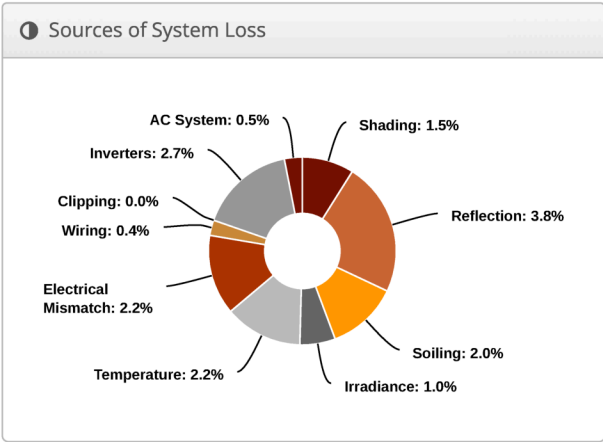
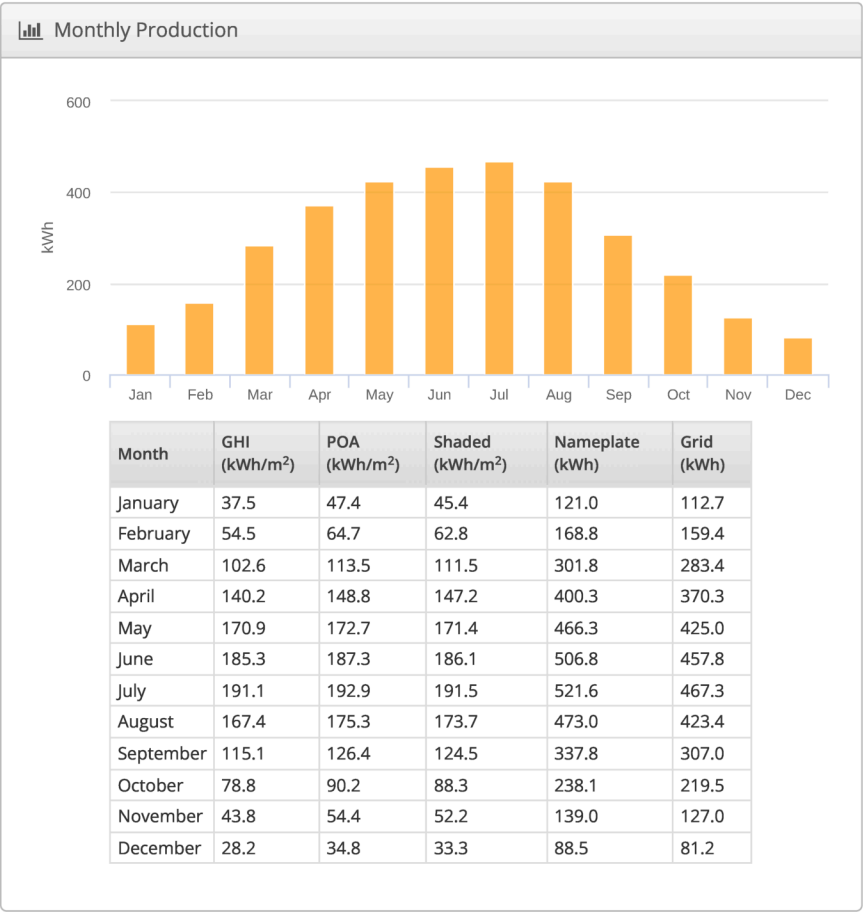
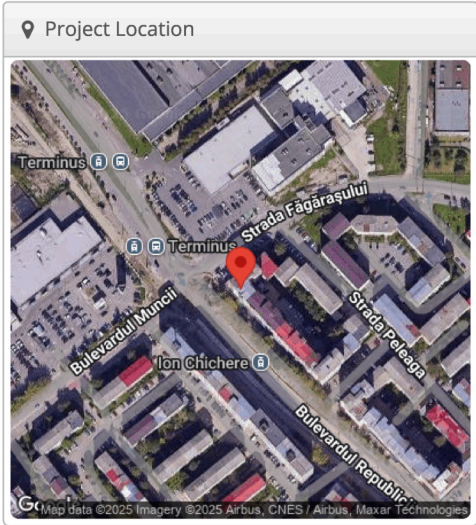


Design 1 resita fagarasului, str Fagarasului nr 37, Resita

Report	
Project Name	resita fagarasului
Project Address	str Fagarasului nr 37, Resita
Prepared By	Cosmin Turbatu fotovoltaice@proxib.ro

System Metrics	
Design	Design 1
Module DC Nameplate	2.88 kW
Inverter AC Nameplate	3.00 kW Load Ratio: 0.96
Annual Production	3.434 MWh
Performance Ratio	84.8%
kWh/kWp	1,194.4
Weather Dataset	TMY, 10km Grid, Meteonorm 8 (meteonorm_v8)
Simulator Version	9f8debac87-fd0e1c9c8c-12e8fa535e-af21278e20



⚡ Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m²)	Annual Global Horizontal Irradiance	1,315.5	
	POA Irradiance	1,408.5	7.1%
	Shaded Irradiance	1,388.1	-1.5%
	Irradiance after Reflection	1,335.9	-3.8%
	Irradiance after Soiling	1,309.2	-2.0%
	Total Collector Irradiance	1,308.5	-0.1%
Energy (kWh)	Nameplate	3,763.0	
	Output at Irradiance Levels	3,725.7	-1.0%
	Output at Cell Temperature Derate	3,644.2	-2.2%
	Output after Electrical Mismatch	3,562.3	-2.2%
	Optimal DC Output	3,547.1	-0.4%
	Constrained DC Output	3,547.0	0.0%
	Inverter Output	3,451.2	-2.7%
	Energy to Grid	3,434.0	-0.5%
Temperature Metrics			
Avg. Operating Ambient Temp		14.6 °C	
Avg. Operating Cell Temp		22.2 °C	
Simulation Metrics			
Operating Hours		4613	
Solved Hours		4613	

☁ Condition Set												
Description	Condition Set 1											
Weather Dataset	TMY, 10km Grid, Meteonorm 8 (meteonorm_v8)											
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
Albedo	J	F	M	A	M	J	J	A	S	O	N	D
	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Rear Mismatch Loss	10%				Rear Shading Factor				5%			
Module Transparency	0%											
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	-2.5% to 2.5%											
AC System Derate	0.50%											
Module & Component Characterizations	Type	Component				Characterization				Bifacial		
	Module	LR5-72HTH 575M (Longi)				Spec Sheet Characterization, PAN				False		
	Inverter	SUN2000-3KTL-L1 (Huawei)				Spec Sheet				N/A		

Components		
Component	Name	Count
Inverters	SUN2000-3KTL-L1 (Huawei)	1 (3.00 kW)
Strings	6 mm2 (Copper)	1 (25.1 m)
Module	Longi, LR5-72HTH 575M (575W)	5 (2.88 kW)

Wiring Zones									
Description	Combiner Poles		String Size		Stringing Strategy				
Wiring Zone	-		3-10		Along Racking				

Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Landscape (Horizontal)	Module: 15°	Module: 229.14462°	0.5 m	1x1	5	5	2.88 kW

Detailed Layout2

