

3SUN B48LE

495-510 Wp

Bifacial: 90% (Bifaciality Factor)



Commercial
& Industrial



Residential



Assembled in Europe.

Modules designed and manufactured exclusively in Italy.



Superior energy yield.

Heterojunction technology for enhanced energy yield.



Long-term reliability.

Low performance degradation in the product's lifetime.



Versatile module format.

Optimized dimension for rooftop installations.



Premium build.

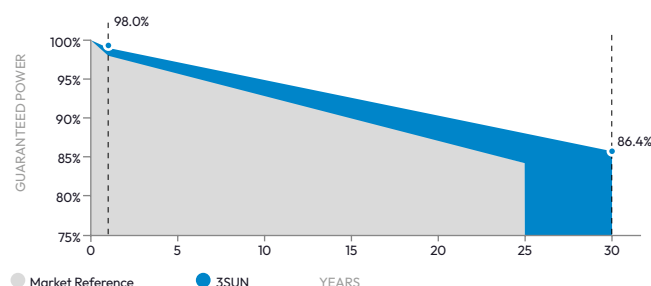
High-quality glass-glass product with a black frame.

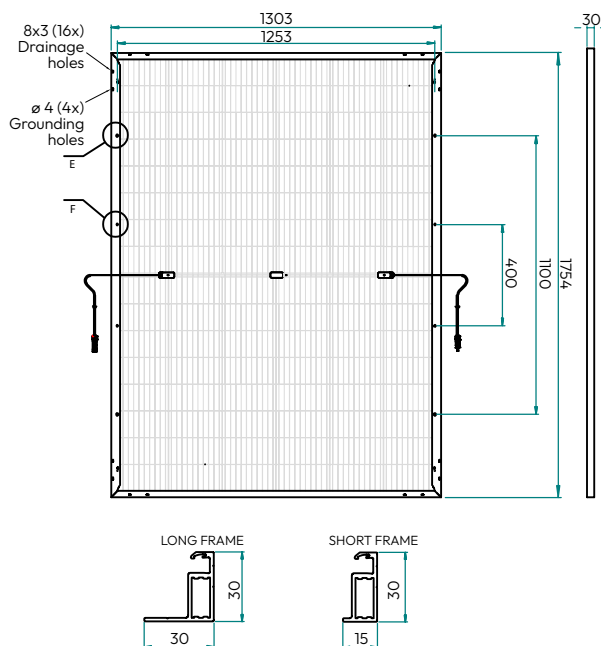


WARRANTY PACKAGE

- Dedicated after-sales support
- 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	96 ½ celle (6 x 8) x 2
Dimensions	1754 x 1303 x 30 mm
Weight	29 kg
Frame	Black anodized aluminium
Front Cover	Textured Glass - 2.0 mm, AR coated, Low Iron, Semi-Tempered
Back Cover	Textured Glass - 2.0 mm, Semi-Tempered
Junction Box	IP68, 1500VDC, 3 bypass diodes
Output Cable	4 mm ² , (+): 1400mm, (-): 1400mm
Type of Connector	Stäubli MC4 EVO 2
Maximum static loading*	Front: up to 5400 Pa Back: up to 2400 Pa
Module Fire Performance**	IEC 61730/UL 790 UNI 9177 - 1 Class

*under certain mounting configurations, refer to the installation and maintenance manual for details

**certification pending

PACKAGING

Pallet dimensions (L x W x H)
Bi-pack: 1787 x 1063 x 2861 mm

Pallet weight
Bi-pack: 1981 kg

Packing configuration
Bi-pack (33 pcs top
+ 33 pcs bottom)

Modules per semi-trailer
990 pcs (15 bi-packs)

TEMPERATURE RATINGS

Nominal Module Operating Temperature	°C	44 ± 2
P _{max} Temperature Coefficient	%/°C	-0.26
I _{sc} Temperature Coefficient	%/°C	0.055
V _{oc} Temperature Coefficient	%/°C	-0.27

BIFACIAL PERFORMANCES

Maximum power bifaciality coefficient	90 % ± 10%
I _{sc} bifaciality coefficient	90 % ± 10%
V _{oc} bifaciality coefficient	100 % ± 5%

ELECTRICAL CHARACTERISTICS

	UNITÀ	3SHBGA-CF-495		3SHBGA-CF-500		3SHBGA-CF-505		3SHBGA-CF-510	
		STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI
P _{max} - Power at Mpp	Wp	495	555	500	561	505	566	510	572
V _{mp} - Voltage at Mpp	V	30.47	30.59	30.67	30.78	30.86	30.97	31.06	31.17
I _{mp} - Current at Mpp	A	16.25	18.14	16.31	18.22	16.37	18.27	16.43	18.35
V _{oc} - Open Circuit Voltage	V	36.40	36.59	36.44	36.64	36.48	36.68	36.52	36.72
I _{sc} - Short Circuit Current	A	17.40	19.51	17.44	19.56	17.48	19.60	17.52	19.65
Module efficiency	%	21.7%	24.3%	21.9%	24.5%	22.1%	24.8%	22.3%	25.0%

Electrical characteristics measured under:

Measurement Tolerance Voc and Isc: ± 5%

Measurement Tolerance Pmax: ± 3%

Power Class Sorting: -0+5 W

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

BNPI = Bifacial NamePlate Irradiance according to IEC 61215:2021

BNPI = AM 1.5, 1000W/m² front side + 135 W/m² rear side

Measurement tolerance BNPI Pmax: ± 10%

MAXIMUM RATINGS

Operating Temperature	°C	-40~+70
Maximum System Voltage	V	1500
Maximum Series Fuse	A	35

CURRENT - VOLTAGE CURVES - 3SHBGA-CF-495-510

