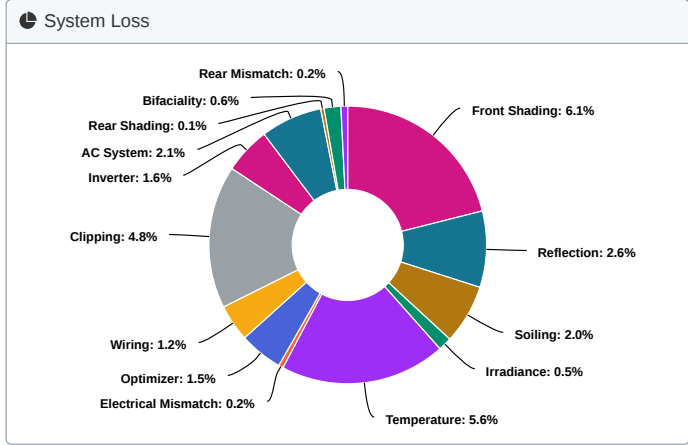
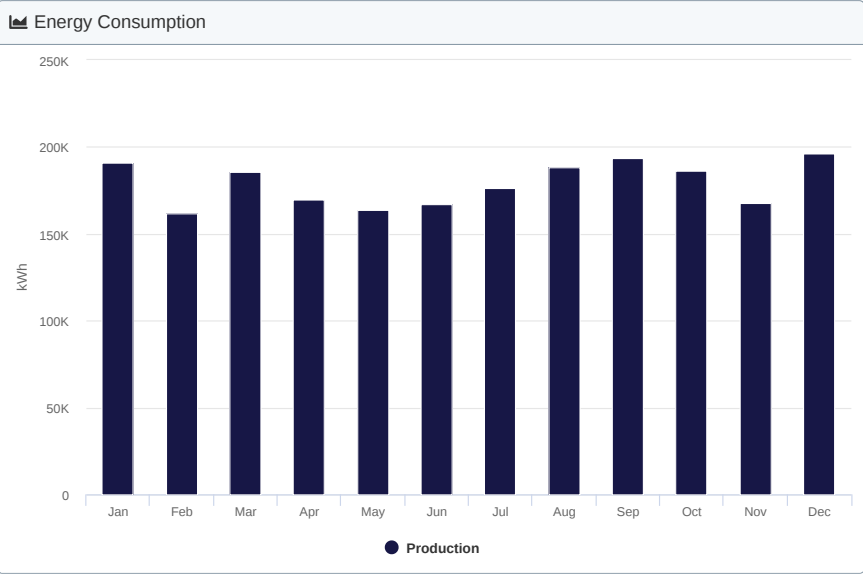
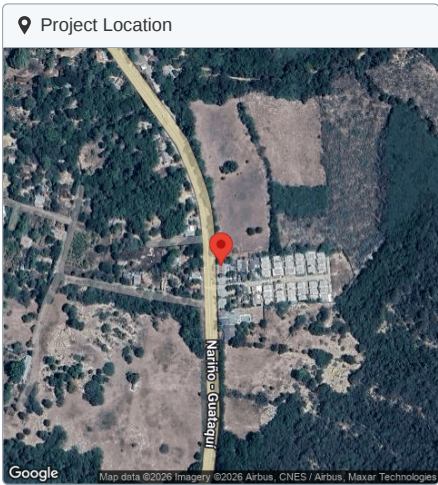


Proyecto Guataqui Design 2026.09.01 SE 720W 180° 960kWAC 1.5 Cerca

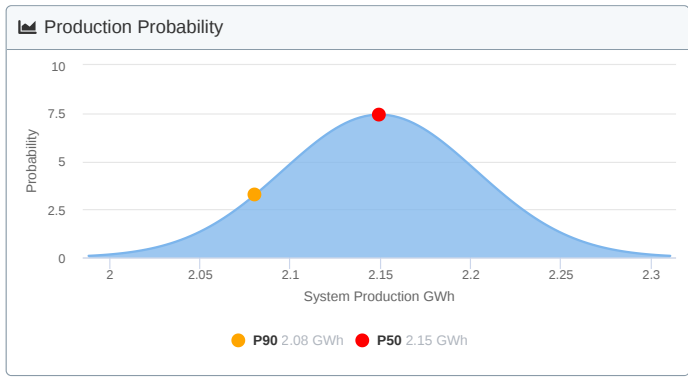
Scenario Summary	
Weather Source	TMY, 10km Grid (meteonorm)
Transposition Model	Perez Model

Project Details	
Address	4.467850290458176, -74.79859442092513
Owner	Smart Energy Solutions SAS 900.728.801-3
Last Modified	Smart Energy Solutions SAS 900.728.801-3 3 minutes ago
Location	(4.466704100000008, -74.79889349999999) (GMT -5)
Profile	Standard techos

System Metrics	
Design	Design 2026.09.01 SE 720W 180° 960kWAC 1.5 Cerca
Module DC Nameplate	1.44 MW
Inverter AC Nameplate	960.00 kW Load Ratio: 1.50
Annual Production	2.1 GWh
Performance Ratio	77.9%
kWh/kWp	1,496.3
Weather Dataset	TMY, 10km Grid, Meteonorm 7 (meteonorm)
Simulator Version	89e1b82bcc-622a0cec95-e941f9a7e0-35d8842b02



Monthly Shading					
Month	GHI (kWh/m²)	POA (kWh/m²)	Shaded (kWh/m²)	Nameplate (kWh)	Grid (kWh)
January	164.5	173.4	164.3	232,964.5	191,215.4
February	140.9	145.4	137.0	194,195.8	162,052.1
March	165.0	166.7	157.6	223,596.6	185,999.2
April	153.9	151.4	141.8	201,515.7	169,979.6
May	151.3	145.6	134.7	192,164.1	163,865.5
June	154.1	146.8	135.9	194,096.1	167,384.9
July	164.4	157.2	146.3	208,814.9	176,155.5
August	170.2	166.1	155.7	221,586.6	188,345.7
September	171.5	171.7	161.6	229,431.5	193,636.7
October	164.3	168.3	159.2	225,776.4	186,499.8
November	145.5	152.1	143.3	203,047.4	168,026.4
December	166.1	176.3	166.7	236,451.0	196,057.8



Design BOM		
Component	Type	Specs
6 AWG (Aluminum)	AC Home Runs	8 (277.4 m)
1000 MCM (Aluminum)	AC Home Runs	1 (76.3 m)
8 input AC Panels	AC Panels	1 (-)
SE120KUS (SolarEdge)	Inverters	8 (960.00 kW)
Jinko Solar, 66HL5-BDV 720W, (720W)	Modules	1,995 (1.44 MW)
JA Solar, JAM66D45-630/LB (2025), (630W)	Modules	0 (-)
S1500 (SolarEdge)	Optimizers	1,008 (1.51 MW)
10 AWG (Copper)	Strings	72 (16,559.1 m)

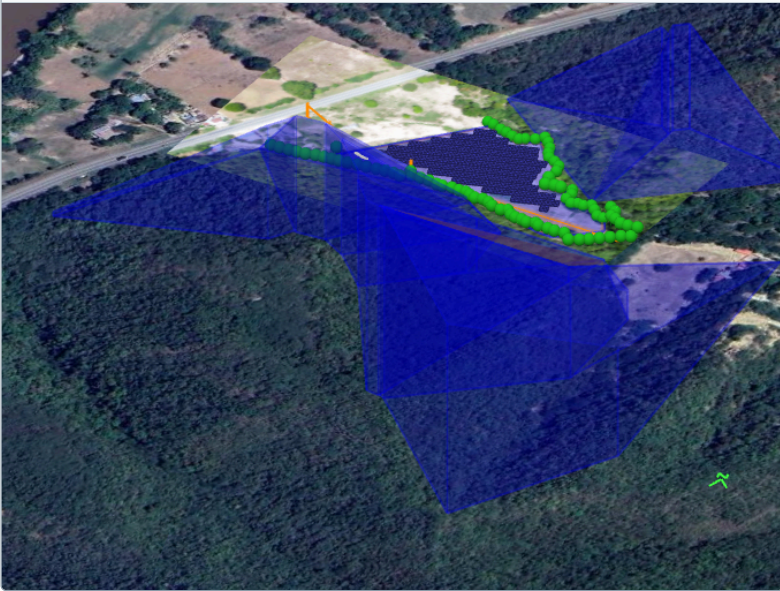
Annual Production				
	Description		Output	% Delta
Front Irradiance (kWh/m²)	Annual Global Horizontal Irradiance		1,911.7	-
	Adjusted Global Horizontal Irradiance		1,911.7	-0.0%
	POA Irradiance		1,921.0	0.5%
	Shaded Irradiance		1,804.3	-6.1%
	Irradiance After Reflection		1,758.2	-2.6%
	Irradiance After Soiling		1,723.0	-2.0%
	Total Front Collector Irradiance		1,723.0	0.0%
Rear Irradiance (kWh/m²) <i>Supported only for fixed tilt racking</i>	Surface Irradiance in Collector Plane	Global Incident Irradiance on Surface	495.5	-
		Surface Reflected Irradiance after Albedo	99.1	-80.0%
		Conversion from Surface Area to Collector Area	132.9	-
		Surface Irradiance in Collector Plane	51.1	-61.5%
	Unshaded Irradiance on Rear Side	Surface Irradiance in Collector Plane	51.1	-
		Sky Diffuse	1.0	-
		Beam Effective	0.0	-
		Total Unshaded Irradiance on Rear Side	52.1	-
	Shaded Irradiance on Rear Side		49.5	-5.1%
	Total Rear Collector Irradiance		49.5	-
	Effective Rear Collector Irradiance		39.6	-20.0%
	Total Collector Irradiance		1,762.6	-
Energy (kWh)	Nameplate		2,563,640.5	-
	Output at Irradiance Levels		2,552,086.8	-0.5%
	Output at Cell Temperature Derate		2,410,085.6	-5.6%
	Output after Electrical Mismatch		2,406,391.3	-0.2%
	Output after Rear Mismatch		2,400,984.6	-0.2%
	Optimizer Output		2,371,238.3	-1.2%
	Optimal DC Output		2,341,860.2	-1.2%
	Constrained DC Output		2,229,432.8	-4.8%
	Inverter Output		2,194,535.2	-1.6%
	AC System Output		2,149,218.8	-2.1%
	Energy to Grid		2,149,218.8	0.0%
	Temperature Metrics			
Avg. Operating Ambient Temp			25.6°C	
Avg. Operating Cell Temp			36.4°C	
Simulation Metrics				
Operating Hours			4,470	

Condition Set													
Description	Condition Set 1												
Weather Dataset	TMY, 10km Grid, Meteonorm 7(meteonorm)												
Solar Angle Location	Project Lat/Lng												
Transposition Model	Perez Model												
Temperature Model	Sandia Model												
Temperature Model Parameters	Rack Type				a		b		Temperature Delta				
	Fixed Tilt				-3.56		-0.08		3.0°C				
	Flush Mount				-2.81		-0.05		0.0°C				
	East-West				-3.56		-0.08		3.0°C				
	Carport				-3.56		-0.08		3.0°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	
Albedo	J	F	M	A	M	J	J	A	S	O	N	D	
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Rear Mismatch Loss	10%				Rear Shading Factor				5%				
Module Transparency	0%												
Irradiation Variance	5.0%												
Cell Temperature Spread	4.0°C												
Module Binning Range	0.0% to 2.5%												
AC System Derate	2.50%												
Component Characterizations	Type		Component				Characterization				Bifacial		
	Module		JAM66D45-630/LB (2025) (JA Solar)				Spec Sheet Characterization, PAN				True		
	Module		66HL5-BDV 720W (Jinko Solar)				Spec Sheet Characterization, PAN				True		
	Inverter		SUN2000-40KTL-M3 (Huawei)				Spec Sheet				N/A		
	Inverter		SUN2000-50KTL-M3 (480V) (Huawei)				Spec Sheet				N/A		
	Buck Boost Optimizer		S1500 (SolarEdge)				Mfg Spec Sheet				N/A		
	Inverter		SE120KUS (SolarEdge)				Spec Sheet				N/A		

Design Render



Design Snapshot



Field Segments

Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Portrait (Vertical)	Module: 7°	Module: 180°	2.5 m	3x1	665	1,995	1.44 MW
Field Segment 3	Flush Mount	Portrait (Vertical)	43°	235.91°	2.5 m	3x1	0	0	0.00 W
Field Segment 2 (copy)	Flush Mount	Portrait (Vertical)	45°	14.328°	2.5 m	3x1	0	0	0.00 W
Field Segment 3 (copy)	Flush Mount	Portrait (Vertical)	44.6°	156.509°	2.5 m	3x1	0	0	0.00 W
Field Segment 2 (copy 1)	Flush Mount	Portrait (Vertical)	39.65°	316.244°	2.5 m	3x1	0	0	0.00 W
Field Segment 2 (copy 2)	Flush Mount	Portrait (Vertical)	39.56°	50.126°	2.5 m	3x1	0	0	0.00 W
Field Segment 2 (copy 3)	Flush Mount	Portrait (Vertical)	38.9°	63.437°	2.5 m	3x1	0	0	0.00 W
Field Segment 2 (copy 4)	Flush Mount	Portrait (Vertical)	31.85°	27.698°	2.5 m	3x1	0	0	0.00 W
Field Segment 2 (copy 5)	Flush Mount	Portrait (Vertical)	32.6°	40.207°	2.5 m	3x1	0	0	0.00 W
Field Segment 2 (copy 6)	Flush Mount	Portrait (Vertical)	25.7°	62.545°	2.5 m	3x1	0	0	0.00 W