Viasol A/S
Hejrevej 39 3.
2400 Copenhagen
Denmark

Contact person:
Christoffer Ovesen
Phone: +457020 7474
E-Mail: info@viasol.dk

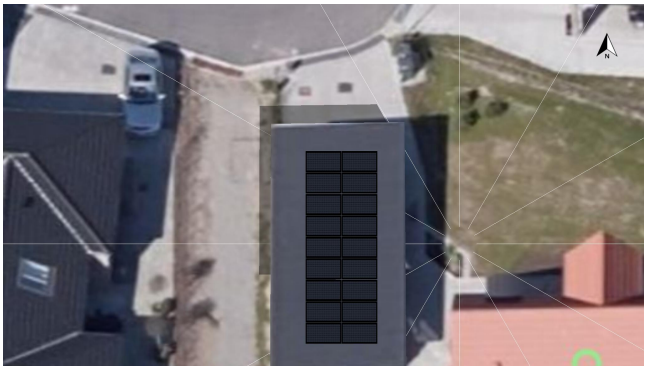
Grubeløkken 8,
4180 Sorø

27-10-2020

Your PV system from Viasol A/S

Address of Installation

Grubeløkken 8,
4180 Sorø



Project Overview

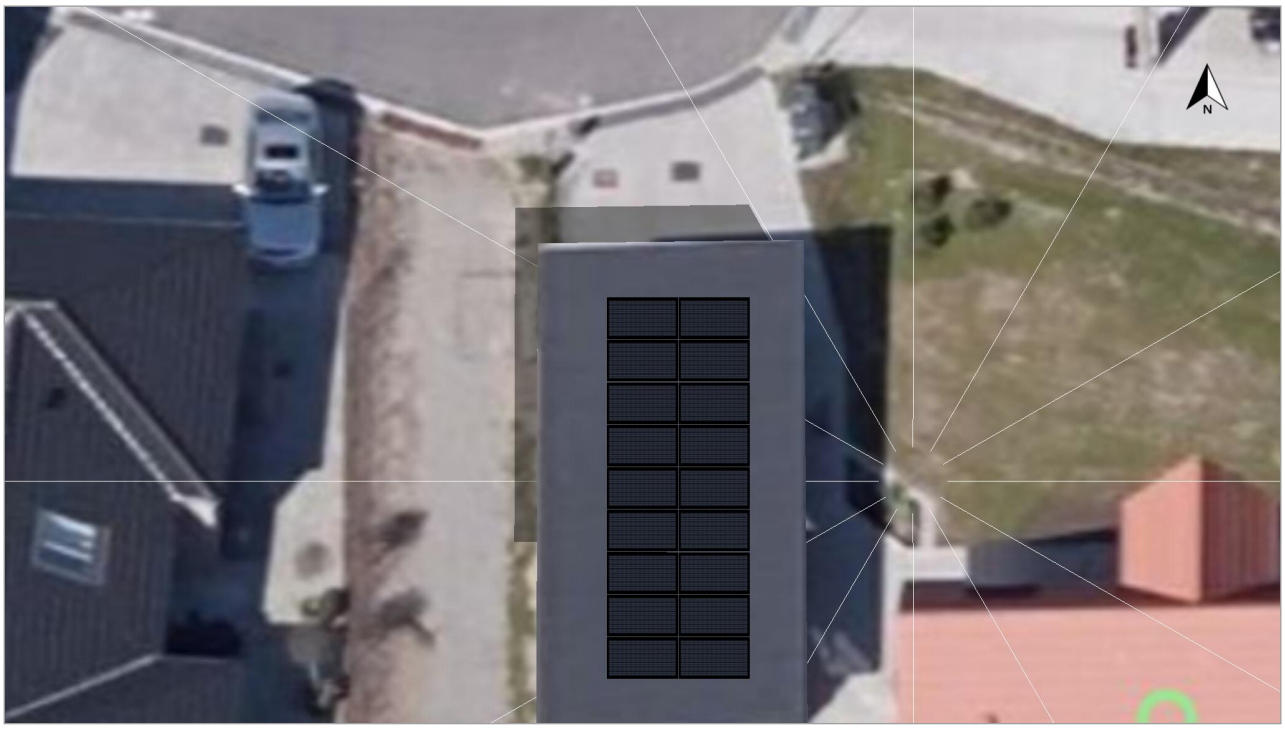


Figure: Overview Image, 3D Design

PV System

3D, Grid-connected PV System

Climate Data	Sorø, DNK (1991 - 2010)	
PV Generator Output	6,3	kWp
PV Generator Surface	33,6	m²
Number of PV Modules	18	
Number of Inverters	1	

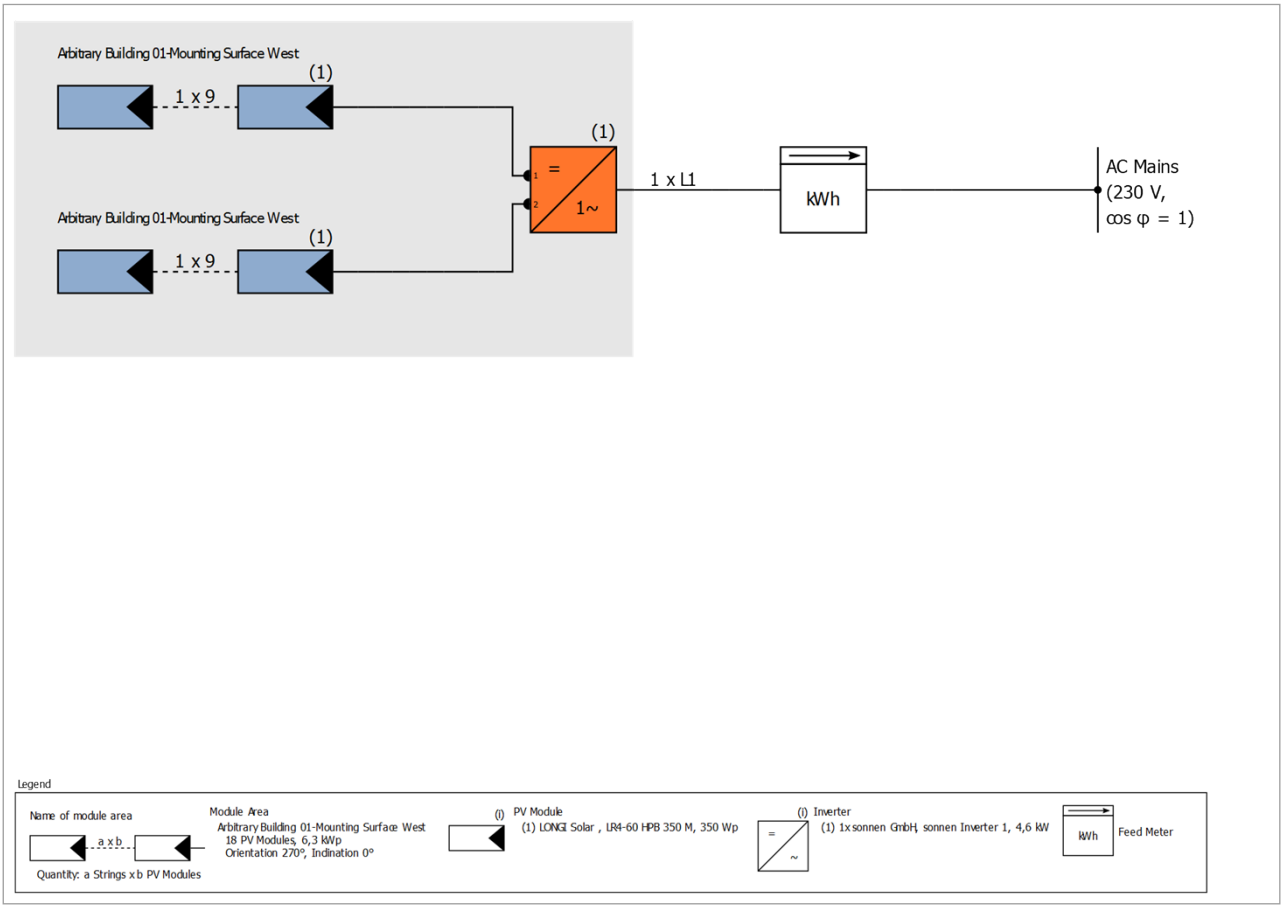


Figure: Schematic diagram

The yield

The yield

PV Generator Energy (AC grid)	5.750	kWh
Grid Feed-in	5.750	kWh
Down-regulation at Feed-in Point	0	kWh
Own Power Consumption	0,0	%
Solar Fraction	0,0	%
Spec. Annual Yield	912,70	kWh/kWp
Performance Ratio (PR)	88,6	%
Yield Reduction due to Shading	0,0	%/Year
CO_2 Emissions avoided	2.703	kg / year

The results have been calculated with a mathematical model calculation from Valentin Software GmbH (PV*SOL algorithms). The actual yields from the solar power system may differ as a result of weather variations, the efficiency of the modules and inverter, and other factors.

Set-up of the System

Overview

System Data

Type of System	3D, Grid-connected PV System
Start of Operation	27-10-2020

Climate Data

Location	Sorø, DNK (1991 - 2010)
Resolution of the data	1 h
Simulation models used:	
- Diffuse Irradiation onto Horizontal Plane	Hofmann
- Irradiance onto tilted surface	Hay & Davies

Module Areas

1. Module Area - Arbitrary Building 01-Mounting Surface West

PV Generator, 1. Module Area - Arbitrary Building 01-Mounting Surface West

Name	Arbitrary Building 01-Mounting Surface West
PV Modules	18 x LR4-60 HPB 350 M (v2)
Manufacturer	LONGI Solar
Inclination	0 °
Orientation	West 270 °
Installation Type	Roof parallel
PV Generator Surface	33,6 m²

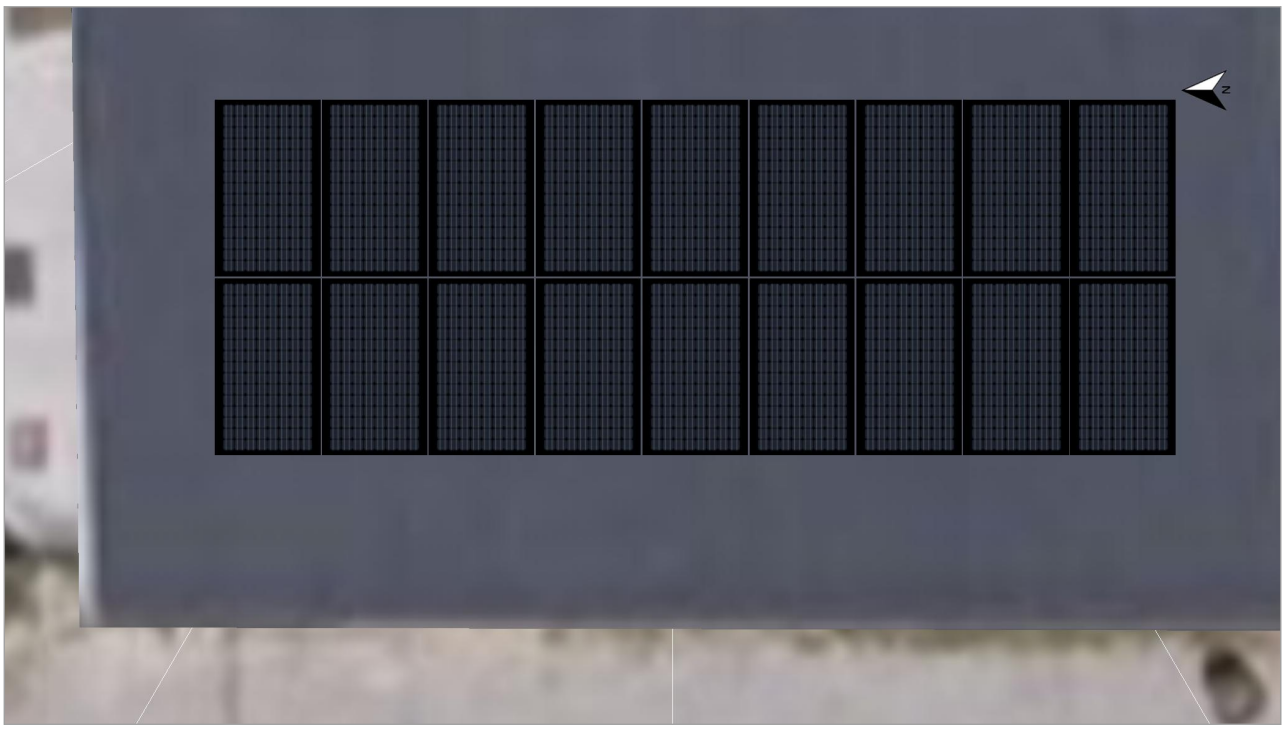


Figure: 1. Module Area - Arbitrary Building 01-Mounting Surface West

Horizon Line, 3D Design

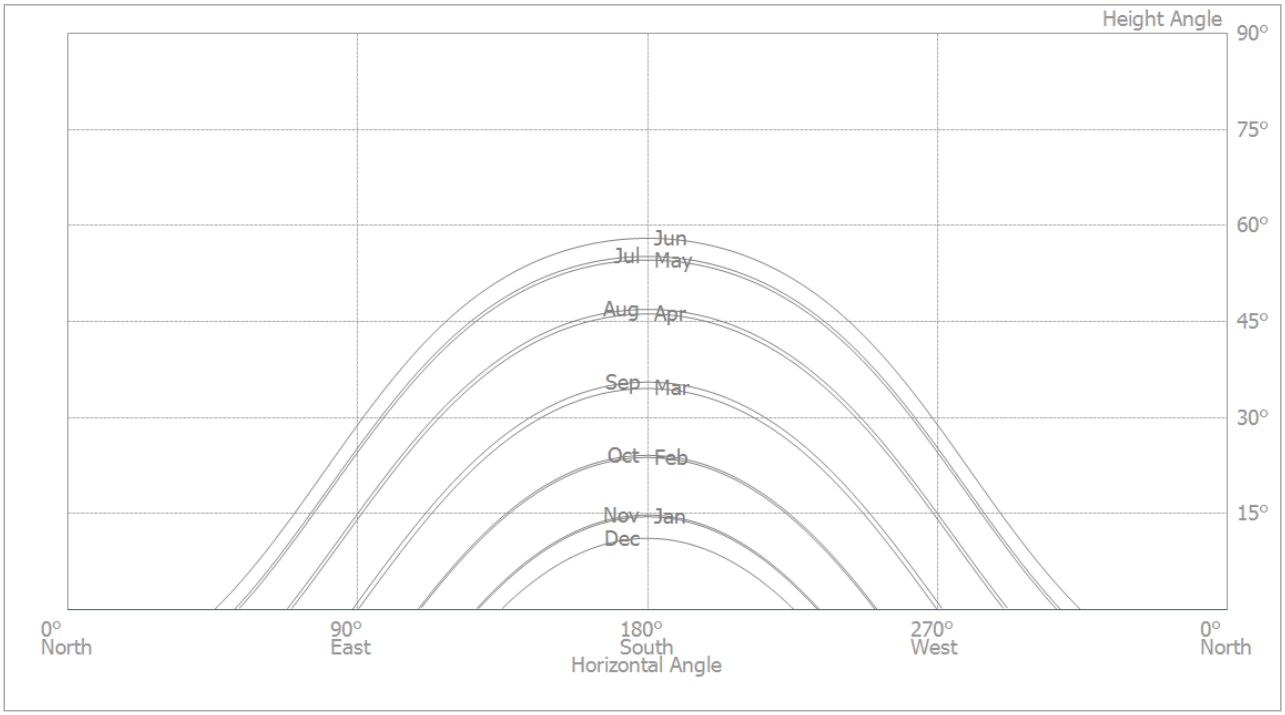


Figure: Horizon (3D Design)

Inverter configuration

Configuration 1	
Module Area	Arbitrary Building 01-Mounting Surface West
Inverter 1	
Model	sonnen Inverter 1 (v1)
Manufacturer	sonnen GmbH
Quantity	1
Sizing Factor	137 %
Configuration	MPP 1: 1 x 9
	MPP 2: 1 x 9

AC Mains

AC Mains	
Number of Phases	3
Mains Voltage (1-phase)	230 V
Displacement Power Factor (cos phi)	+/- 1

Simulation Results

Results Total System

PV System		
PV Generator Output	6,3	kWp
Spec. Annual Yield	912,70	kWh/kWp
Performance Ratio (PR)	88,6	%
Yield Reduction due to Shading	0,0	%/Year
Grid Feed-in	5.750	kWh/Year
Grid Feed-in in the first year (incl. module degradation)	5.750	kWh/Year
Standby Consumption (Inverter)	0	kWh/Year
CO_2 Emissions avoided	2.703	kg / year

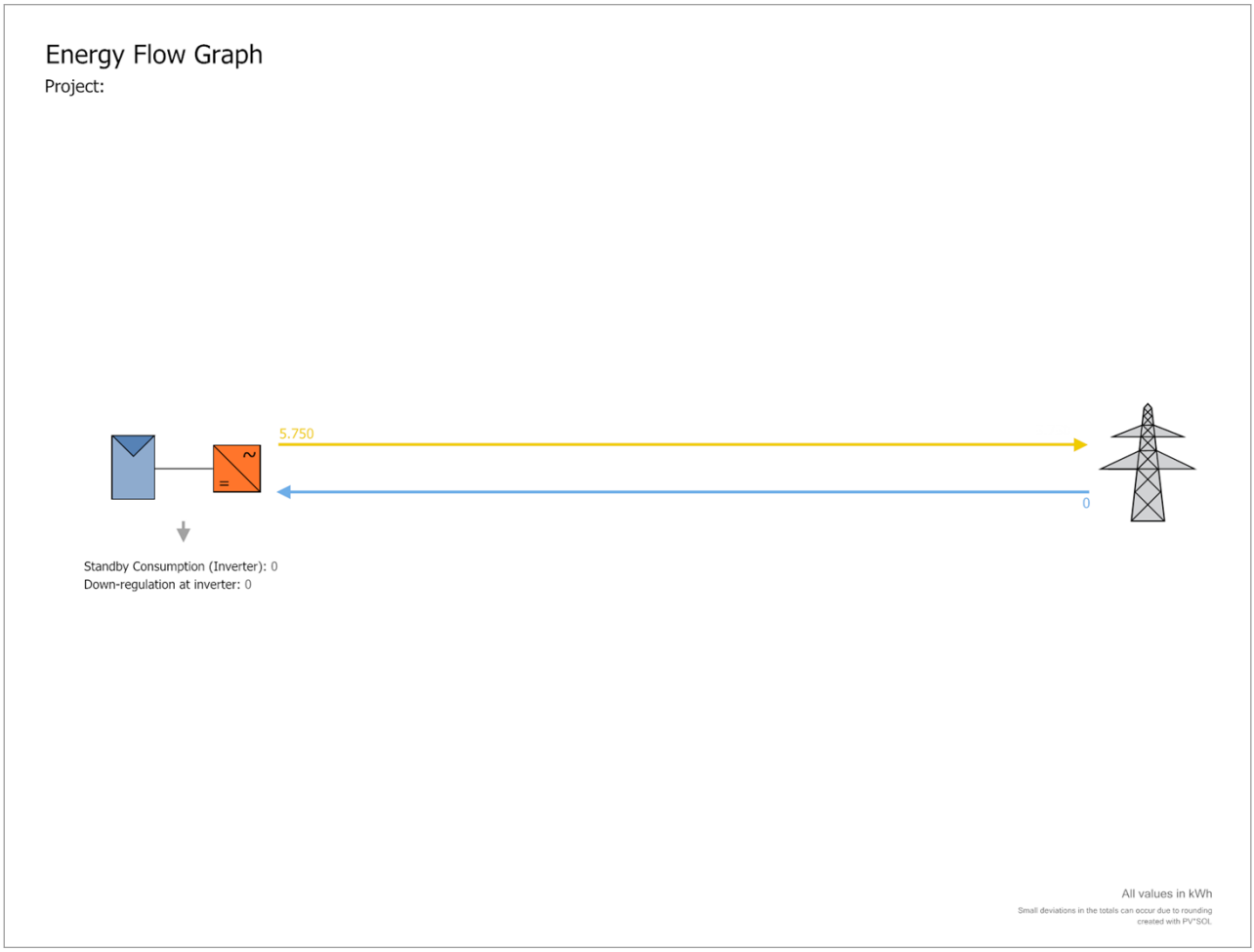


Figure: Energy Flow Graph

Plans and parts list

Circuit Diagram

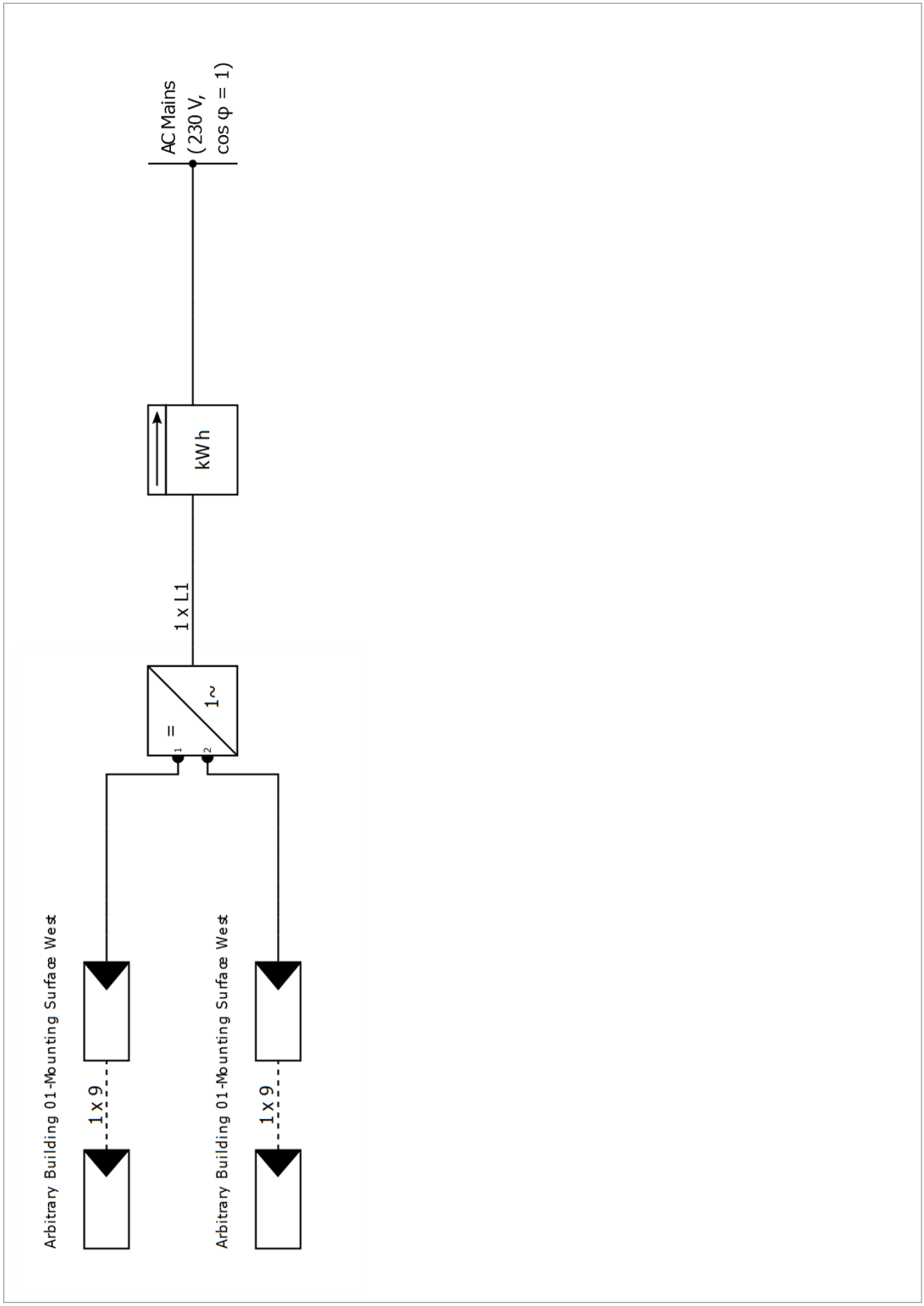


Figure: Circuit Diagram

Dimensioning Plan

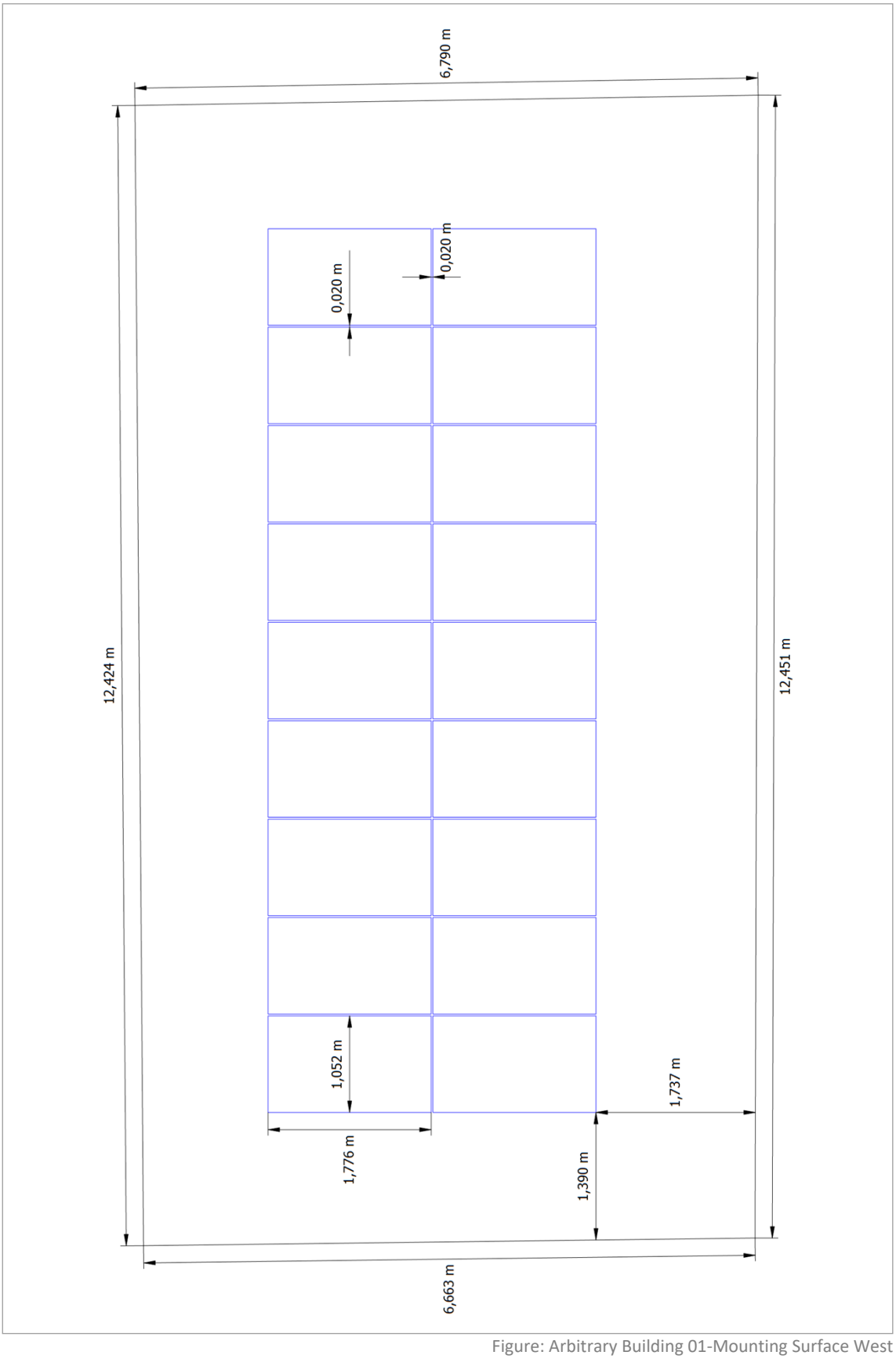


Figure: Arbitrary Building 01-Mounting Surface West

String Plan

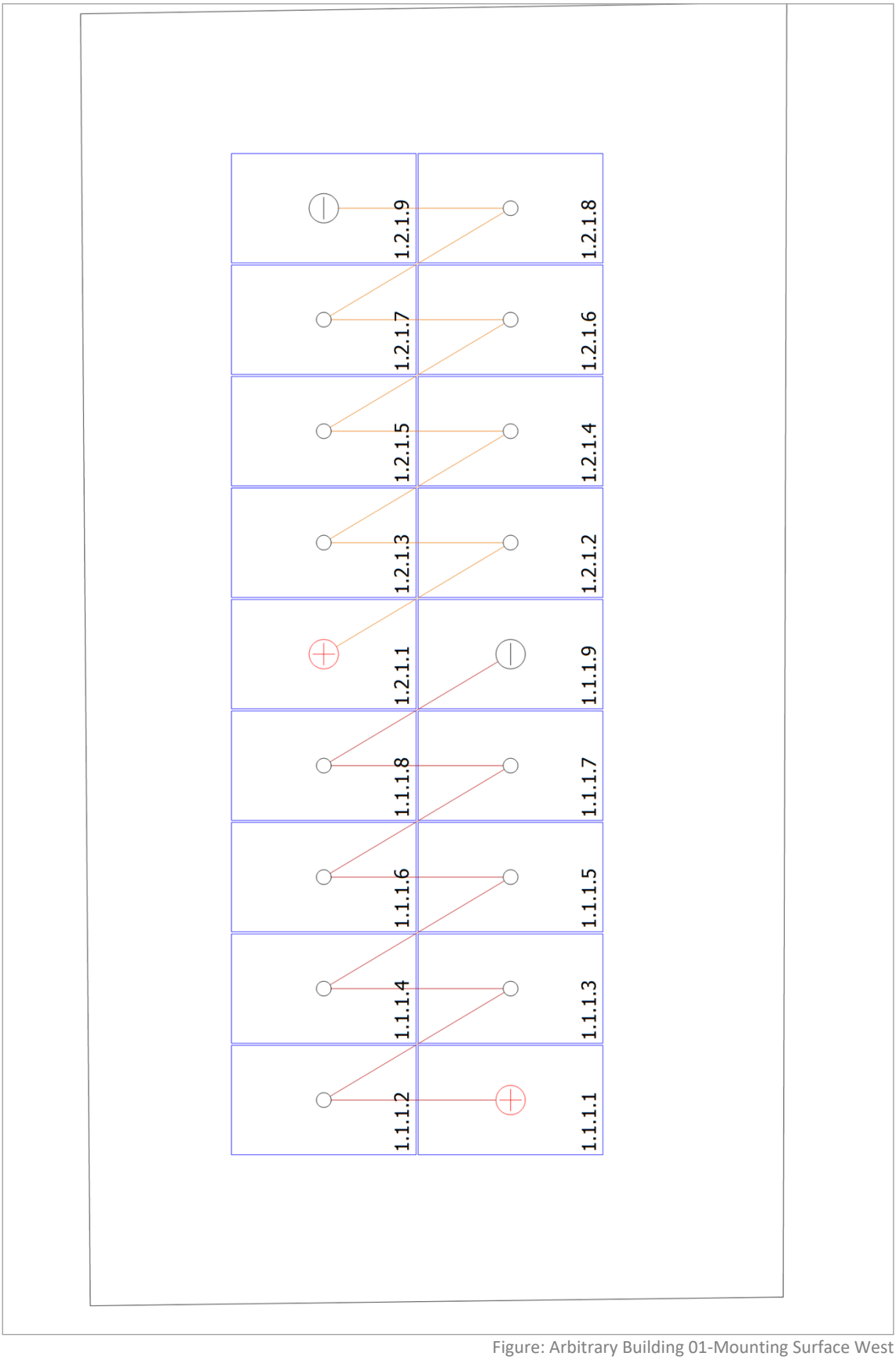


Figure: Arbitrary Building 01-Mounting Surface West

Parts list

Parts list

#	Type	Item number	Manufacturer	Name	Quantity	Unit
1	PV Module		LONGI Solar	LR4-60 HPB 350 M	18	Piece
2	Inverter		sonnen GmbH	sonnen Inverter 1	1	Piece
3	Meter			Feed Meter	1	Piece

Screenshots, 3D Design

Environment

Figure: Screenshot01

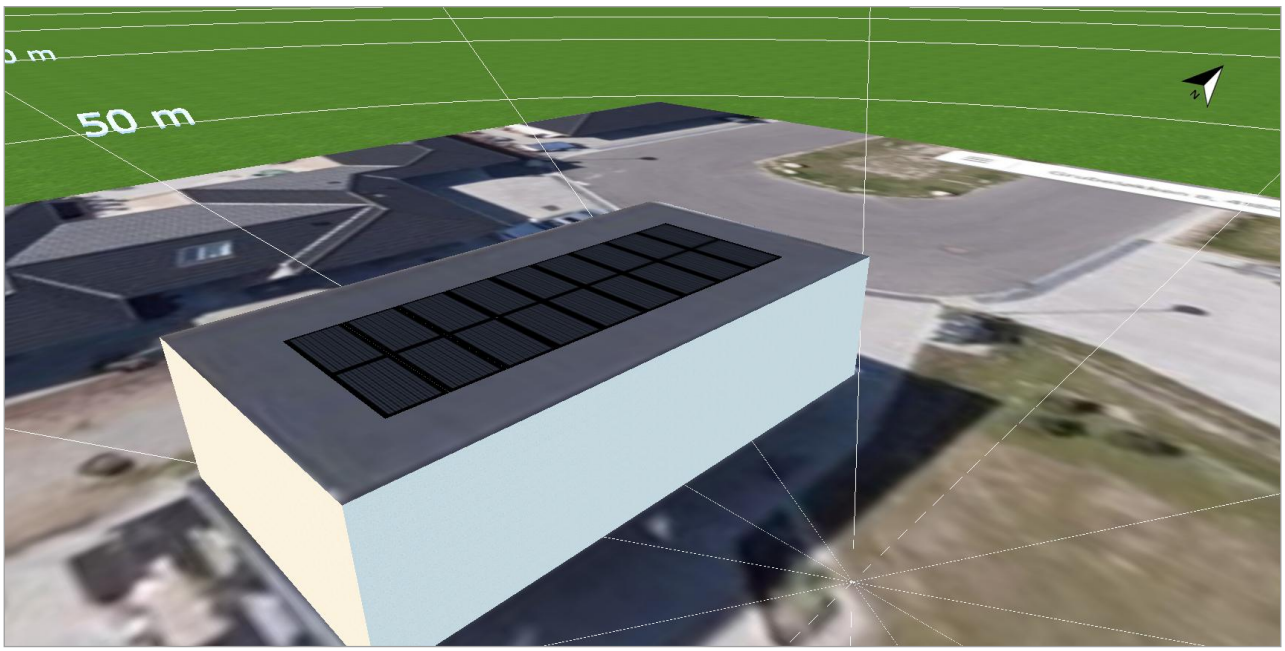


Figure: Screenshot02