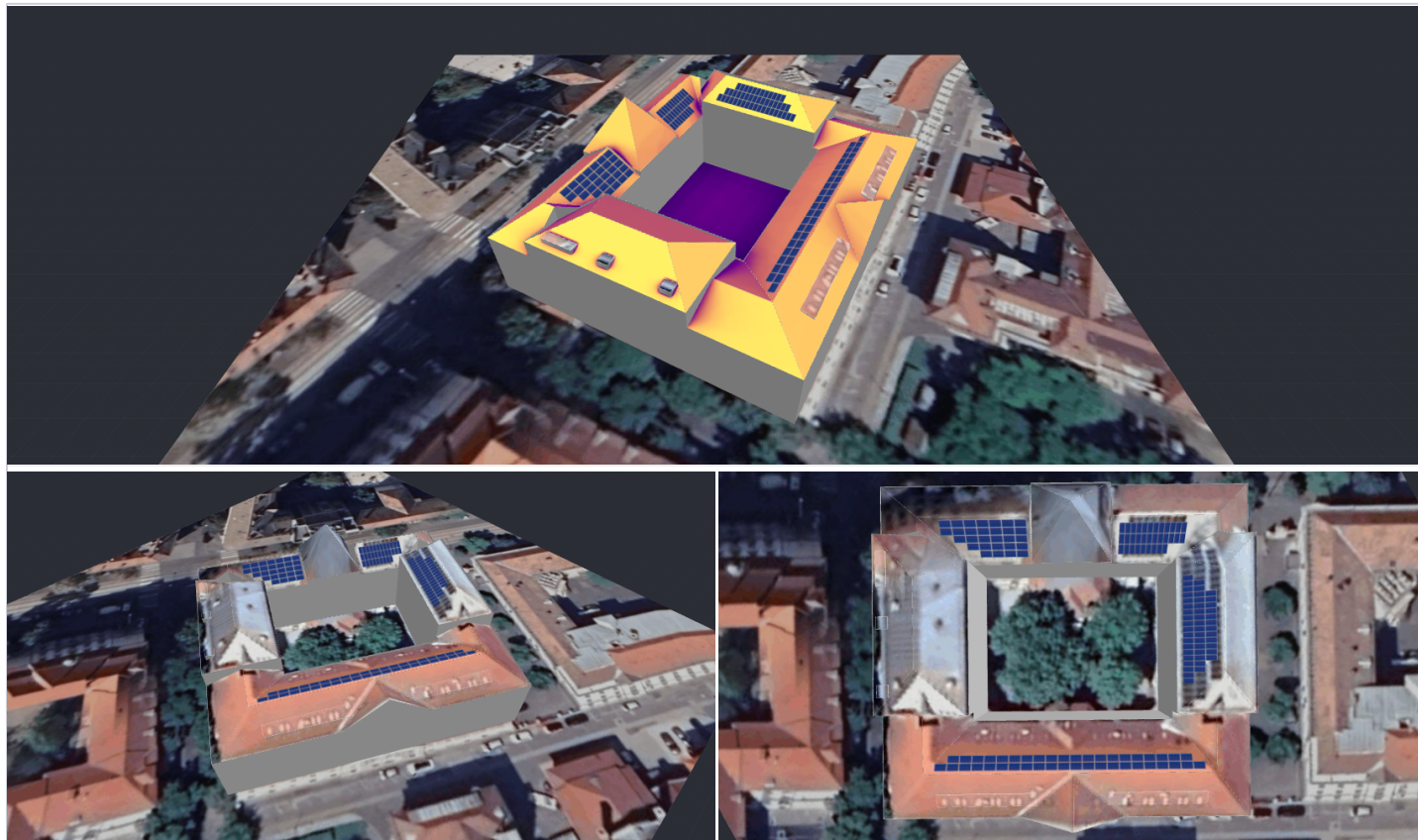


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SYSTEM OVERVIEW



151 PV modules



2 Inverters



151 Optimizers

SIMULATION RESULTS



Installed DC Power

49.11 kWp



Max Achieved AC Power

41.00 kW



Annual Energy Production

58.26 MWh



CO2 Emission Saved

15.15 t



Equivalent Trees Planted

696



Max Achieved DC Power

43.86 kW



DC/AC Oversizing

107 %



Max Active AC Power

41.00 kW



Performance Ratio

85 %



Performance Index

1,186 kWh/kWp

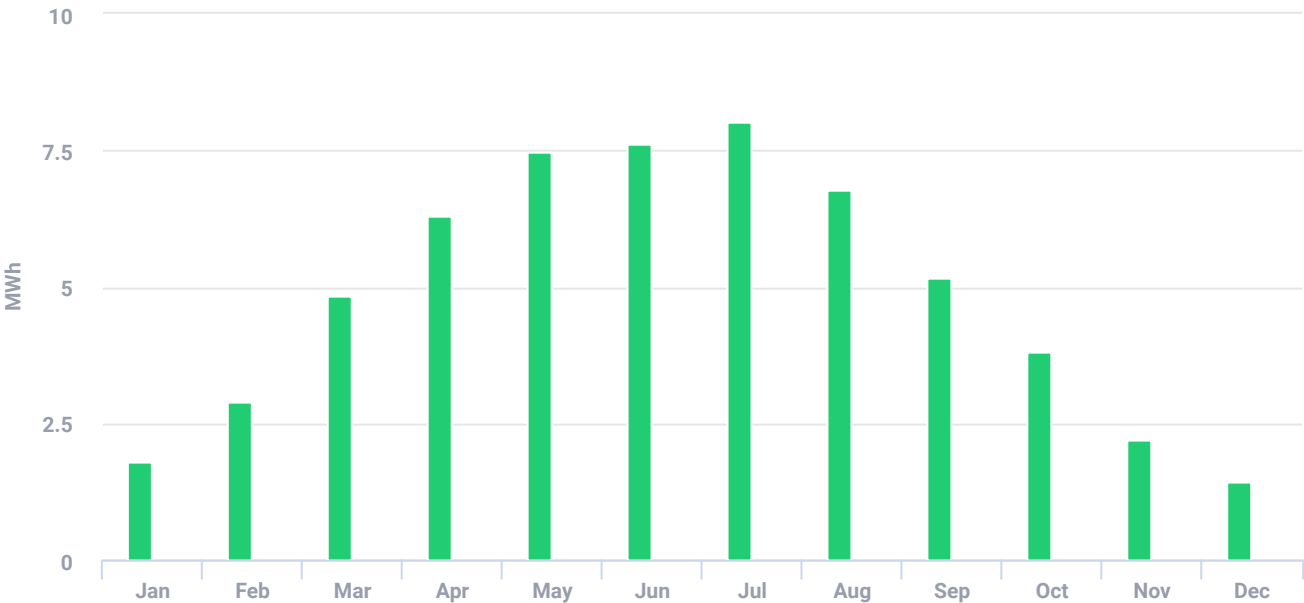
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ESTIMATED MONTHLY ENERGY

● Solar Production ▨ Clipped Energy



Total clipped energy: 0.03%

PV MODULES

# Module	Model	Peak power	Racking type	Orientation	Azimuth	Tilt
29	Risen Energy Co. Ltd., RSM40-8-410M	11.9 kWp			119°	35°
33	SunPower, X20-250-BLK	8.3 kWp			119°	35°
42	Risen Energy Co. Ltd., RSM40-8-410M	17.2 kWp			299°	20°
47	SunPower, X20-250-BLK	11.8 kWp			209°	28°
Total: 151		49.1 kWp				

BILL OF MATERIALS (BOM)





Items	Quantity	Price (Ft)	Total (Ft)
SE16K	1		

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BILL OF MATERIALS (BOM) (CONTINUED)

Items	Quantity	Price (Ft)	Total (Ft)
 SE25K	1	1026000.00	1,026,000.00
 S440	151		
 X20-250-BLK	80		
 RSM40-8-410M	71		

Total Price: Ft 1,026,000.00

ELECTRICAL DESIGN

Inverters & Storage	Strings per inverter	Optimizers per string	PV modules per string
 1 x SE16K 18.93kW 118%	 1 x string	 39 x S440	 39
	 1 x string	 41 x S440	 41
 1 x SE25K 24.93kW 100%	 1 x string	 21 x S440	 21
	 1 x string	 24 x S440	 24
	 1 x string	 26 x S440	 26

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SYSTEM LOSS DIAGRAM



SIMULATION PARAMETERS



LOCATION & GRID

Time zone	GMT+1 (Budapest)
Weather station	Szeged (3.59 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%