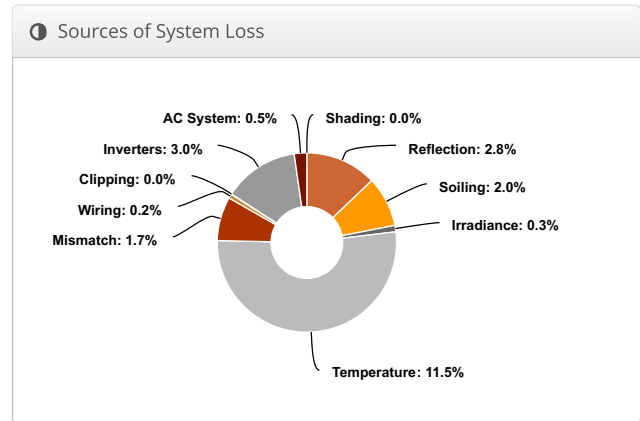
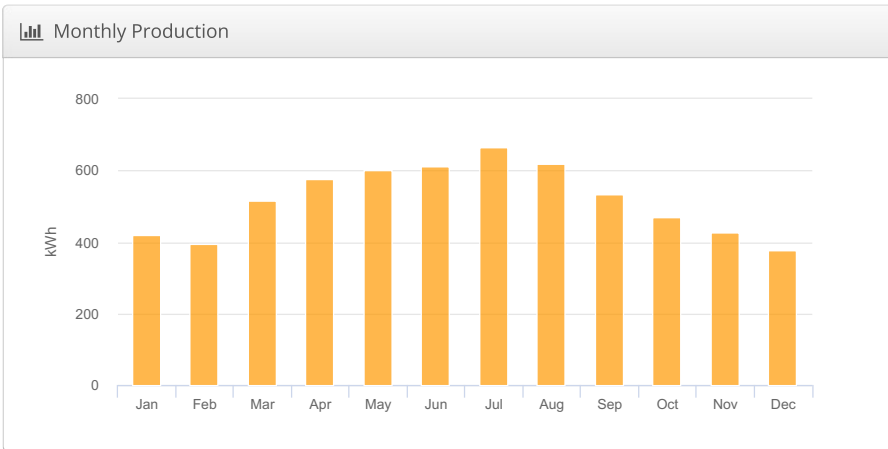
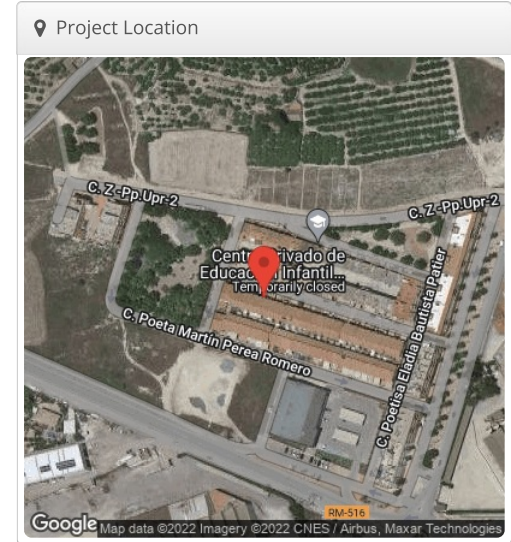


Diseño precio Francisco Miguel-Mula, C. del Historiador Nicolás Acero y Abad, 43, 30170 Mula, Murcia

Report	
Project Name	Francisco Miguel-Mula
Project Address	C. del Historiador Nicolás Acero y Abad, 43, 30170 Mula, Murcia
Prepared By	Adrian Molina Navarro info@esirenovables.es



System Metrics	
Design	Diseño precio
Module DC Nameplate	3.60 kW
Inverter AC Nameplate	3.00 kW Load Ratio: 1.20
Annual Production	6.211 MWh
Performance Ratio	79.6%
kWh/kWp	1,725.3
Weather Dataset	TMY, 10km Grid, meteonorm (meteonorm)
Simulator Version	26c513b886-2f17bc8804-b418a4e336-5b608c73c1



Annual Production

	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,871.1	
	POA Irradiance	2,167.8	15.9%
	Shaded Irradiance	2,167.8	0.0%
	Irradiance after Reflection	2,106.4	-2.8%
	Irradiance after Soiling	2,064.3	-2.0%
	Total Collector Irradiance	2,064.3	0.0%
Energy (kWh)	Nameplate	7,433.6	
	Output at Irradiance Levels	7,415.0	-0.3%
	Output at Cell Temperature Derate	6,561.3	-11.5%
	Output After Mismatch	6,447.0	-1.7%
	Optimal DC Output	6,435.8	-0.2%
	Constrained DC Output	6,435.2	0.0%
	Inverter Output	6,242.1	-3.0%
	Energy to Grid	6,210.9	-0.5%
Temperature Metrics			
	Avg. Operating Ambient Temp	20.2 °C	
	Avg. Operating Cell Temp	43.6 °C	
Simulation Metrics			
	Operating Hours	4600	
	Solved Hours	4600	

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								
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								
	TSM-DE17M(II) 450 (2021) (Trina Solar)	HelioScope		Spec Sheet Characterization, PAN								
Component Characterizations	Device	Uploaded By		Characterization								
	X1-3.0-T-N(L) (230V) (Solax)	HelioScope		Spec Sheet								

Components

Component	Name	Count
Inverters	X1-3.0-T-N(L) (230V) (Solax)	1 (3.00 kW)
Strings	10 AWG (Copper)	1 (4.6 m)
Module	Trina Solar, TSM-DE17M(II) 450 (2021) (450W)	8 (3.60 kW)

Wiring Zones

Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	2-11	Along Racking

Field Segments

Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Flush Mount	Portrait (Vertical)	30°	201.0375°	0.0 m	1x1	8	8	3.60 kW

Detailed Layout

