

3SUN B60 LE

610-640 W

with module efficiency > 21.7%
and 90% bifaciality.



Utility
Scale



Commercial
& Industrial



Assembled in Europe.

Modules designed and manufactured exclusively in Italy.



Superior energy yield.

Heterojunction technology for enhanced energy yield.



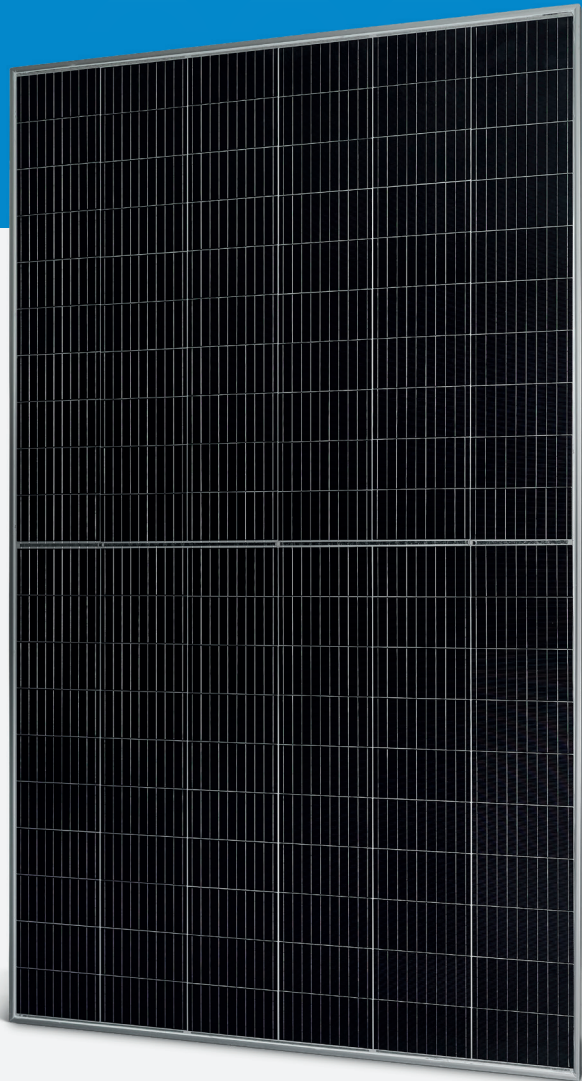
Great customer value.

Engineered for reduced BOP costs in a variety of applications.



Long-term reliability.

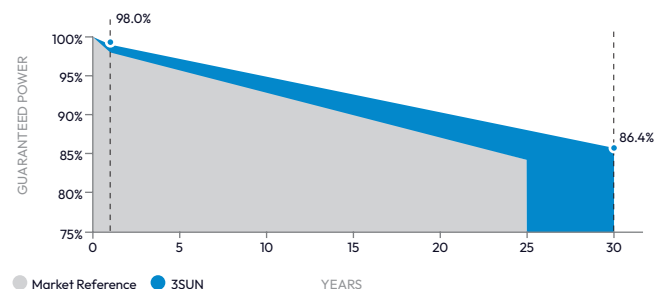
High quality glass-glass product with strong mechanical performances.

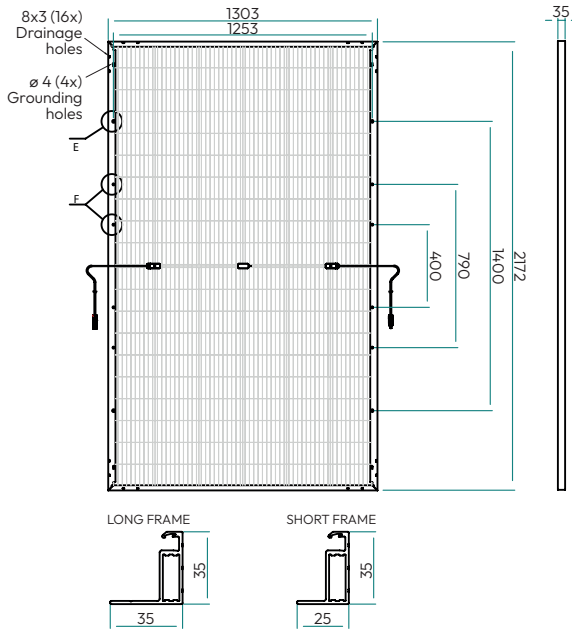


WARRANTY

- Dedicated aftersales
- Product Warranty **15 years**
- Performance Warranty **30 years**
(2% first year, then 0.40% per year)

LINEAR PERFORMANCE WARRANTY





MECHANICAL CHARACTERISTICS

Cell Type	Mono-crystalline, n-type Si HJT, G12 (210mm x 210mm) Cells manufactured outside the European Union.
Number of cells	120 ½ cells (6 x 10) x 2
Dimensions	2172 x 1303 x 35 mm
Weight	36 kg
Frame	Anodized aluminium
Front Cover	2.0 mm textured glass, AR coated, low iron, semi-tempered
Back Cover	2.0 mm textured glass, semi-tempered
Junction Box	IP68, 1500VDC, 3 bypass diodes
Output Cable	4 mm ² , (+): 1200mm, (-): 1200mm
Type of Connector	MC4 alternative
Maximum static test loading	Front: up to 5400 Pa Rear: up to 2400 Pa
Module Fire Performance	IEC 61730 - A Class UNI 9177 - Class 1

PACKAGING

Pallet dimensions (L x W x H)
Bi-pack: 2205 x 1373 x 2501 mm
Top: 2205 x 1373 x 1070 mm
Bottom: 2205 x 1373 x 1431 mm

Pallet weight
Bi-pack: 2273 kg
Top: 944 kg
Bottom: 1329 kg

Packing Configuration
Bi-pack: 63 pcs
Top: 26 pcs
Bottom: 37 pcs

Modules per Container (40'HQ)
504 pcs (8 Bi-packs)

TEMPERATURE RATINGS

Nominal Module Operating Temperature	°C	44 ± 2
P_{max} Temperature Coefficient	%/°C	-0.26 ± 0.04
I_{sc} Temperature Coefficient	%/°C	0.055
V_{oc} Temperature Coefficient	%/°C	-0.27

MAXIMUM RATINGS

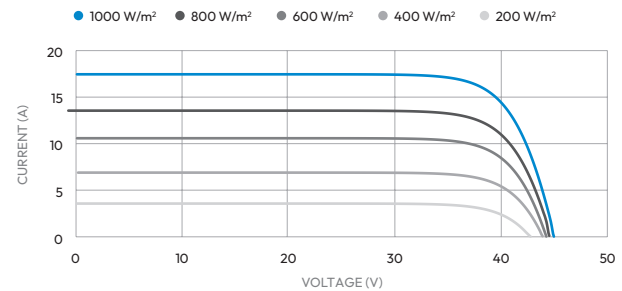
Operating Temperature	°C	-40~+85
Maximum System Voltage (IEC/UL)	V	1500
Maximum Series Fuse	A	35

BIFACIAL PERFORMANCES

Bifaciality Factor	90 % ± 10%
Power @STC	W 610 615 620 625 630 635 640
Power @BSTC*	W 684 690 695 701 707 712 718

*BSTC = Bifacial Standard Test Condition according to IEC 60904-1-2:2019

CURRENT - VOLTAGE CURVES - 3SHBGH-C#-610-640



ELECTRICAL CHARACTERISTICS

	UNIT	3SHBGH-C#-610		3SHBGH-C#-615		3SHBGH-C#-620		3SHBGH-C#-625		3SHBGH-C#-630		3SHBGH-C#-635		3SHBGH-C#-640	
		STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
P_{max} - Power at Mpp	W	610	461	615	465	620	469	625	473	630	477	635	481	640	484
V_{mp} - Voltage at Mpp	V	37.72	35.91	37.92	36.10	38.12	36.29	38.32	36.48	38.52	36.67	38.72	36.87	38.91	37.05
I_{mp} - Current at Mpp	A	16.16	12.84	16.21	12.88	16.26	12.92	16.31	12.96	16.36	13.00	16.41	13.04	16.46	13.08
V_{oc} - Open Circuit Voltage	V	45.38	43.19	45.44	43.24	45.49	43.29	45.55	43.34	45.60	43.39	45.65	43.44	45.70	43.49
I_{sc} - Short Circuit Current	A	17.32	13.98	17.36	14.01	17.40	14.04	17.44	14.07	17.48	14.10	17.52	14.13	17.56	14.17
Module efficiency	%	21.7		21.9		22.1		22.3		22.4		22.6		22.8	

Electrical characteristics measured under:

Measurement Tolerance ± 3%

Power tolerance Pmax: -0+5 W

STC = AM 1.5, 1000 W/m², Cells Temperature 25°C



IEC 61215-1:2021; IEC 61215-2:2021; IEC 61730-2:2016; UL 61730:2017