Project name:	**Tronds Solcelle anlegg**	**Location: Norway / Oslo**
Project number:		
Project file:	Tronds Solcelle anlegg.sdp2	Grid voltage: 3~230 V

System overview

14 x Sharp NU-U235F1 (Øst side)
Azimuth angle: -90°, Inclination: 30°, Mounting type: Roof, PV peak power: 3,29 kWp

10 x Sharp NU-U235F1 (Vest side)
Azimuth angle: 90°, Inclination: 30°, Mounting type: Roof, PV peak power: 2,35 kWp

 **1 x SB 2000HF-30**

 **1 x SB 2500HF-30**

Technical data

Total number of PV modules:	24	Energy usability factor:	99,9 %
PV peak power:	5,64 kWp	Performance ratio (approx.)*:	80,4 %
Number of inverters:	2	Spec. energy yield (approx.)*:	735 kWh/kWp
Nominal AC power:	4,50 kW	Line losses (in % of PV energy):	0,14 %
AC active power:	4,50 kW	Unbalanced load:	2,50 kVA
Active power ratio:	79,8 %	Self-consumption:	2788,46 kWh
Annual energy yield (approx.)*:	4146,30 kWh	Self-consumption quota:	67,3 %

Signature

*Important: The yield values displayed are estimates. They are determined mathematically. SMA Solar Technology AG accepts no responsibility for the real yield value which can deviate from the yield values displayed here. Reasons for deviations are various outside conditions, such as soiling of the PV Modules or fluctuations in the efficiency of the PV modules.

Evaluation of design

Project name: Tronds Solcelle anlegg
Project number:
Project file: Tronds Solcelle anlegg.sdp2

Teilprojekt 1

Location: Norway / Oslo
Ambient temperature:
Record Low Temperature: -10,00 °C
Average High Temperature: 25,00 °C
Record High Temperature: 40,00 °C

1 x SB 2000HF-30

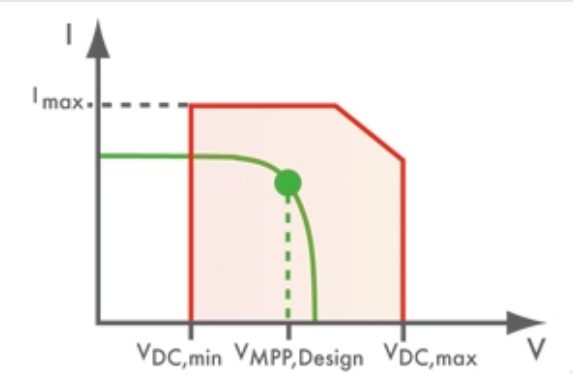
PV peak power:	2,35 kWp
Total number of PV modules:	10
Number of inverters:	1
Max. DC power:	2,10 kW
Max. AC power:	2,00 kW
Grid voltage:	230 V
Nominal power ratio:	89 %

SB 2000HF-30

Technical data

Input A: Vest side
10 x Sharp NU-U235F1, Azimuth angle: 90°, Inclination: 30°, Mounting type: Roof

	Input A:
Number of strings:	1
PV modules per string:	10
Peak power (input):	2,35 kWp
Typical PV voltage:	268 V
Min. PV voltage:	240 V
Min. DC voltage (Grid voltage 230 V):	175 V
Max. PV voltage:	417 V
Max. DC voltage (PV):	600 V
Max. current of PV array:	7,8 A
Max. DC current:	12,0 A



PV/Inverter compatible

Evaluation of design

Project name: Tronds Solcelle anlegg
Project number:
Project file: Tronds Solcelle anlegg.sdp2

Teilprojekt 1

Location: Norway / Oslo
Ambient temperature:
Record Low Temperature: -10,00 °C
Average High Temperature: 25,00 °C
Record High Temperature: 40,00 °C

1 x SB 2500HF-30

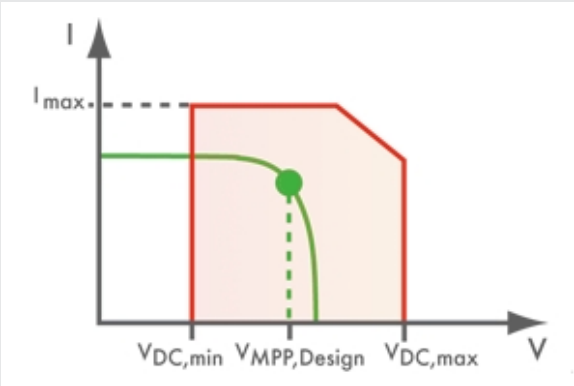
PV peak power:	3,29 kWp
Total number of PV modules:	14
Number of inverters:	1
Max. DC power:	2,60 kW
Max. AC power:	2,50 kW
Grid voltage:	230 V
Nominal power ratio:	79 %

SB 2500HF-30

Technical data

Input A: Øst side
14 x Sharp NU-U235F1, Azimuth angle: -90°, Inclination: 30°, Mounting type: Roof

	Input A:
Number of strings:	1
PV modules per string:	14
Peak power (input):	3,29 kWp
Typical PV voltage:	375 V
Min. PV voltage:	336 V
Min. DC voltage (Grid voltage 230 V):	175 V
Max. PV voltage:	584 V
Max. DC voltage (PV):	600 V
Max. current of PV array:	7,8 A
Max. DC current:	15,0 A



PV/Inverter compatible

Self-consumption

Project name: Tronds Solcelle anlegg **Location: Norway / Oslo**
Project number:
Project file: Tronds Solcelle anlegg.sdp2

Information on self-consumption

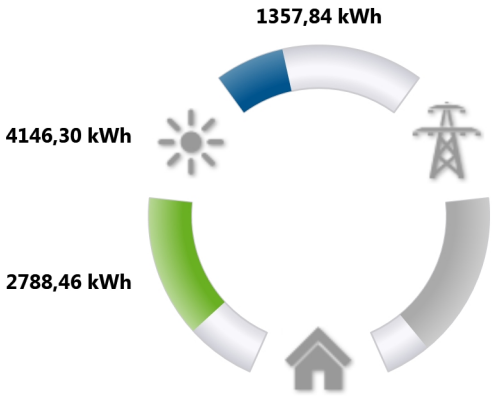
Load profile: 1-person household
Private household with typical load peaks at lunchtime and further consumption increases in the morning and evening.

Energy consumption per year: 13000,00 kWh

Result

Energy yield of the PV plant	**4146,30 kWh**
Grid feed-in	**1357,84 kWh**
Consumption	**10211,54 kWh**
Self-consumption	**2788,46 kWh**
Self-consumption quota (in % of PV energy)	**67,3 %**

Self-consumption quota 67,3 %



The displayed results are estimated values which are derived mathematically. SMA Solar Technology AG accepts no liability for the actual self-consumption which may deviate from the values displayed here. The potential self-consumption essentially depends on individual load patterns, which may deviate from the load profile on which the calculation is based.

Sunny Design 2.30.0.R