

voltec 385 RS0.9 angle 10 centre aquatique BERNARD ALBIN, 135 Rue des Paquis 08000 Charleville Mézières

Report

Project Name	centre aquatique BERNARD ALBIN
Project Address	135 Rue des Paquis 08000 Charleville Mézières
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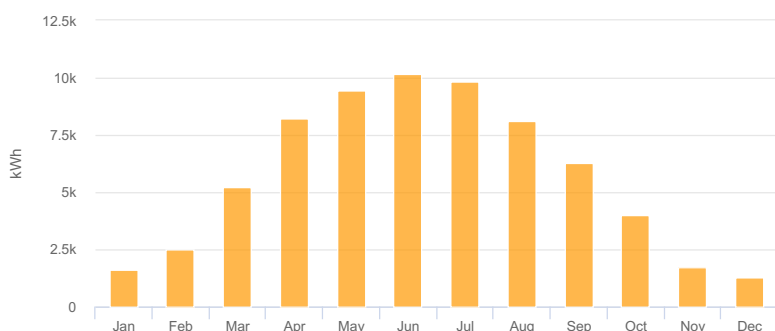
System Metrics

Design	voltec 385 RS0.9 angle 10
Module DC Nameplate	77.0 kW
Inverter AC Nameplate	60.0 kW Load Ratio: 1.28
Annual Production	68.33 MWh
Performance Ratio	78.5%
kWh/kWp	887.4
Weather Dataset	TMY, 10km Grid, meteonorm (meteonorm)
Simulator Version	5662eb7cd9-b049adbefe-4f841677b4-bf9900e55c

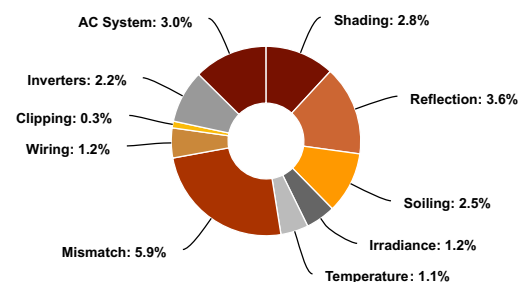
Project Location



Monthly Production



Sources of System Loss



Annual Production

	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,053.3	
	POA Irradiance	1,130.8	7.4%
	Shaded Irradiance	1,098.8	-2.8%
	Irradiance after Reflection	1,058.7	-3.6%
	Irradiance after Soiling	1,032.2	-2.5%
	Total Collector Irradiance	1,032.3	0.0%
Energy (kWh)	Nameplate	79,492.0	
	Output at Irradiance Levels	78,530.8	-1.2%
	Output at Cell Temperature Derate	77,645.3	-1.1%
	Output After Mismatch	73,082.3	-5.9%
	Optimal DC Output	72,192.2	-1.2%
	Constrained DC Output	71,995.4	-0.3%
	Inverter Output	70,445.7	-2.2%
	Energy to Grid	68,332.3	-3.0%
Temperature Metrics			
	Avg. Operating Ambient Temp		12.6 °C
	Avg. Operating Cell Temp		18.6 °C
Simulation Metrics			
	Operating Hours		4609
	Solved Hours		4609

☁ 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		
	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5		
Irradiation Variance	5%													
Cell Temperature Spread	4° C													
Module Binning Range	-2.5% to 2.5%													
AC System Derate	3.00%													
Module Characterizations	Module					Uploaded By		Characterization						
	RCM-385-6MA-DG (Recom)					HelioScope		Spec Sheet Characterization, PAN						
	TARKA 126 VSBD 385 (Voltec Solar)					HelioScope		Spec Sheet Characterization, PAN						
Component Characterizations	Device		Uploaded By					Characterization						

🗂 Components		
Component	Name	Count
Inverters	60 kWac inverter (Kehua)	1 (60.0 kW)
Home Runs	12 AWG (Copper)	1 (12.8 m)
Combiners	8 input Combiner	1
Strings	10 AWG (Copper)	8 (413.6 m)
Module	Voltec Solar, TARKA 126 VSBD 385 (385W)	200 (77.0 kW)

🔌 Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	12	23-25	Along Racking

🏠 Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Landscape (Horizontal)	10°	180°	0.9 m	1x1	23	23	8.86 kW
Field Segment 2	Fixed Tilt	Landscape (Horizontal)	10°	180°	0.9 m	1x1	172	172	66.2 kW
Field Segment 3	Fixed Tilt	Landscape (Horizontal)	10°	180°	0.9 m	1x1	5	5	1.93 kW
Field Segment 4	Flush Mount	Landscape (Horizontal)	8.2°	354.2894°	0.8 m	1x1	0	0	0
Field Segment 5	Flush Mount	Landscape (Horizontal)	1.4°	97.800186°	0.8 m	1x1	0	0	0

Detailed Layout

