

OSNOVNA ŠOLA JURŠINCI
Juršinci 19, Juršinci, 2256, Slovenia | Mar 9, 2024



SYSTEM OVERVIEW

712 PV modules

4 Inverters

357 Optimizers

SIMULATION RESULTS

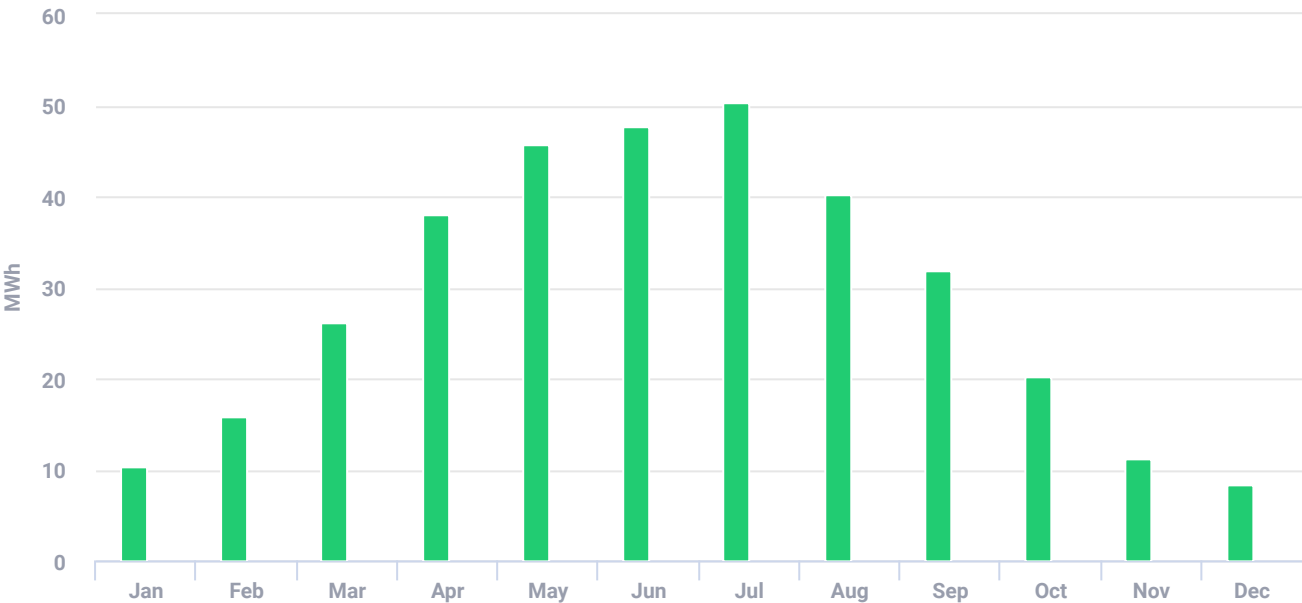
<div><div></div><div>Installed DC Power</div><div>313.28 kWp</div></div>	<div><div></div><div>Max Achieved AC Power</div><div>266.40 kW</div></div>	<div><div></div><div>Annual Energy Production</div><div>346.18 MWh</div></div>	<div><div></div><div>CO2 Emission Saved (Annually)</div><div>87.93 t</div></div>	<div><div></div><div>Equivalent Trees Planted (Annually)</div><div>4,039</div></div>
<div><div></div><div>Max Achieved DC Power</div><div>293.93 kW</div></div>	<div><div></div><div>DC/AC Oversizing</div><div>110 %</div></div>	<div><div></div><div>Max Active AC Power</div><div>266.40 kW</div></div>	<div><div></div><div>Performance Ratio</div><div>89 %</div></div>	<div><div></div><div>Performance Index</div><div>1,105 kWh/kWp</div></div>

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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
142	JinkoSolar Holding Co. Ltd., JKM-440N-54HL4R-V Tiger Neo N-Type	62.5 kWp			180°	0°
570	JinkoSolar Holding Co. Ltd., JKM-440N-54HL4R-V Tiger Neo N-Type	250.8 kWp			199°	3°
Total: 712		313.3 kWp				


BILL OF MATERIALS (BOM)

Items	Part Number	Quantity	Price (€)	Total (€)
 SE66.6K Synergy Manager		4		
 S1000		357		






















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BILL OF MATERIALS (BOM) (CONTINUED)

Items	Part Number	Quantity	Price (€)	Total (€)
	JKM-440N-54HL4R-V Tiger Neo N-Type	712		

ELECTRICAL DESIGN

Inverters & Storage	Strings per inverter	Optimizers per string	PV modules per string
 <div>1 xSE66.6K Synergy Manager Center Unit 74.47kW 112% Oversizing</div>	3 x strings	 15 x S1000 (2:1)	 30
	Left Unit		
	3 x strings	 15 x S1000 (2:1)	 30
 <div>2 xSE66.6K Synergy Manager Center Unit 73.64kW 111% Oversizing</div>	2 x strings	 15 x S1000 (2:1)	 30
	1 x string	 14 x S1000 (2:1)	 28
	Left Unit		
	3 x strings	 15 x S1000 (2:1)	 30
 <div>1 xSE66.6K Synergy Manager Center Unit 72.18kW 108% Oversizing</div>	2 x strings	 15 x S1000 (2:1)	 30
	1 x string	 14 x S1000 (2:1)	 28
	Left Unit		
	1 x string	 17 x S1000 (2:1)	 34
	2 x strings	 13 x S1000 (2:1), 1 x S1000 (1:1)	 27

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SYSTEM LOSS DIAGRAM



SIMULATION PARAMETERS



LOCATION & GRID

Time zone	GMT+1 (Ljubljana)
Weather station	Maribor (22.18 km away)
Station altitude	263 m
Station data source	Meteonorm 7.1
Grid	400V L-L, 230V L-N
Export limit to grid	238 kW



LOSS FACTORS

Near shading	Enabled
Albedo	0.20
Bi-Facial Albedo	0.30
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%