

IGLOO THERMO LOGISTICS

Pennine View 19, Birstall, WF17 9NF, United Kingdom | 24 Apr 2026



SYSTEM OVERVIEW

 270 PV modules

 1 Inverter

 136 Optimizers

SIMULATION RESULTS



Installed DC Power
137.70 kWp



Max Achieved AC Power
99.90 kW



Annual Usable Solar
Production
136.98 MWh



Annual CO₂ Emission Saved
26.49 t



Annual Equivalent Trees
Planted
1,217

ANNUAL CONSUMPTION AND PRODUCTION RESULTS

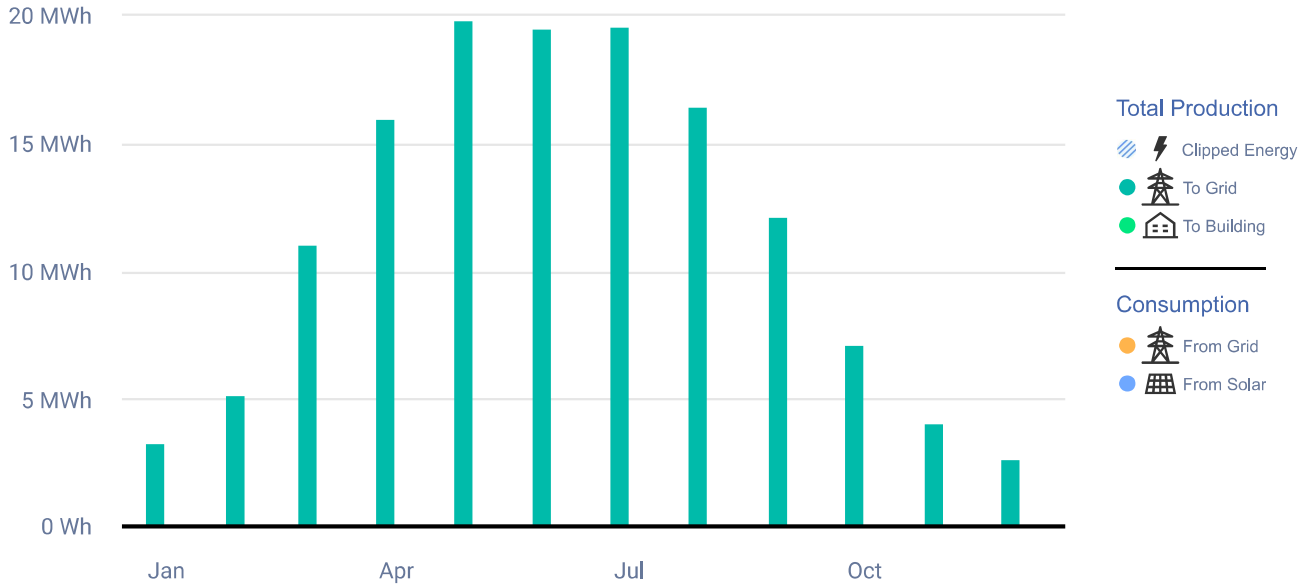
Total Production **137.01** MWh 

Consumption **0.00** Wh | 
0% Energy from solar

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ESTIMATED MONTHLY ENERGY



Total clipped energy: **0.02%**

PV MODULES

# Module	Model	Peak power	Racking type	Orientation	Azimuth	Tilt
270	JinkoSolar Holding Co. Ltd., JKM-510N-54HL4M-BDV-Z1-EU Tiger Neo N-Type Bifacial Bi-Verre	137.7 kWp			151°	10°
Total:	270	137.7 kWp				


BILL OF MATERIALS (BOM)

Items	Part Number	Quantity	Price (£)	Total (£)
SE100K Synergy Manager Three Phase Inverter with Synergy Technology, Manager, 100kW, MC4 connectors, DC Safety Switch and DC SPD	SE-TRI-RW00IBNQ4	1		
S1000		136		












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BILL OF MATERIALS (BOM) (CONTINUED)

Items	Part Number	Quantity	Price (£)	Total (£)
 JKM-510N-54HL4M-BDV-Z1-EU Tiger Neo N-Type Bifacial Bi-Verre		270		

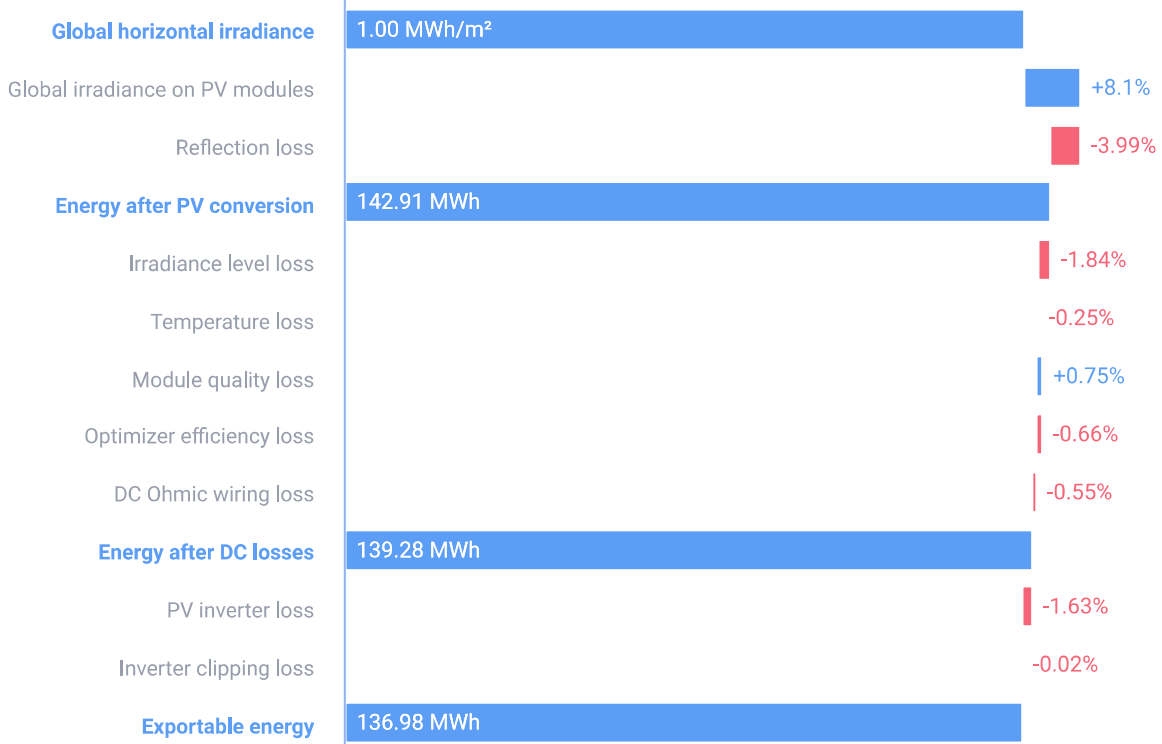
ELECTRICAL DESIGN

Inverters & Storage	Strings per inverter	Optimizers per string	PV modules per string
 1 x SE100K Synergy Manager Center Unit 127.5kW 128% Oversizing	∞ 1 x string	 16 x S1000 (2:1)	 32
	∞ 1 x string	 15 x S1000 (2:1)	 30
	∞ 1 x string	 14 x S1000 (2:1), 1 x S1000 (1:1)	 29
	Left Unit		
	∞ 3 x strings	 15 x S1000 (2:1)	 30
	Right Unit		
	∞ 2 x strings	 15 x S1000 (2:1)	 30
∞ 1 x string	 14 x S1000 (2:1), 1 x S1000 (1:1)	 29	

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SYSTEM LOSS DIAGRAM



SIMULATION PARAMETERS



LOCATION & GRID

Time zone	BST (London)
Weather station	Leeds Andbradford (13 km away)
Station altitude	208 m
Station data source	Meteonorm 8.2
Grid	400V L-L, 230V L-N



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 U _c (const) Flush mount	20
Thermal loss factor U _c (const) Tilted	29
LID loss factor	0%
System unavailability	0%