CONCEPTION IAV (copy) 85_ DECONS ALTLANTIQUE, 46.5237639890664, -1.0742605855551142

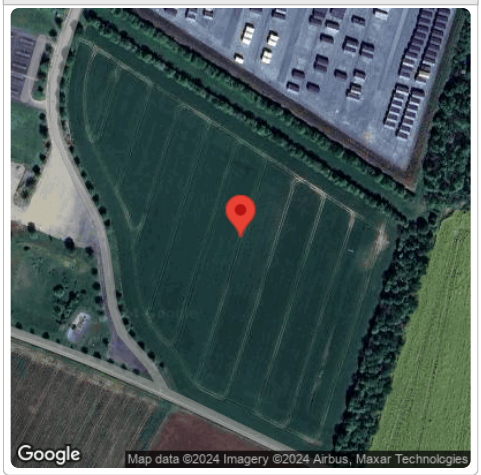
Report

Project Name	85_ DECONS ALTLANTIQUE
Project Address	46.5237639890664, -1.0742605855551142
Prepared By	Emmanuel Penot emmanuel.penot@edfenr.com

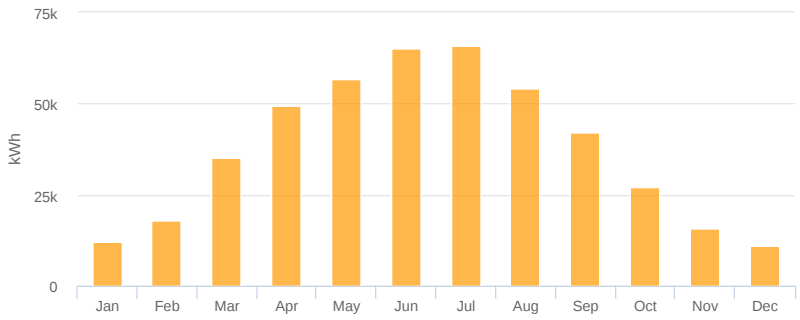
System Metrics

Design	CONCEPTION IAV (copy)
Module DC Nameplate	434.2 kW
Inverter AC Nameplate	400.0 kW Load Ratio: 1.09
Annual Production	453.2 MWh
Performance Ratio	81.0%
kWh/kWp	1,043.6
Weather Dataset	TMY, 10km Grid, Meteonorm 7 (meteonorm)
Simulator Version	4beced6ba8-160632578a-b7ffaec3cb-66897de2d2

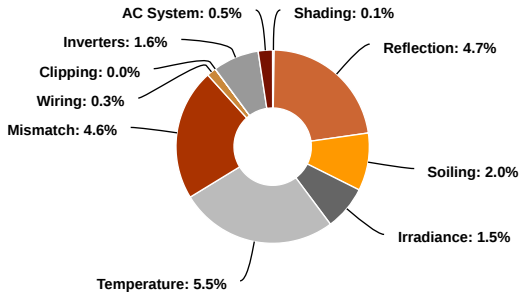
Project Location



Monthly Production



Sources of System Loss



Annual Production

	Description	Output	% Delta
Irradiance (kWh/m²)	Annual Global Horizontal Irradiance	1,298.2	
	POA Irradiance	1,288.8	-0.7%
	Shaded Irradiance	1,288.1	-0.1%
	Irradiance after Reflection	1,228.1	-4.7%
	Irradiance after Soiling	1,203.5	-2.0%
	Total Collector Irradiance	**1,203.6**	**0.0%**
Energy (kWh)	Nameplate	522,889.2	
	Output at Irradiance Levels	514,836.2	-1.5%
	Output at Cell Temperature Derate	486,588.1	-5.5%
	Output After Mismatch	464,357.0	-4.6%
	Optimal DC Output	462,842.0	-0.3%
	Constrained DC Output	462,842.0	0.0%
	Inverter Output	455,436.6	-1.6%
	Energy to Grid	**453,159.4**	**-0.5%**
Temperature Metrics			
	Avg. Operating Ambient Temp		14.9 °C
	Avg. Operating Cell Temp		28.1 °C
Simulation Metrics			
	Operating Hours		4615
	Solved Hours		4615

Condition Set

Description	Condition Set 1											
Weather Dataset	TMY, 10km Grid, Meteonorm 7 (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									
	DM460M10RT-B54HBW (DMEGC)	EDF ENR	DM460M10RT-B54HBW.PAN, PAN									
Component Characterizations	Device	Uploaded By	Characterization									
	SUN2000-100KTL-M2 (400V) (Huawei)	HelioScope	Spec Sheet									

Components

Component	Name	Count
Inverters	SUN2000-100KTL-M2 (400V) (Huawei)	4 (400.0 kW)
Strings	10 AWG (Copper)	40 (2,682.3 m)
Module	DMEGC, DM460M10RT-B54HBW (460W)	944 (434.2 kW)

Wiring Zones

Description	Combiner Poles	String Size	Stringing Strategy
BATIMENT A	-	7-25	Along Racking
BATIMENT B	-	7-25	Along Racking
BATIMENT C	-	7-25	Along Racking

Field Segments

Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
STOCKAGE PARTICULIER	Flush Mount	Portrait (Vertical)	6.87°	300.14346°	0.0 m	1x1	208	208	95.7 kW
BAT A TOIT NORD	Flush Mount	Portrait (Vertical)	6.87°	300.14346°	0.0 m	1x1	130	130	59.8 kW
BAT A TOIT SUD	Flush Mount	Portrait (Vertical)	6.87°	120.14346°	0.0 m	1x1	142	142	65.3 kW
BATIMENT C TOIT NORD	Flush Mount	Portrait (Vertical)	6.87°	300.41324°	0.0 m	1x1	128	128	58.9 kW
BATIMENT C TOIT SUD	Flush Mount	Portrait (Vertical)	6.87°	120.41323°	0.0 m	1x1	128	128	58.9 kW
BAT B TOIT NORD	Flush Mount	Portrait (Vertical)	6.87°	300.5581°	0.0 m	1x1	104	104	47.8 kW
BAT B TOIT SUD	Flush Mount	Portrait (Vertical)	6.87°	120.55809°	0.0 m	1x1	104	104	47.8 kW

Detailed Layout2