   // 1s //

| General | Grid | Inverter | **Charger** | Virtual switch | Assistants | Advanced |

☑ Enable charger

☐ Weak AC input
☐ Stop after excessive bulk

☑ Lithium batteries

☐ Configured for VE.Bus BMS

Battery type:

No corresponding default

☐ Disable VSense (for diagnostic purposes)

Charge curve: Fixed ▼

Absorption voltage	29.00 V	Repeated absorption time	1.00 Hr
Float voltage	27.60 V	Repeated absorption interval	7.00 Days
Charge current	16 A	Absorption time	1 Hr

☐ Stop charger below -20.5 deg C

General | Grid | Inverter | Charger | Virtual switch | Assistants | Advanced

☑ limit internal charger to prioritize other energy sources

Sustain voltage 26.00 V

Refer to documentation for recommended sustain voltage

<   **ESS**   ⚠ 🛜 **12:31**

Mode	Optimized (without BatteryLife)
Grid metering	Inverter/Charger
Multiphase regulation	Total of all phases
Minimum SOC (unless grid fails)	25%
Peak shaving	Above minimum SOC only
Limit inverter power	⬤

⊪ Pages   ⌄   **☰ Menu**

ESS

Minimum SOC (unless grid fails)	25%
Peak shaving	Above minimum SOC only
Limit inverter power	⬤
Grid setpoint	0W
Grid feed-in	›
Scheduled charge levels	**Inactive** ›

⬚ **Pages** ∧ ☰ **Menu**

Grid feed-in

AC-coupled PV - feed in excess	⬤
DC-coupled PV - feed in excess	⬤
Feed-in limiting active	No

⬚ **Pages** ☰ **Menu**