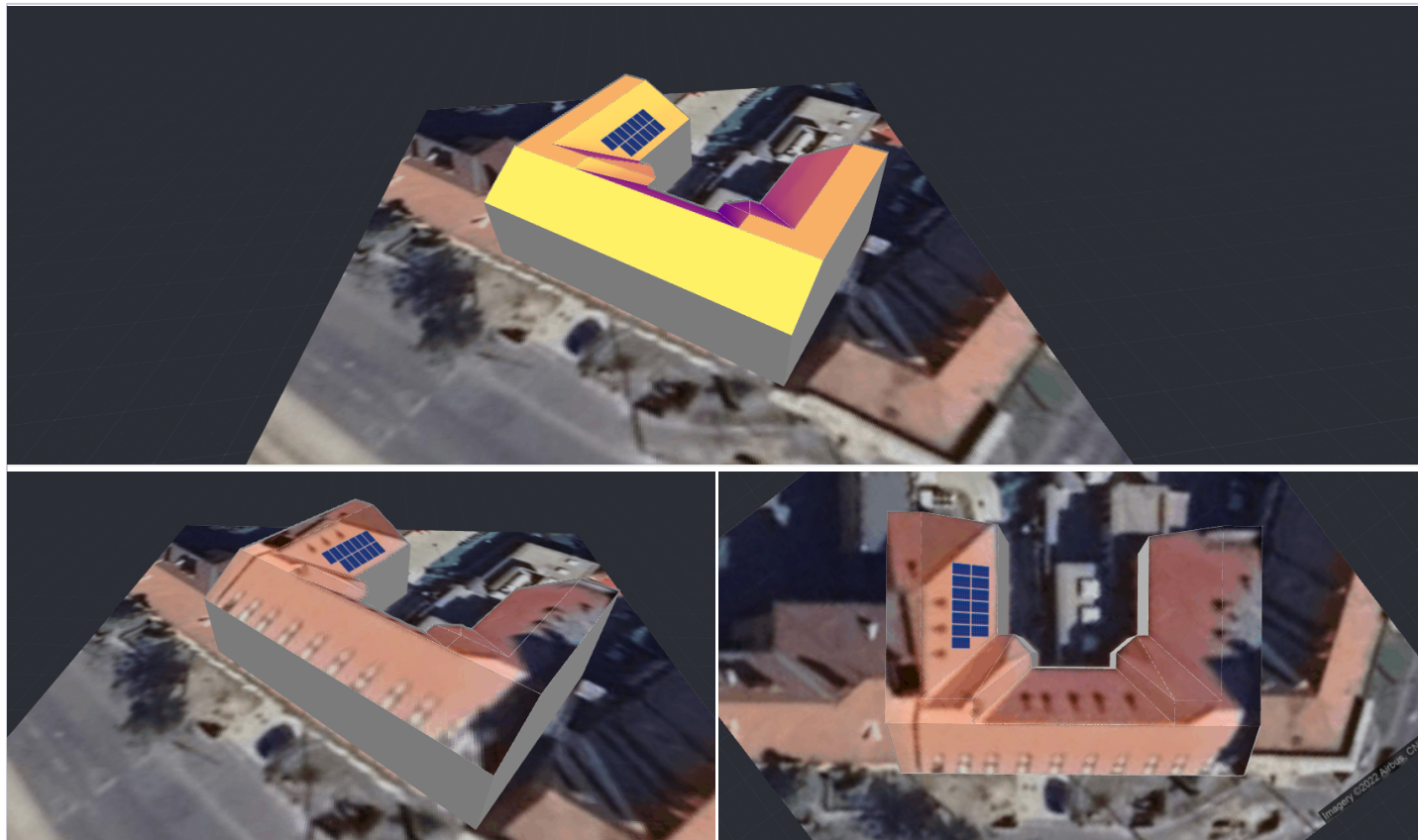


## SZTE SZAOK OKTATÁSI ÉPÜLET

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## SYSTEM OVERVIEW



13 PV modules



1 Inverters



13 Optimizers

## SIMULATION RESULTS



Installed DC Power

5.33 kWp



Max Achieved AC Power

5.00 kW



Annual Energy Production

6.90 MWh



CO2 Emission Saved

1.79 t



Equivalent Trees Planted

82



Max Achieved DC Power

5.29 kW



DC/AC Oversizing

106 %



Max Active AC Power

5.00 kW



Performance Ratio

87 %



Performance Index

1,294 kWh/kWp

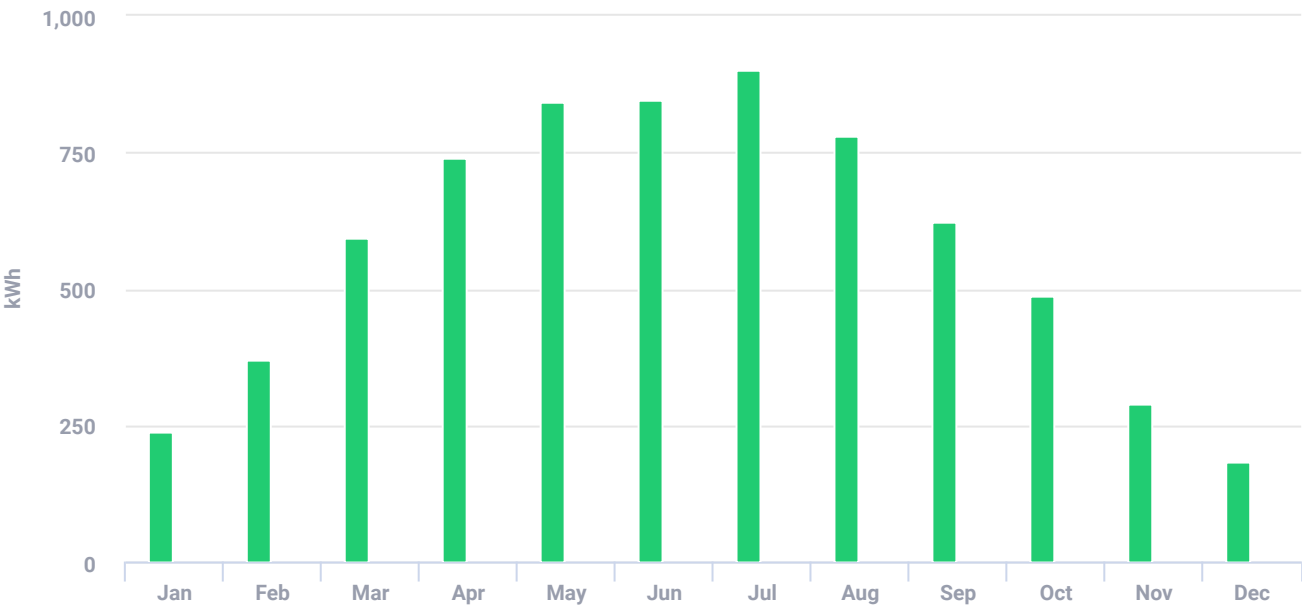
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ESTIMATED MONTHLY ENERGY

Solar Production



Total clipped energy: 0%

PV MODULES

# Module	Model	Peak power	Racking type	Orientation	Azimuth	Tilt
13	Risen Energy Co. Ltd., RSM40-8-410M	5.3 kWp			128°	30°
Total: 13		5.3 kWp				

BILL OF MATERIALS (BOM)





Items	Quantity	Price (Ft)	Total (Ft)
SE5K-RWB (For short PV strings)	1		
S440	13		
RSM40-8-410M	13		

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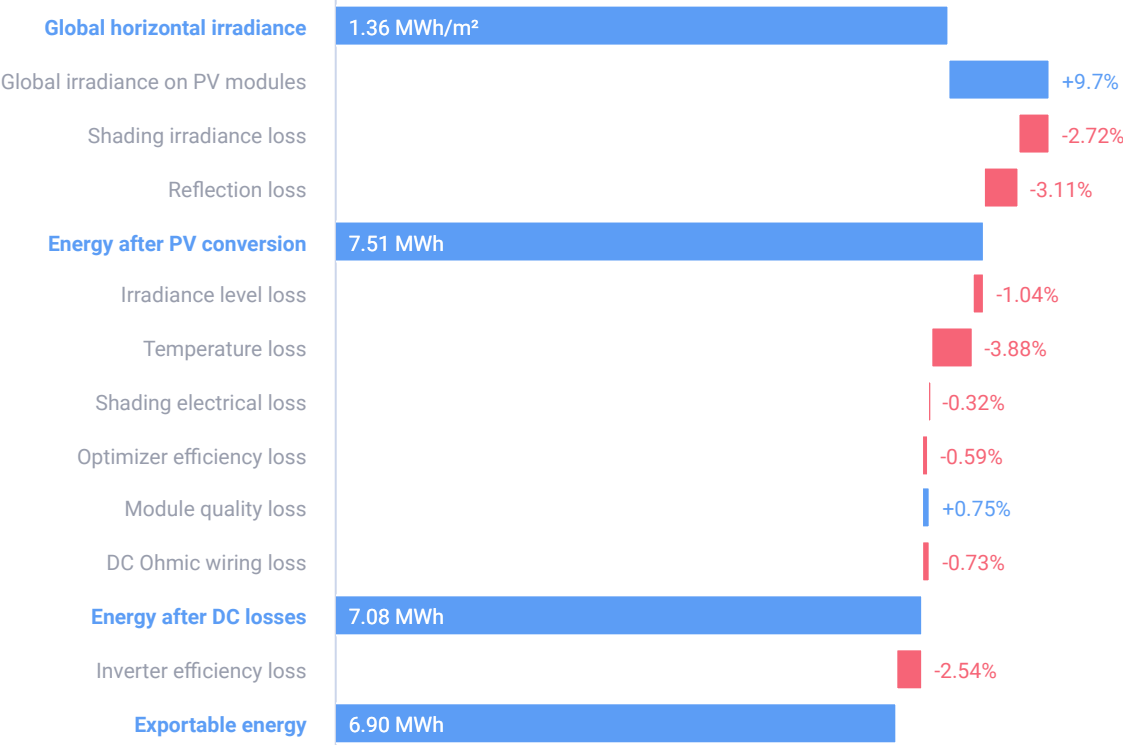
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ELECTRICAL DESIGN

Inverters & Storage	Strings per inverter	Optimizers per string	PV modules per string
<div> 1 x SE5K-RWB (For short PV strings) 5.29kW   106%</div>	<div> 1 x string</div>	<div><div></div> 13 x S440</div>	<div> 13</div>

SYSTEM LOSS DIAGRAM



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SIMULATION PARAMETERS



LOCATION & GRID

Time zone	GMT+1 (Budapest)
Weather station	Szeged (3.45 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 $U_c$ (const) Flush mount	20
Thermal loss factor $U_c$ (const) Tilted	29
LID loss factor	0%
System unavailability	0%