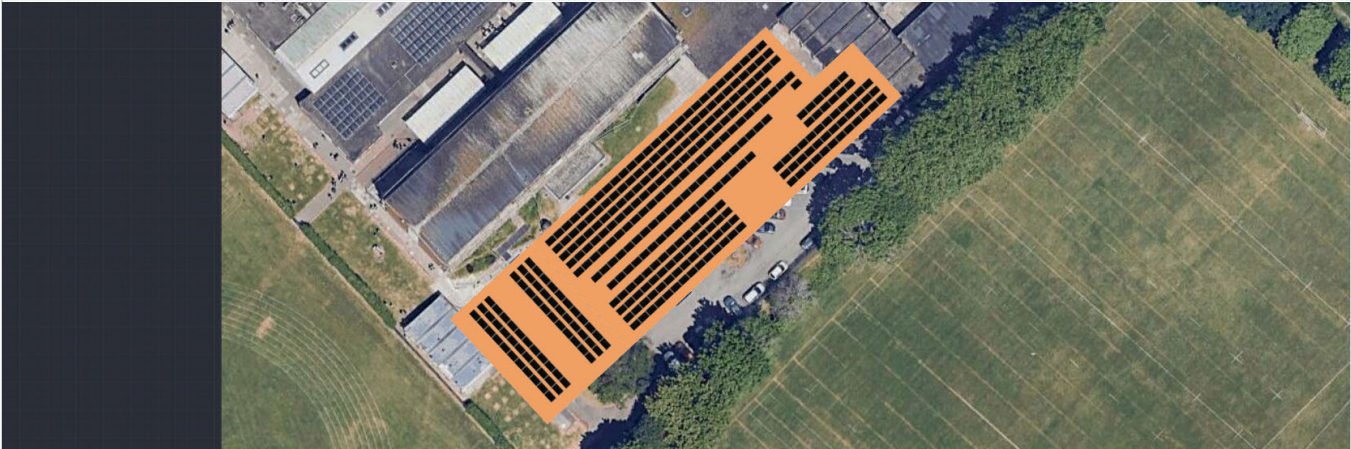


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SYSTEM OVERVIEW

 344 PV modules

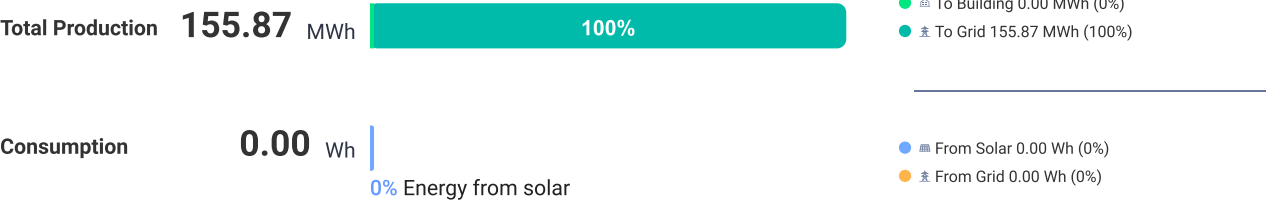
 2 Inverters

 172 Optimizers

SIMULATION RESULTS



ANNUAL CONSUMPTION AND PRODUCTION RESULTS



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PV MODULES

# Module	Model	Peak power	Racking type	Orientation	Azimuth	Tilt
278	Eurener, MEPV450P-11ZII (user-defined)	125.1 kWp			138°	3°
66	Eurener, MEPV450P-11ZII (user-defined)	29.7 kWp			228°	3°
Total: 344		154.8 kWp				

BILL OF MATERIALS (BOM)

Items	Part Number	Quantity
SE66.6K Synergy Manager 66.6kW with Synergy Technology, DC Safety Switch and DC SPD	SE66.6K-RW00IBNQ4	2
S1000		172
MEPV450P-11ZII		344

ELECTRICAL DESIGN

Inverters & Storage	Strings per inverter	Optimizers per string	PV modules per string
1 x SE66.6K Synergy Manager 69.92kW 105% Oversizing	Center Unit		
	1 x string	15 x S1000 (2:1)	30
	2 x strings	14 x S1000 (2:1)	28
	Left Unit		
	1 x string	15 x S1000 (2:1)	30
	2 x strings	14 x S1000 (2:1)	28

CAERLEON SCHOOL

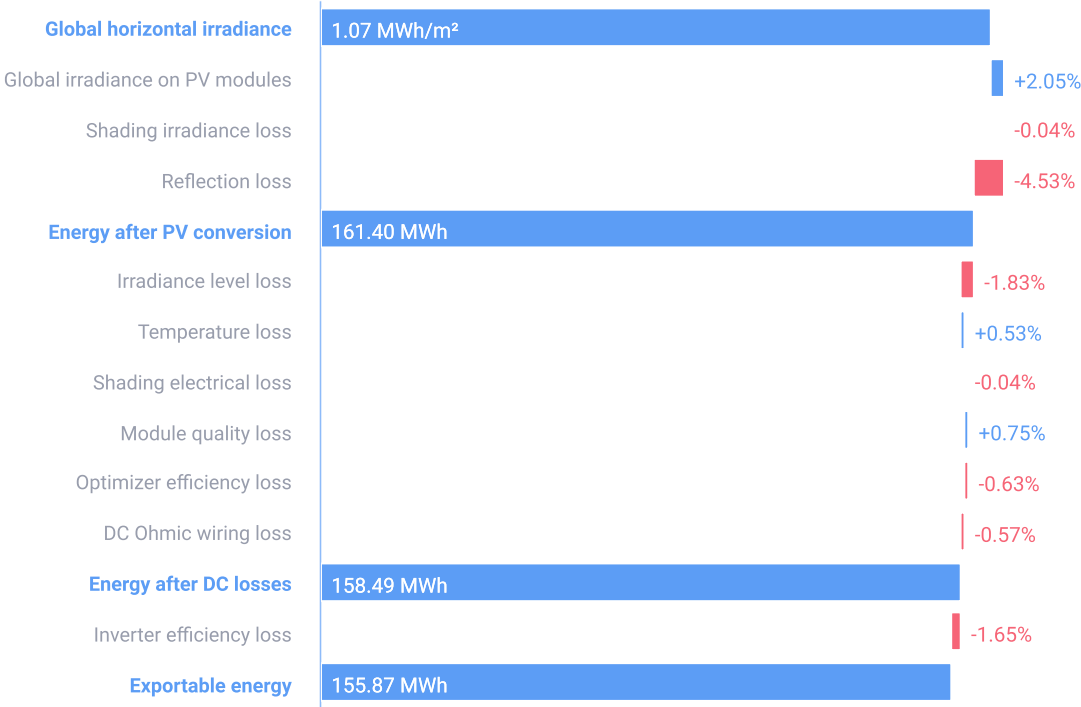
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ELECTRICAL DESIGN (CONTINUED)

Inverters & Storage	Strings per inverter	Optimizers per string	PV modules per string
 1 x SE66.6K Synergy Manager Center Unit 69.82kW 105% Oversizing	1 x string	15 x S1000 (2:1)	30
	2 x strings	14 x S1000 (2:1)	28
	Left Unit		
	1 x string	15 x S1000 (2:1)	30
	2 x strings	14 x S1000 (2:1)	28

SYSTEM LOSS DIAGRAM



CAERLEON SCHOOL

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SIMULATION PARAMETERS

 LOCATION & GRID

Time zone	GMT (London)
Weather station	Bristol/Lulsgate (30 km away)
Station altitude	189 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%