

NAU CENTRAL TFG 100KW, Calle Bisuteros 6

Report

Project Name	TFG 100KW
Project Address	Calle Bisuteros 6
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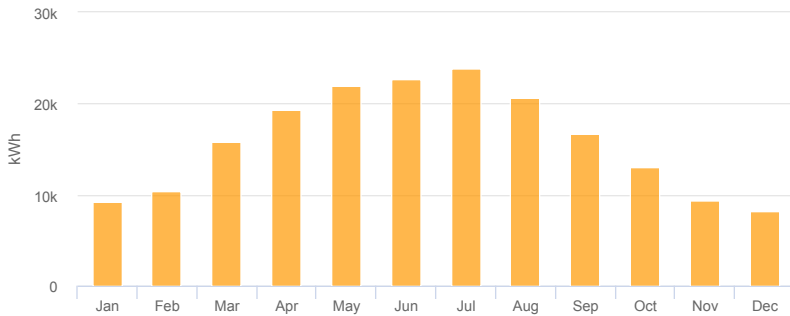
System Metrics

Design	NAU CENTRAL
Module DC Nameplate	130.9 kW
Inverter AC Nameplate	100.0 kW Load Ratio: 1.31
Annual Production	191.2 MWh
Performance Ratio	79.8%
kWh/kWp	1,460.4
Weather Dataset	TMY, 10km Grid, meteonorm (meteonorm)
Simulator Version	66c5d39b29-a1ba09fbc3-b8dd31d9c4-4b27448a91

Project Location

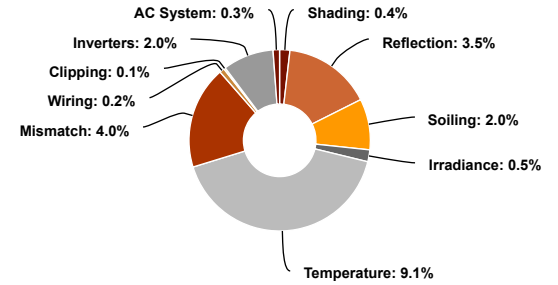


Monthly Production



Month	GHI (kWh/m ²)	POA (kWh/m ²)	Shaded (kWh/m ²)	Nameplate (kWh)	Grid (kWh)
January	67.7	86.1	85.4	10,450.1	9,231.7
February	80.6	95.3	94.8	11,660.9	10,424.0
March	130.9	146.5	146.0	18,086.0	15,768.2
April	171.3	182.3	181.7	22,574.1	19,355.0
May	205.3	210.6	210.0	26,094.2	21,993.0
June	219.7	221.1	220.5	27,423.9	22,653.8
July	232.2	235.5	234.9	29,246.2	23,818.1
August	193.5	203.3	202.7	25,206.9	20,610.5
September	146.9	161.8	161.2	19,978.9	16,730.7
October	107.1	123.9	123.2	15,200.0	13,025.4
November	70.5	87.5	86.8	10,630.4	9,343.5
December	59.5	77.0	76.3	9,292.8	8,207.4

Sources of System Loss



⚡ Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m²)	Annual Global Horizontal Irradiance	1,685.2	
	POA Irradiance	1,830.9	8.6%
	Shaded Irradiance	1,823.5	-0.4%
	Irradiance after Reflection	1,760.2	-3.5%
	Irradiance after Soiling	1,725.0	-2.0%
	Total Collector Irradiance	1,725.0	0.0%
Energy (kWh)	Nameplate	225,844.4	
	Output at Irradiance Levels	224,792.7	-0.5%
	Output at Cell Temperature Derate	204,306.1	-9.1%
	Output After Mismatch	196,063.0	-4.0%
	Optimal DC Output	195,688.3	-0.2%
	Constrained DC Output	195,565.3	-0.1%
	Inverter Output	191,651.6	-2.0%
	Energy to Grid	191,161.5	-0.3%
Temperature Metrics			
Avg. Operating Ambient Temp		19.0 °C	
Avg. Operating Cell Temp		37.6 °C	
Simulation Metrics			
		Operating Hours	4604
		Solved Hours	4604

☁ 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			
	JAM72S30-550/GR (1500V) (JA Solar)						HelioScope		Spec Sheet Characterization, PAN			
Component Characterizations	Device						Uploaded By		Characterization			
	SUN2000-50KTL-M3 (400V) (Huawei)						HelioScope		Spec Sheet			

📦 Components		
Component	Name	Count
Inverters	SUN2000-50KTL-M3 (400V) (Huawei)	2 (100.0 kW)
AC Home Runs	50 mm2 (Copper)	2 (262.8 m)
Strings	10 mm2 (Copper)	16 (531.4 m)
Module	JA Solar, JAM72S30-550/GR (1500V) (550W)	238 (130.9 kW)

🔌 Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	14-16	Along Racking

🏠 Field Segments										
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power	
Field Segment 1	Flush Mount	Landscape (Horizontal)	10°	343°	0.6 m	1x1			0	
Field Segment 2	Flush Mount	Landscape (Horizontal)	10°	163°	0.6 m	1x1	101	101	55.6 kW	
Field Segment 3	Flush Mount	Landscape (Horizontal)	10°	343°	0.6 m	1x1			0	
Field Segment 4	Flush Mount	Landscape (Horizontal)	12°	163.3°	0.6 m	1x1	137	137	75.4 kW	

Detailed Layout

