


Diseño previo Julio Hernández Pascual - La Alcayna, C. Sierra Taibilla, 37, 30507 Molina de Segura, Murcia

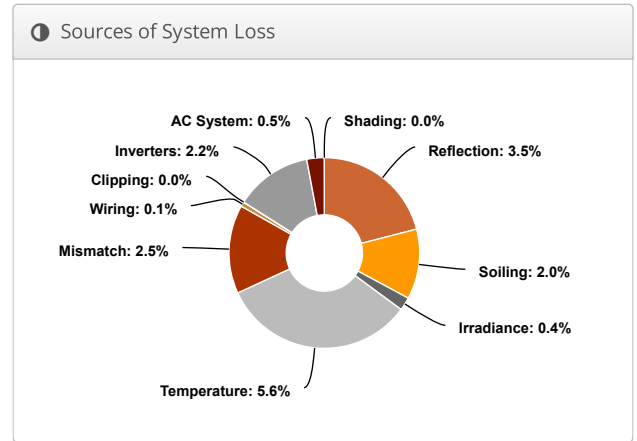
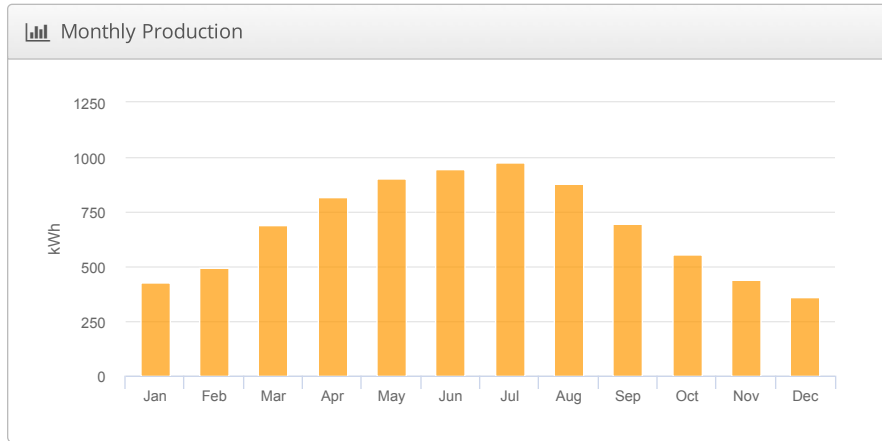
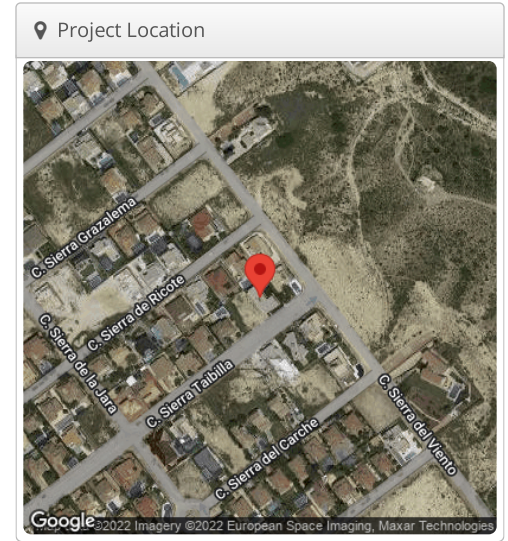
Report

Project Name	Julio Hernández Pascual - La Alcayna
Project Address	C. Sierra Taibilla, 37, 30507 Molina de Segura, Murcia
Prepared By	Adrian Molina Navarro info@esirenovables.es



System Metrics

Design	Diseño previo
Module DC Nameplate	5.01 kW
Inverter AC Nameplate	5.00 kW Load Ratio: 1.00
Annual Production	8.163 MWh
Performance Ratio	84.3%
kWh/kWp	1,631.1
Weather Dataset	TMY, 10km Grid, meteonorm (meteonorm)
Simulator Version	6ff2c96a3e-4518647d3c-6f1ba25a6d-0379be8fe4



⚡ Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,793.0	
	POA Irradiance	1,934.0	7.9%
	Shaded Irradiance	1,934.0	0.0%
	Irradiance after Reflection	1,865.7	-3.5%
	Irradiance after Soiling	1,828.4	-2.0%
	Total Collector Irradiance	1,828.4	0.0%
Energy (kWh)	Nameplate	9,160.4	
	Output at Irradiance Levels	9,125.8	-0.4%
	Output at Cell Temperature Derate	8,618.5	-5.6%
	Output After Mismatch	8,400.3	-2.5%
	Optimal DC Output	8,389.0	-0.1%
	Constrained DC Output	8,389.0	0.0%
	Inverter Output	8,204.5	-2.2%
	Energy to Grid	8,163.4	-0.5%
	Temperature Metrics		
	Avg. Operating Ambient Temp		22.1 °C
	Avg. Operating Cell Temp		32.2 °C
Simulation Metrics			
	Operating Hours		4612
	Solved Hours		4612

☁ Condition Set												
Description	Condition Set 1											
Weather Dataset	TMY, 10km Grid, meteonorm (meteonorm)											
Solar Angle Location	Meteo Lat/Lng											
Transposition Model	Perez Model											
Temperature Model	Sandia Model											
Temperature Model Parameters	Rack Type	a	b	Temperature Delta								
	Fixed Tilt	-3.56	-0.075	3°C								
	Flush Mount	-2.81	-0.0455	0°C								
	East-West	-3.56	-0.075	3°C								
	Carport	-3.56	-0.075	3°C								
Soiling (%)	J	F	M	A	M	J	J	A	S	O	N	D
	2	2	2	2	2	2	2	2	2	2	2	2
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	-2.5% to 2.5%											
AC System Derate	0.50%											
Module Characterizations	Module	Uploaded By					Characterization					
	RSM144-7-455M (Risen Energy)	HelioScope					Spec Sheet Characterization, PAN					
Component Characterizations	Device	Uploaded By					Characterization					
	SUN2000-5KTL-L1 (Huawei)	HelioScope					Spec Sheet					

📦 Components		
Component	Name	Count
Inverters	SUN2000-5KTL-L1 (Huawei)	1 (5.00 kW)
Strings	10 AWG (Copper)	1 (6.7 m)
Module	Risen Energy, RSM144-7-455M (455W)	11 (5.01 kW)

🔌 Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	3-11	Along Racking

🏠 Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Portrait (Vertical)	10°	163.49564°	0.0 m	1x1	11	11	5.01 kW

Detailed Layout

