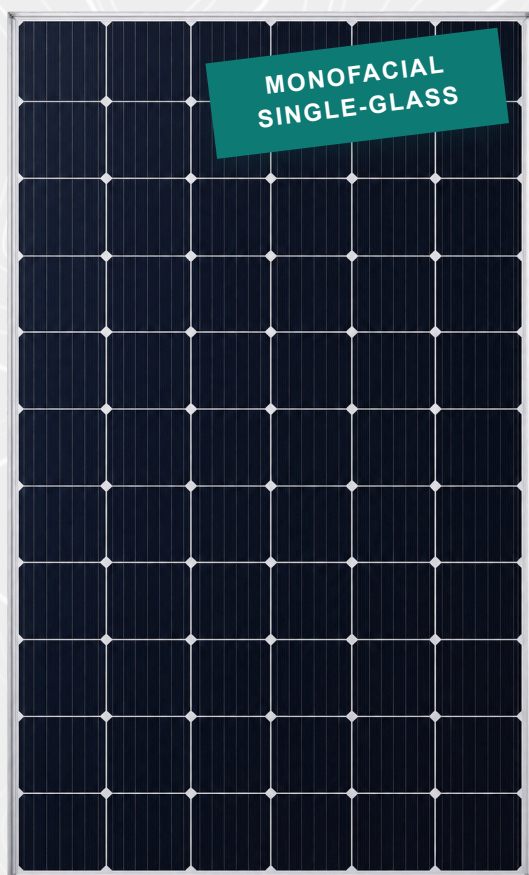


445W-465W

SZAL-144PP-MF



21.4%

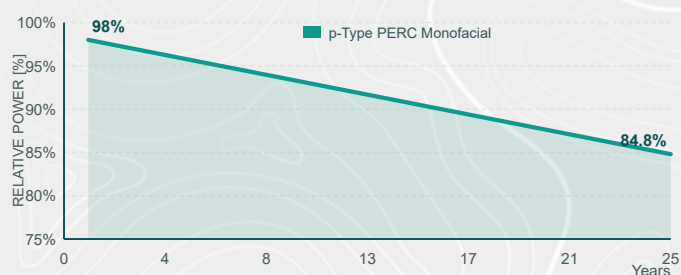
Maximum Efficiency

144

Half Cells

- ◆ P-type PERC Technology
- ◆ High power output — 445–465 Wp, up to 21.4% efficiency
- ◆ Monofacial single-glass, 3.2 mm coated tempered front glass
- ◆ Multi-busbar half-cut cell design
- ◆ Certified to IEC 61215 & IEC 61730 standards

OUR PERFORMANCE WARRANTY



25 YEARS

Performance Warranty

12 YEARS

Product Warranty

≤ 2% first-year degradation, then 0.55 percentage points of initial rated power annually — 84.8% min. warranted power at year 25

*Specifications are subject to change without notice. Actual performance may vary. Warranty terms are defined in the latest SOLANZO Limited Warranty.



MONOFACIAL - SINGLE GLASS

SZAL-144PP-MF 445W-465W

P-TYPE PERC TECHNOLOGY

Electrical specifications (STC*):

Module model	SZAL-144PP-MF-	445	450	455	460	465
Nominal max. power $P_{\max}$ (Wp)		445	450	455	460	465
Maximum operating voltage V_M (V)		41.30	41.50	41.70	41.90	42.10
Maximum operating current I_M (A)		10.78	10.85	10.92	10.98	11.05
Open-circuit voltage V_{oc} (V)		49.10	49.30	49.50	49.70	49.90
Short-circuit current I_{sc} (A)		11.53	11.60	11.66	11.73	11.79
Module efficiency η (%)		20.47	20.70	20.93	21.16	21.39
Power tolerance (%)	0 to +3					
Maximum system voltage (V/DC)	1500					
Maximum series fuse rating (A)	20					

*STC: Standard Test Conditions (irradiance 1000 W/m², cell temperature 25°C and air mass of AM1.5), measurement tolerance Pmax: ±3%.

Electrical specifications (NOCT*):

Nominal max. power P_{max} (Wp)	334.3	338.0	341.8	345.5	349.3
Maximum operating voltage V_M (V)	38.40	38.60	38.80	39.00	39.20
Maximum operating current I_M (A)	8.70	8.75	8.81	8.86	8.91
Open-circuit voltage V_{oc} (V)	46.20	46.40	46.50	46.70	46.90
Short-circuit current I_{sc} (A)	9.35	9.41	9.46	9.51	9.56

*NOCT: Nominal Operating Cell Temperature — irradiance 800 W/m², ambient temperature 20 °C, wind speed 1 m/s, air mass AM1.5. Values illustrate representative operating conditions; actual output depends on ventilation, mounting, weather and cell temperature.

Mechanical and design specifications

Cell type	P-Type Monocrystalline PERC Half-Cut Cells
Cell configuration	144 Half-Cut Cells (6 × 24)
Module construction	Monofacial Single-Glass
Front cover	3.2 mm coated tempered glass
Back cover	Protective polymeric backsheet
Junction box	IP68 rated
Frame	35 mm anodized aluminium alloy
Cable (incl. connectors)	4.0 mm² PV cable, +400/-200 mm
Dimension	2094 mm x 1038 mm x 35 mm
Weight	24.3 kg

Packaging information



30 pcs

Modules per pallet



150 pcs

Modules per 20' GP container



660 pcs

Modules per 40' HC container

Temperature ratings

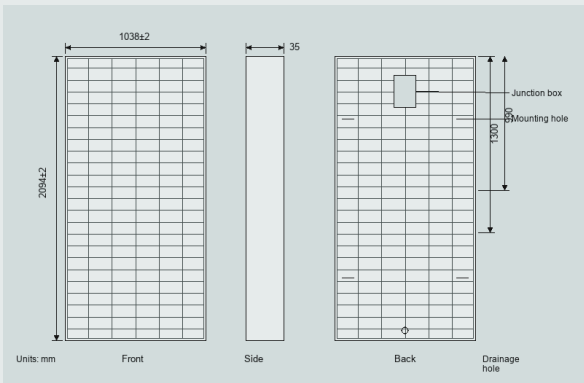
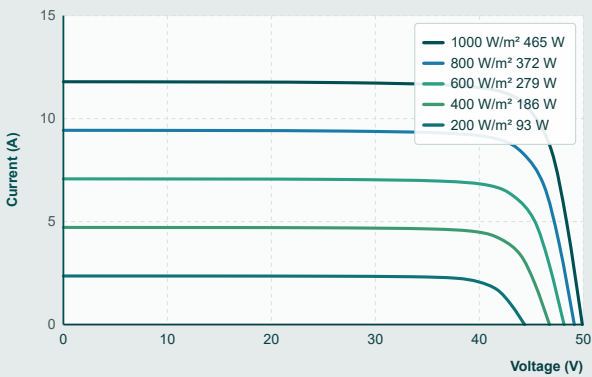
Operating temperature	-40 to +85°C
Temp. coefficient of Pmax	-0.34 %/°C
Temp. coefficient of Voc	-0.265 %/°C
Temp. coefficient of Isc	+0.05 %/°C
Nom. operating cell temp. (NOCT)	45 ± 2°C

Mechanical load & ratings

Front-side max. static load	5400 Pa
Rear-side max. static load	2400 Pa
Maximum series fuse rating	20 A

Representative I-V Characteristics — 465W Module

Cells temp. = 25°C



Specifications are subject to change without notice. Electrical data are based on STC conditions. Actual performance may vary. Warranty terms are defined in the latest SOLANZO Limited Warranty.

PRODUCT CERTIFICATIONS



+39 2 500 41 301
info@solanzo.eu
www.solanzo.eu

SOLANZO S.r.l.
Corso Venezia 11, 10147 Turin, Italy