

# Erfahrungen mit PV / BHKW- Stromspeicher

# Anlage 1

Jahr 2019

Bestehende Elektroinstallation

Dacharbeiten





- 8,7 kWp Anlage
- 13 kWh Speicher
- Alpha ESS T10
  - 3-phasig
  - USV / Notstrom / Insel
  - 10-20 kWh Speicher
  - 10 Jahre Akkugarantie (optional 25)
  - 1C / max. 10 kW Lade/Entladeleistung



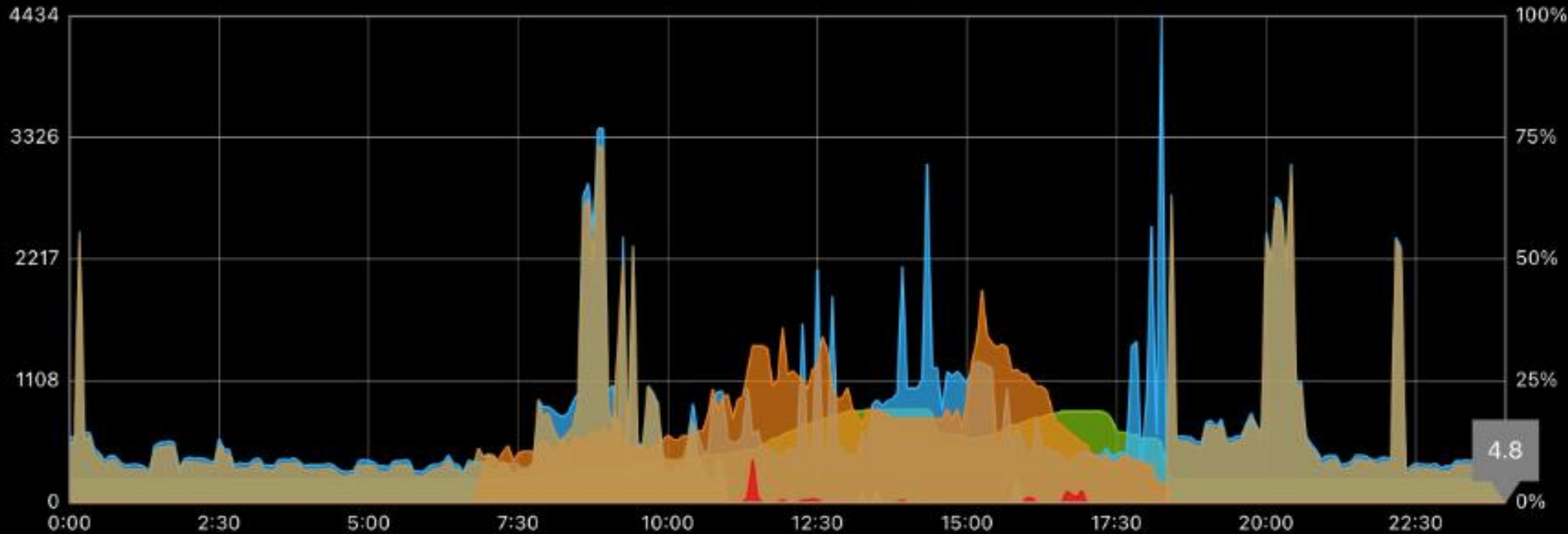




2021-03-16



(W)



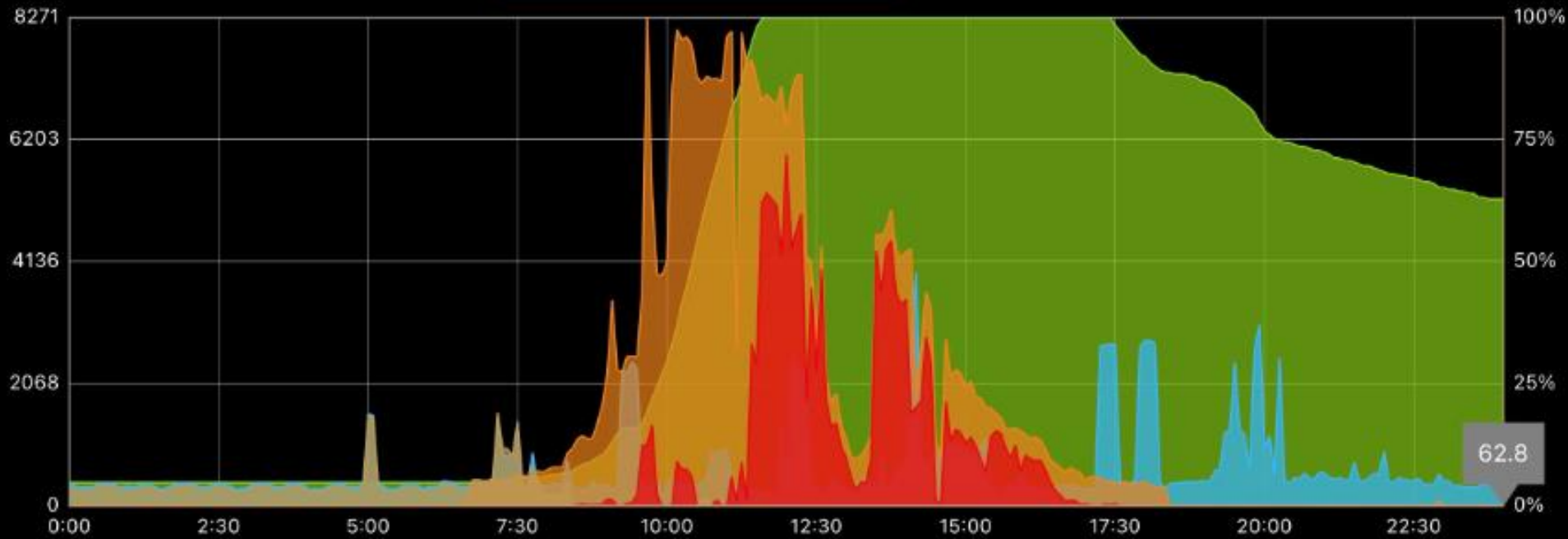
4.8



2021-03-17



(W)



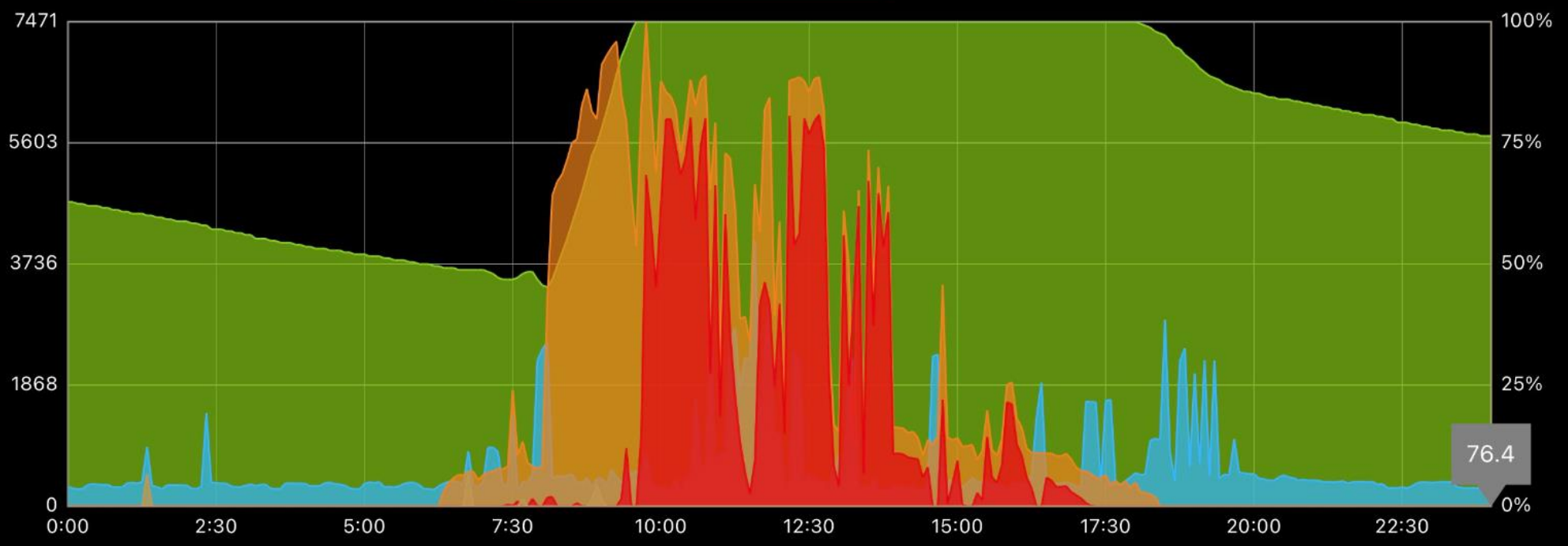
62.8



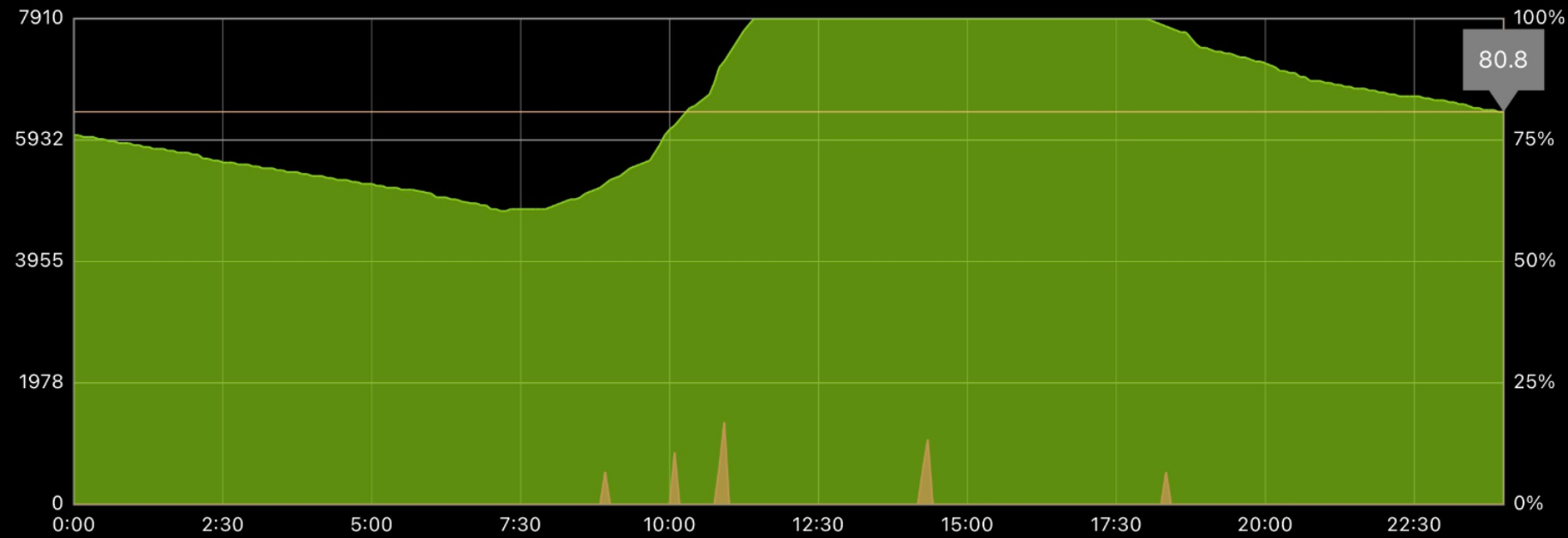
2021-03-18



(W)



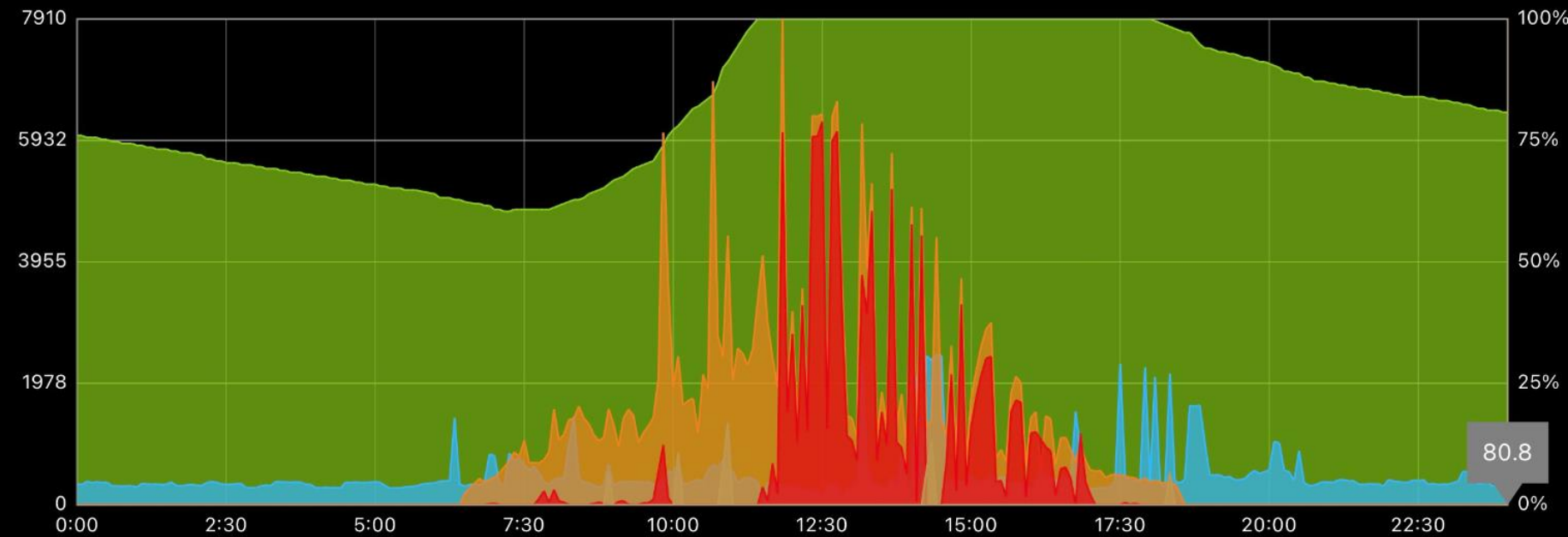
(W)



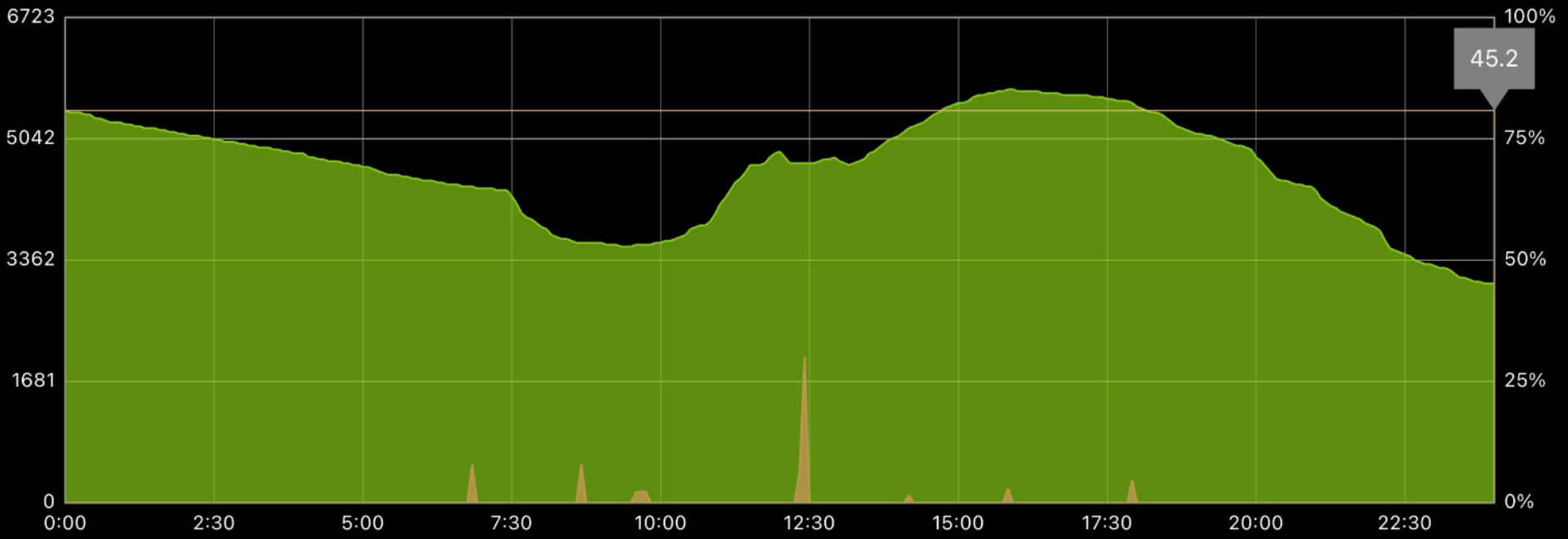
2021-03-19



(W)



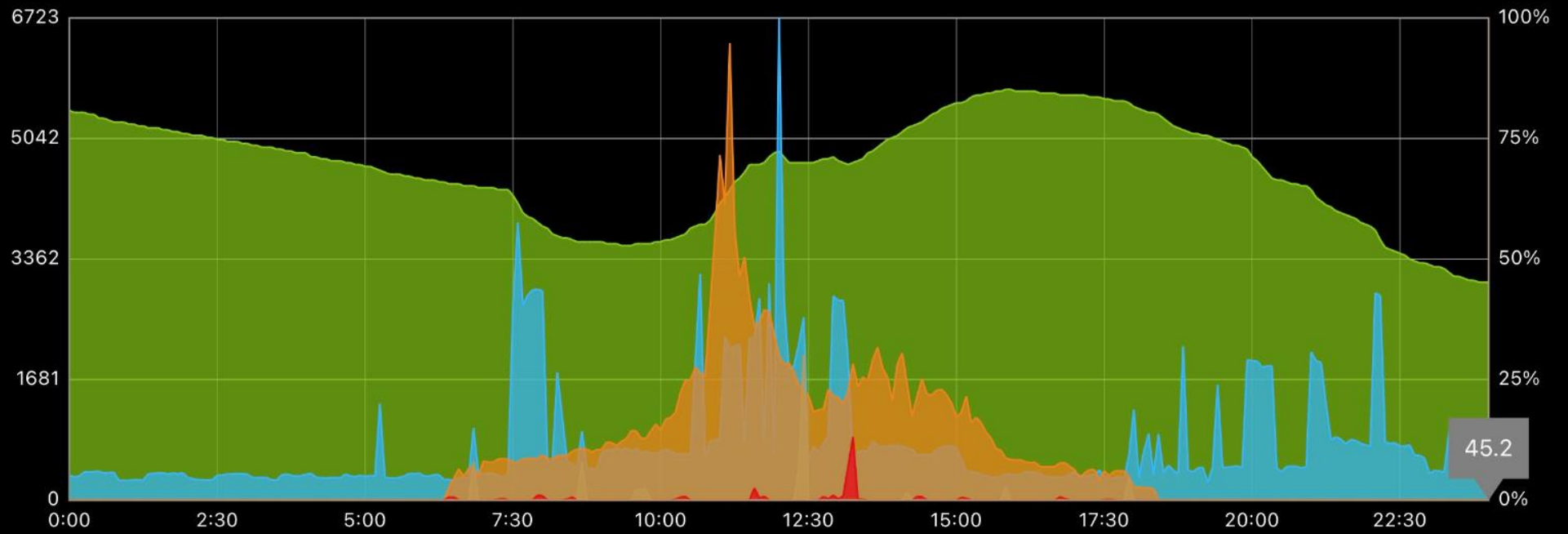




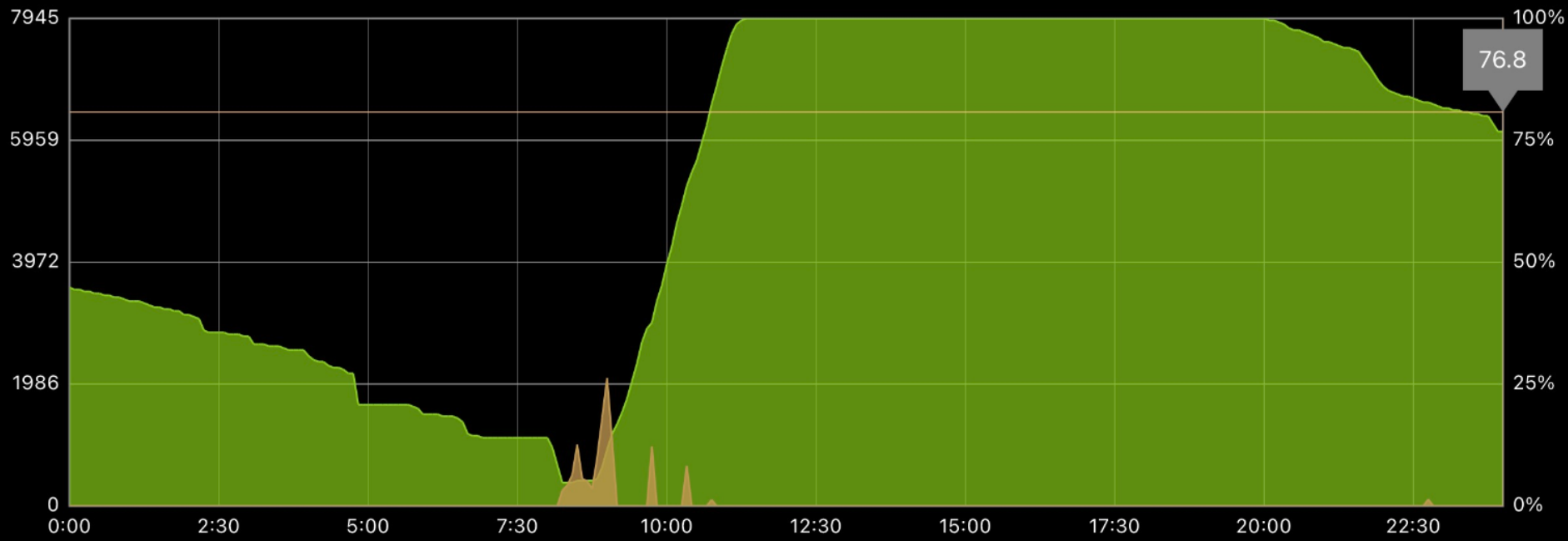
2021-03-20



(W)



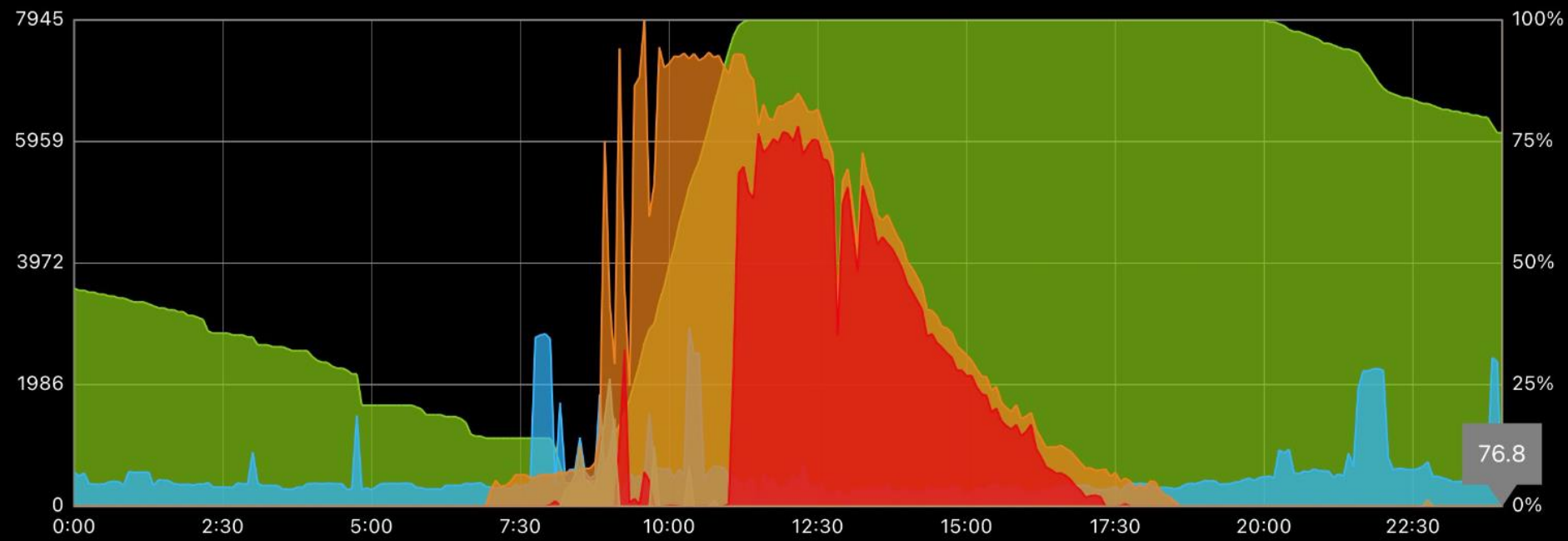
(W)

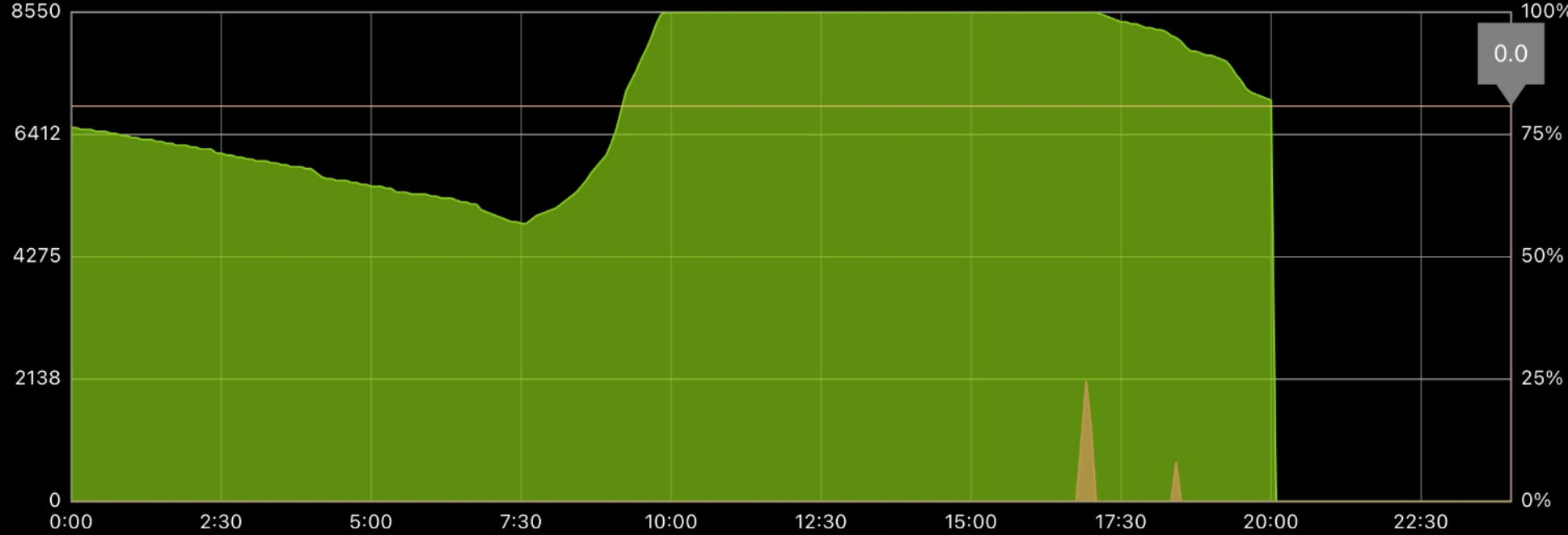


2021-03-21

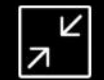


(W)



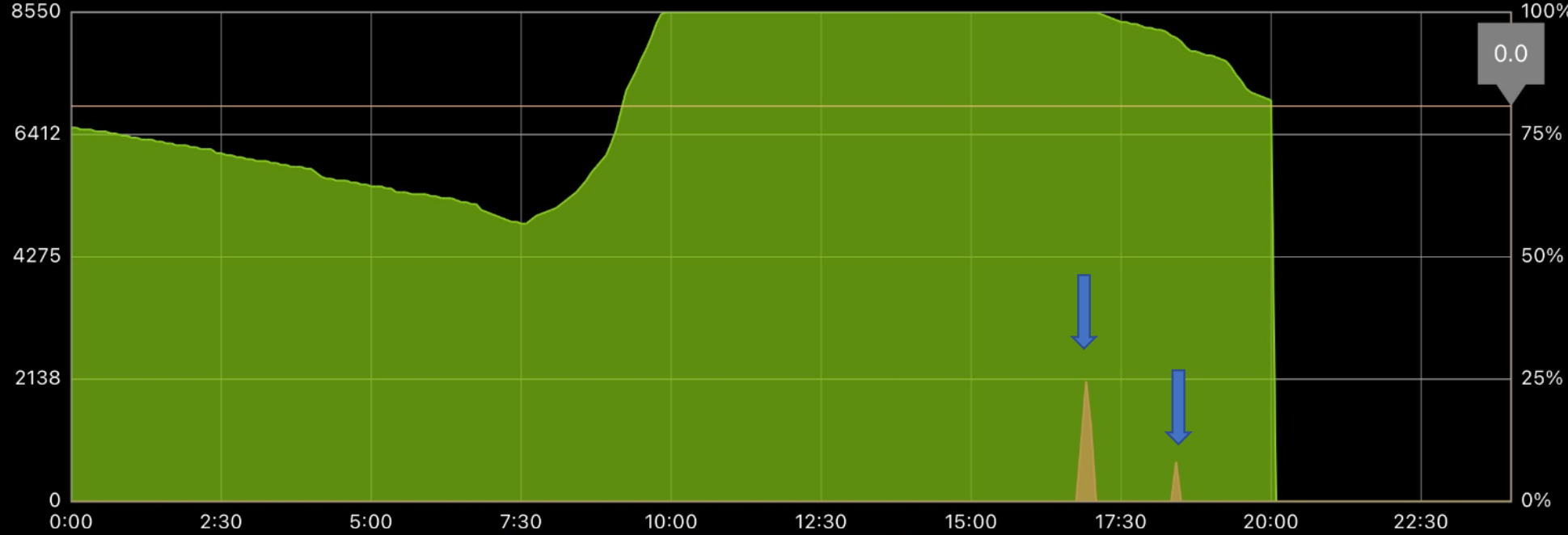


2021-03-22



(W)





2021-03-22



(W)



Tag

Monat

Jahr

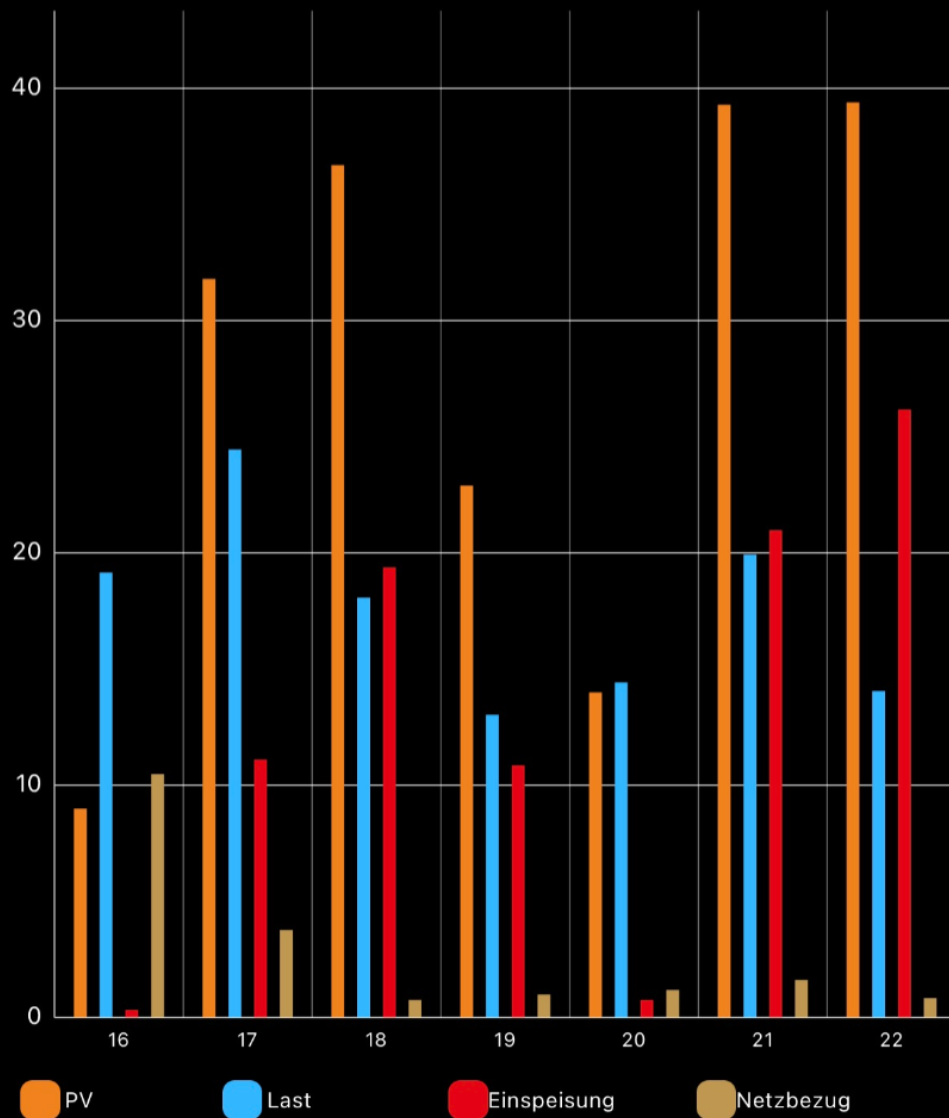
Gesamt

2021-03-16

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2021-03-22

(kWh)



46.0%  
Eigenverbrauchsanteil

80.0%  
Autarkiegrad

82.0%  
Eigenverbrauchsanteil

49.0%  
Autarkiegrad

Tag Monat Jahr Gesamt

2020-05

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2020-10

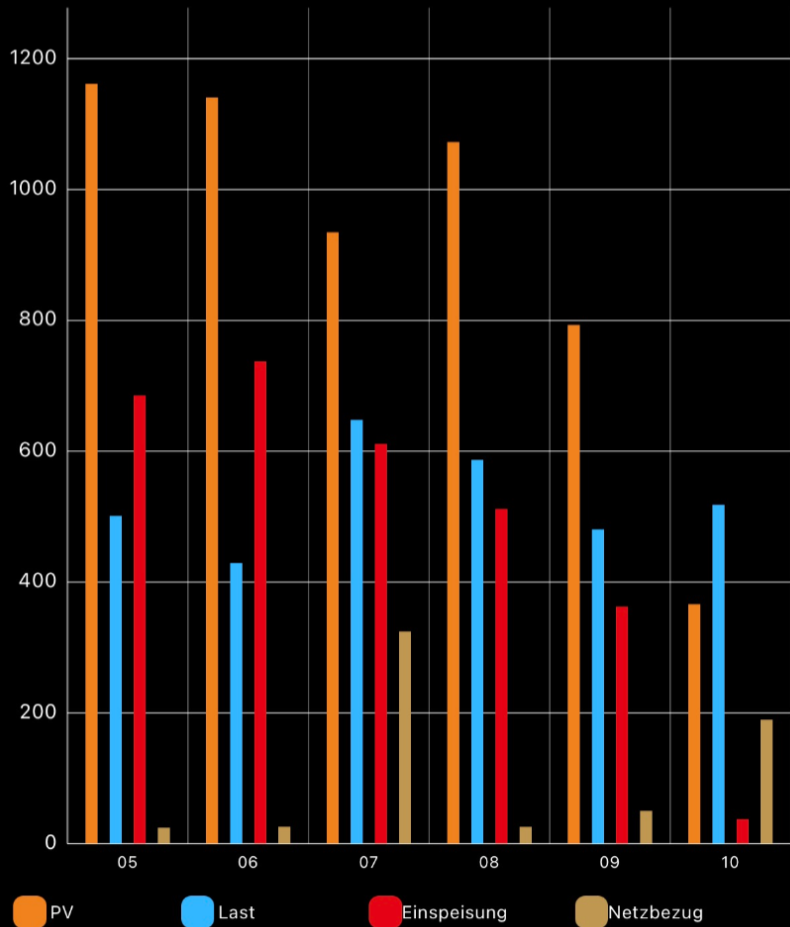
Tag Monat Jahr Gesamt

2020-10

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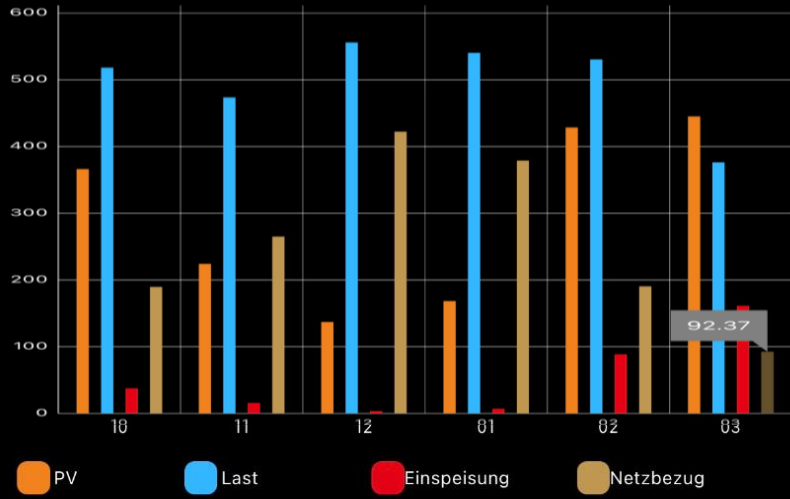
2021-03

(kWh)



(kWh)

(kWh)



56.0%

64.0%

Eigenverbrauchsanteil

Autarkiegrad

Tag

Monat

Jahr

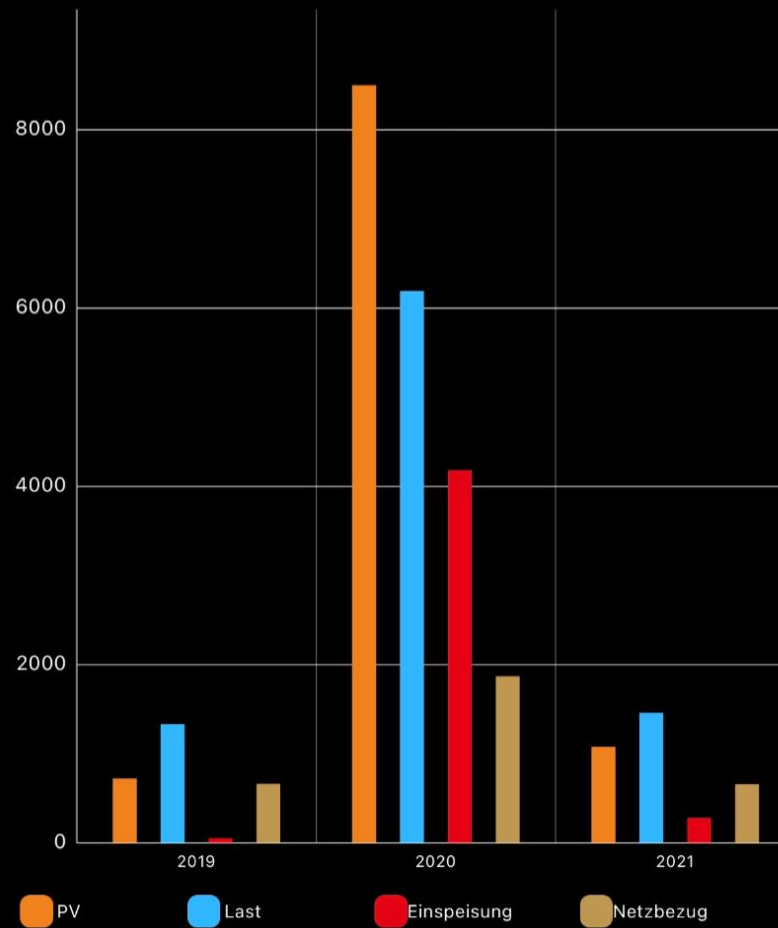
Gesamt

2019

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2021

(kWh)



# Anlage 2

- Anlageninstallation
  - BHKW 16 kW (Austausch)
  - Solaranlage 8,5 kWp
  - Speicher
- E3/DC
  - S10E Pro 39 kWh
  - Dauerbetrieb 6 bis 9 kW
  - Peak bis zu 12 kW



# Aktuelle Werte



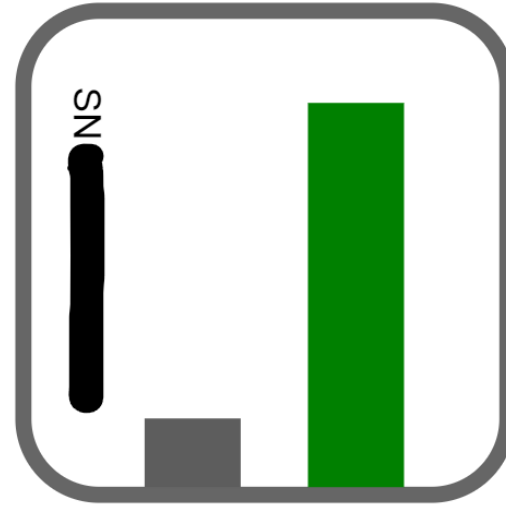
PV Wechselrichter



ext. Quelle

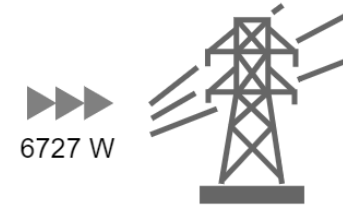


Batterie

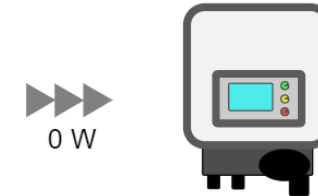


Eigenstrom  
17 %

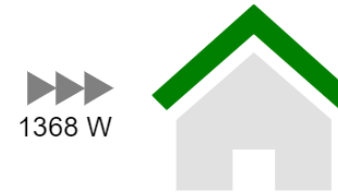
Autarkie  
100 %



Netz



Wallbox



Hausverbrauch

0

Solar Produktion  
[W]

0

Batterie Leistung  
[W]

99

Batterie Status  
[%]

-6727

Netz Leistung  
[W]

1368

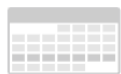
Hausverbrauch  
[W]

8095

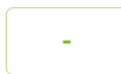
ext. Produktion  
[W]

0

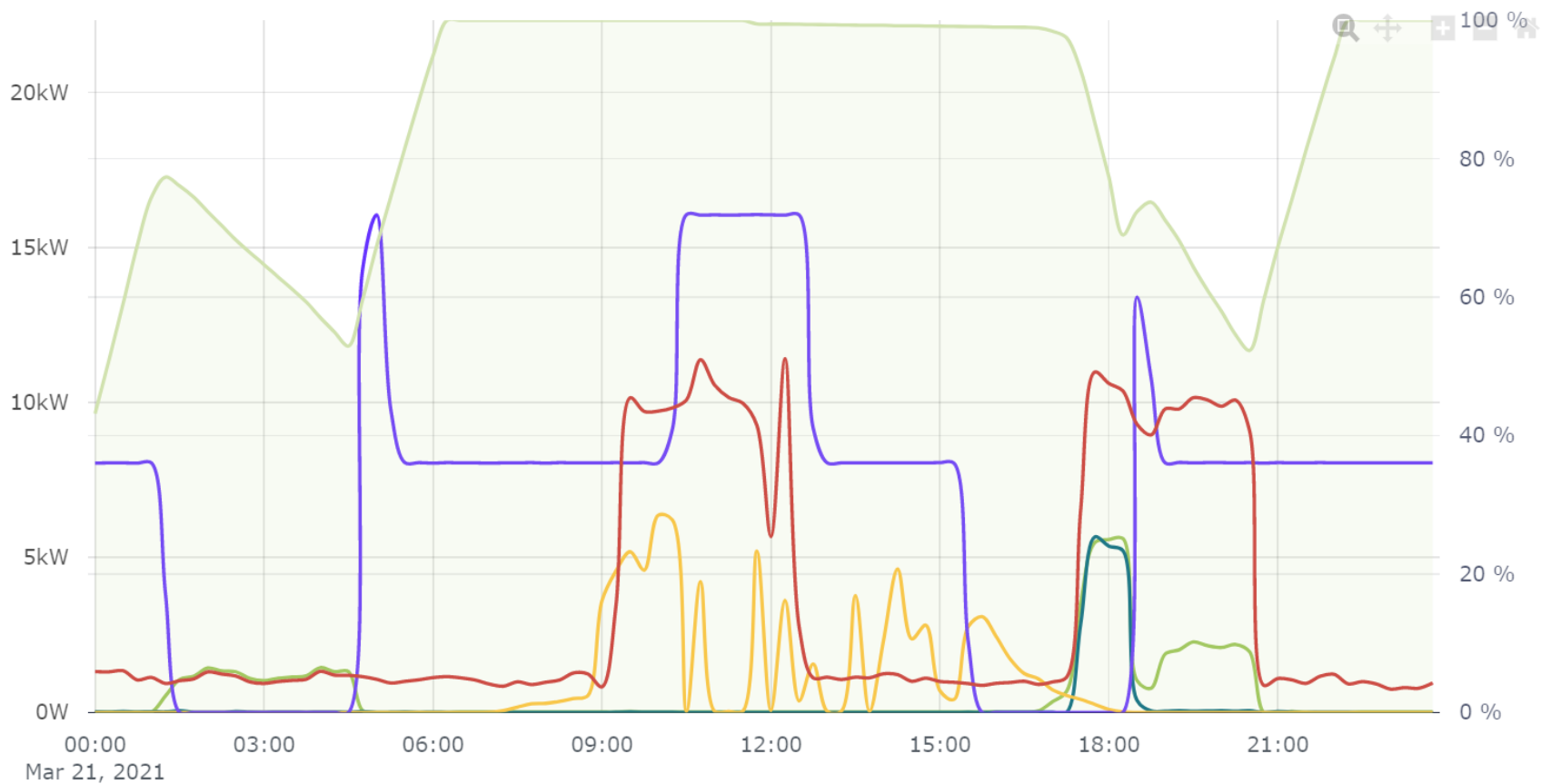
Wallbox  
[W]



2020



2021-03-21



-  
Ladezustand

35.92 [kWh]  
-  
Prognose

24.64 [kWh]  
-  
Batterie (Laden)

13.71 [kWh]  
-  
Batterie (Entladen)

95.91 [kWh]  
-  
Netzeinspeisung

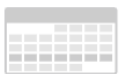
5.1 [kWh]  
-  
Netzbezug

19.85 [kWh]  
-  
Solarproduktion

166.96 [kWh]  
-  
ext. Produktion

186.81 [kWh]  
-  
Σ Produktion

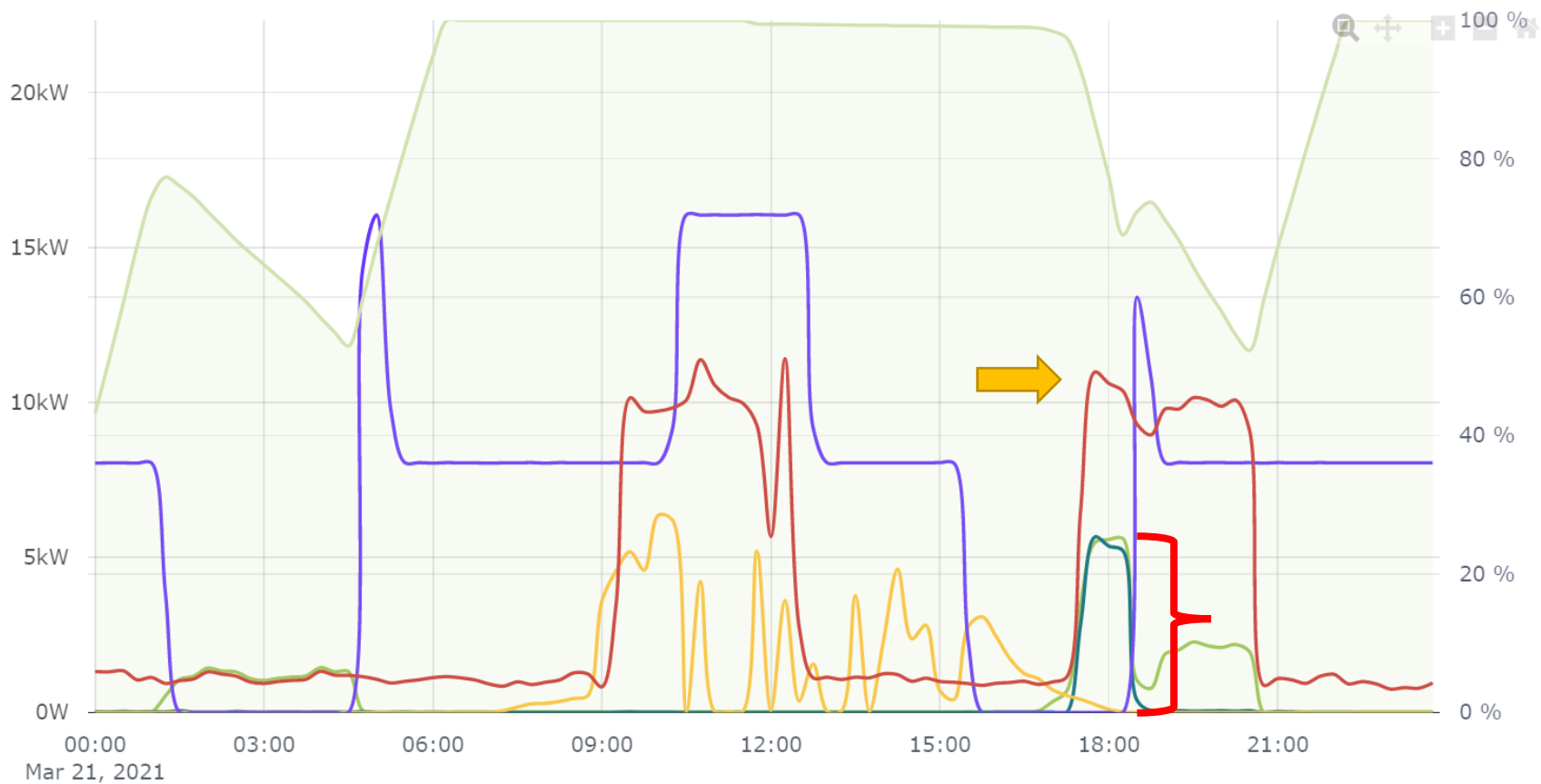
80.58 [kWh]  
-  
Hausverbrauch



2020



2021-03-21



-  
Ladezustand

35.92 [kWh]  
-  
Prognose

24.64 [kWh]  
-  
Batterie (Laden)

13.71 [kWh]  
-  
Batterie (Entladen)

95.91 [kWh]  
-  
Netzeinspeisung

5.1 [kWh]  
-  
Netzbezug

19.85 [kWh]  
-  
Solarproduktion

166.96 [kWh]  
-  
ext. Produktion

186.81 [kWh]  
-  
Σ Produktion

80.58 [kWh]  
-  
Hausverbrauch



2020

-

2021-03-22

+

PROGNOSE EINBLENDEN



-  
Ladezustand

10.38 [kWh]  
-  
Prognose

2.83 [kWh]  
-  
Batterie (Laden)

2.74 [kWh]  
-  
Batterie (Entladen)

130.78 [kWh]  
-  
Netzeinspeisung

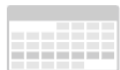
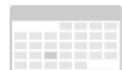
0.14 [kWh]  
-  
Netzbezug

40.79 [kWh]  
-  
Solarproduktion

116.18 [kWh]  
-  
ext. Produktion

156.98 [kWh]  
-  
Σ Produktion

23.47 [kWh]  
-  
Hausverbrauch

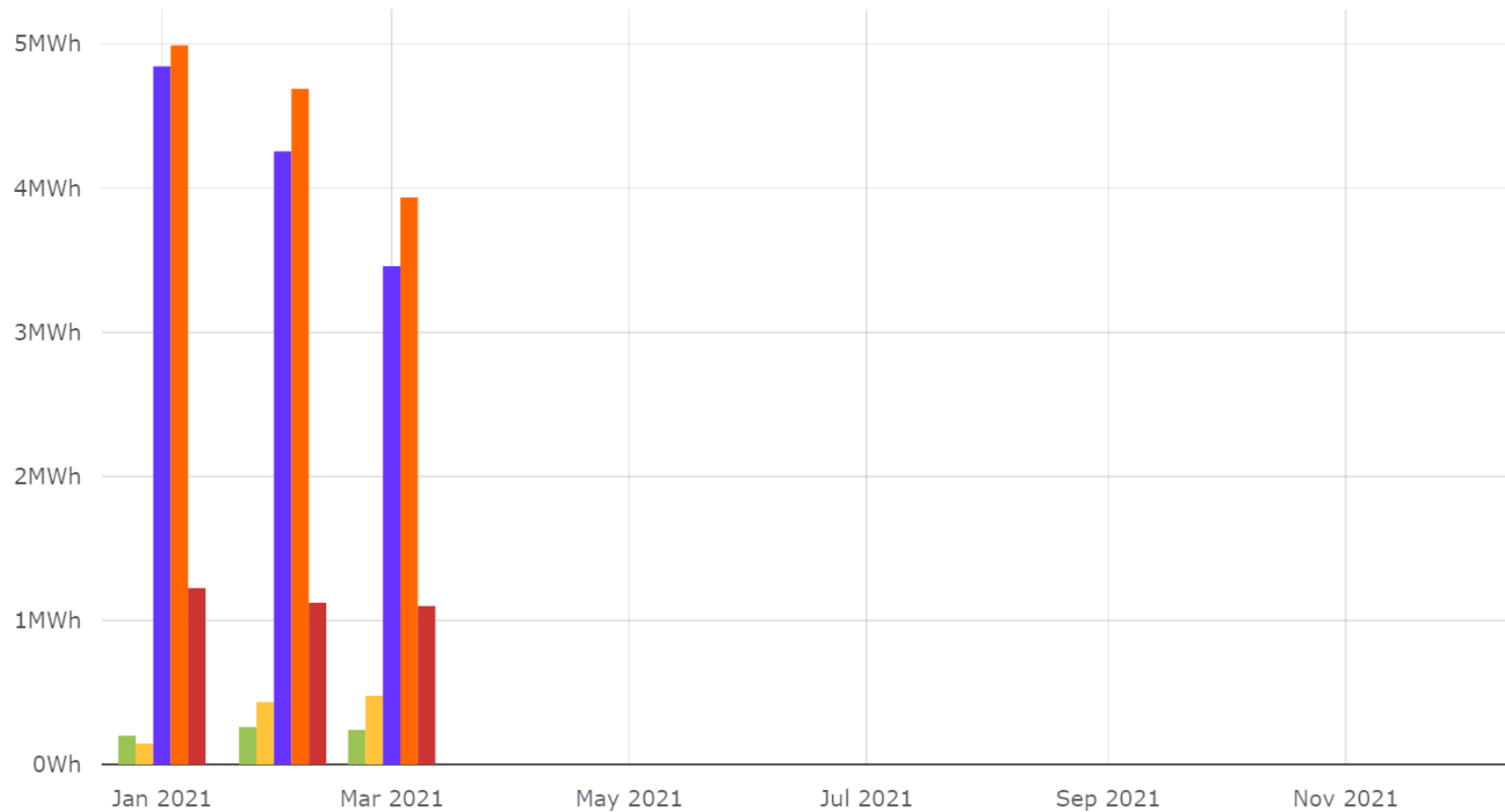


2020

-

2021

+



731.72 [kWh]  
-  
Batterie (Laden)

700.6 [kWh]  
-  
Batterie (Entladen)

9940.54 [kWh]  
-  
Netzeinspeisung

31.89 [kWh]  
-  
Netzbezug

1056.4 [kWh]  
-  
Solarproduktion

12560.36 [kWh]  
-  
ext. Produktion

13616.76 [kWh]  
-  
Σ Produktion

3448.07 [kWh]  
-  
Hausverbrauch

# Fazit

- PV vs. Speichergröße
- Ent-/Ladeleistung
- Regelung E-Ladestation
- USV-Funktion
- (3-phasig)

