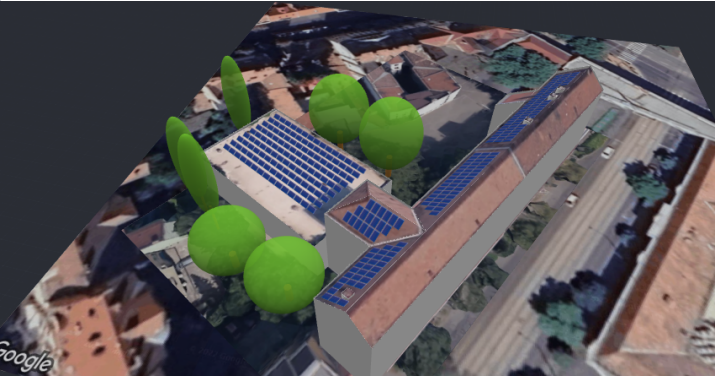


SZTE SÁGVÁI ÁLT ISK

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SYSTEM OVERVIEW

 303 PV modules

 2 Inverters

 303 Optimizers

SIMULATION RESULTS



Installed DC Power
124.23 kWp



Max Achieved AC Power
100.00 kW



Annual Energy Production
125.36 MWh



CO2 Emission Saved
32.59 t



Equivalent Trees Planted
1,497



Max Achieved DC Power
114.28 kW



DC/AC Oversizing
114 %



Max Active AC Power
100.00 kW



Performance Ratio
75 %



Performance Index
1,009 kWh/kWp

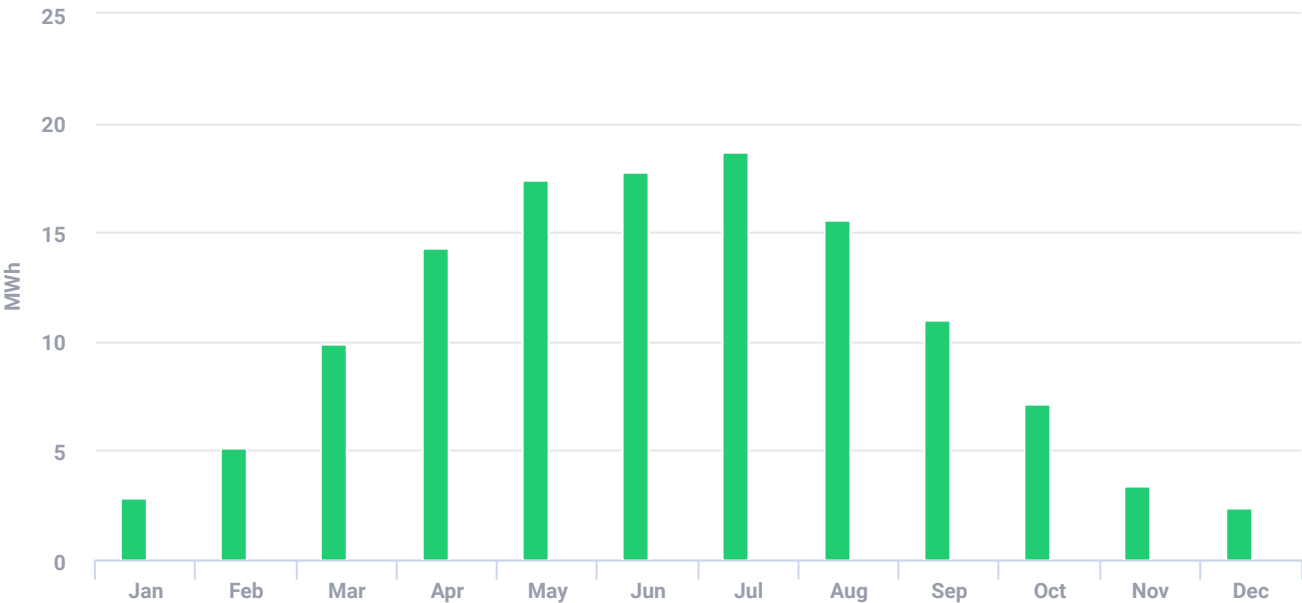
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ESTIMATED MONTHLY ENERGY

Solar Production Clipped Energy



Total clipped energy: 0.06%

PV MODULES

# Module	Model	Peak power	Racking type	Orientation	Azimuth	Tilt
18	Risen Energy Co. Ltd., RSM40-8-410M	7.4 kWp			209°	38°
29	Risen Energy Co. Ltd., RSM40-8-410M	11.9 kWp			299°	33°
121	Risen Energy Co. Ltd., RSM40-8-410M	49.6 kWp			299°	33°
135	Risen Energy Co. Ltd., RSM40-8-410M	55.4 kWp			209°	37°
Total: 303		124.2 kWp				

BILL OF MATERIALS (BOM)

Items	Quantity	Price (Ft)	Total (Ft)
SE50K Manager	2		

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BILL OF MATERIALS (BOM) (CONTINUED)

Items	Quantity	Price (Ft)	Total (Ft)
S440	303		
RSM40-8-410M	303		

ELECTRICAL DESIGN

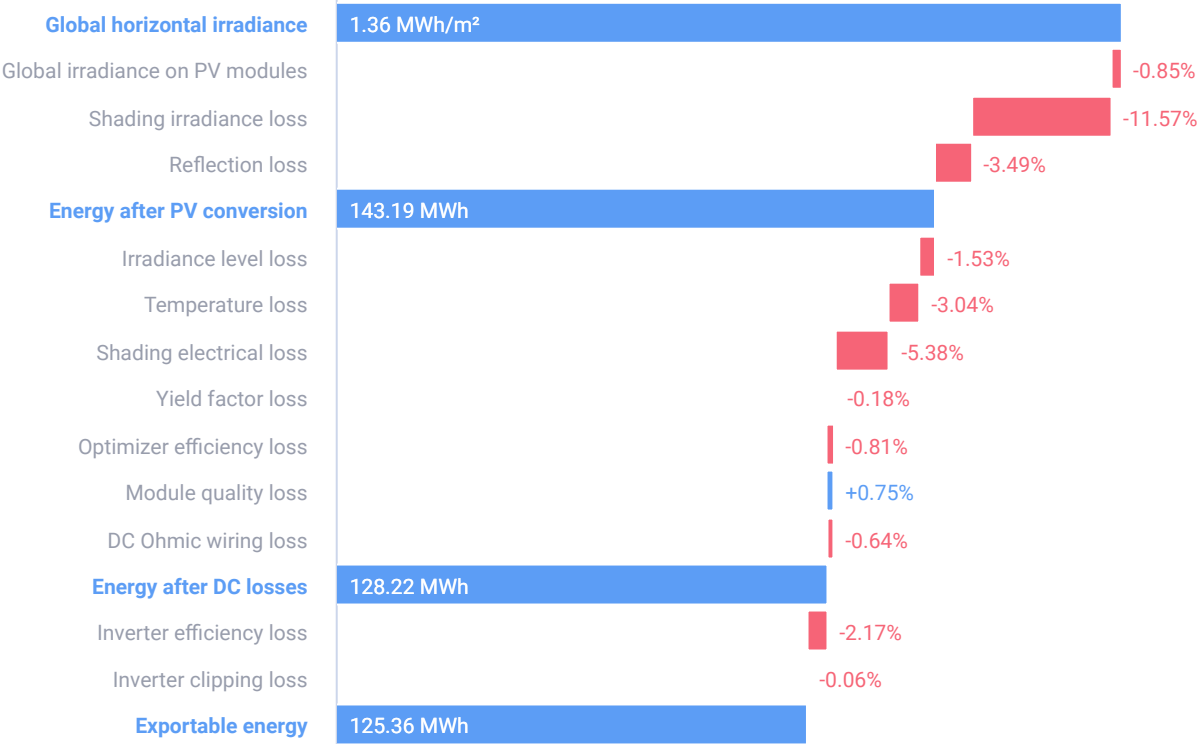
Inverters & Storage	Strings per inverter	Optimizers per string	PV modules per string
1 x SE50K Manager 55.35kW 111%	Center		
	⌋ 2 x strings	22 x S440	22
	⌋ 1 x string	23 x S440	23
	Left		
	⌋ 1 x string	22 x S440	22
	⌋ 2 x strings	23 x S440	23
1 x SE50K Manager 58.93kW 118%	Center		
	⌋ 1 x string	18 x S440	18
	⌋ 1 x string	29 x S440	29
	⌋ 1 x string	32 x S440	32
	Left		
	⌋ 1 x string	29 x S440	29
	⌋ 2 x strings	30 x S440	30

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SYSTEM LOSS DIAGRAM



SIMULATION PARAMETERS



LOCATION & GRID

Time zone	GMT+1 (Budapest)
Weather station	Szeged (3.55 km away)
Station altitude	74 m
Station data source	Meteonorm 7.1
Grid	400V L-L, 230V L-N



LOSS FACTORS

Near shading	Enabled
Albedo	0.20
Soiling/Snow	0%
Incidence angle modifier (IAM), ASHRAE b0 param.	0.05
Thermal loss factor Uc (const) Flush mount	20
Thermal loss factor Uc (const) Tilted	29
LID loss factor	0%
System unavailability	0%