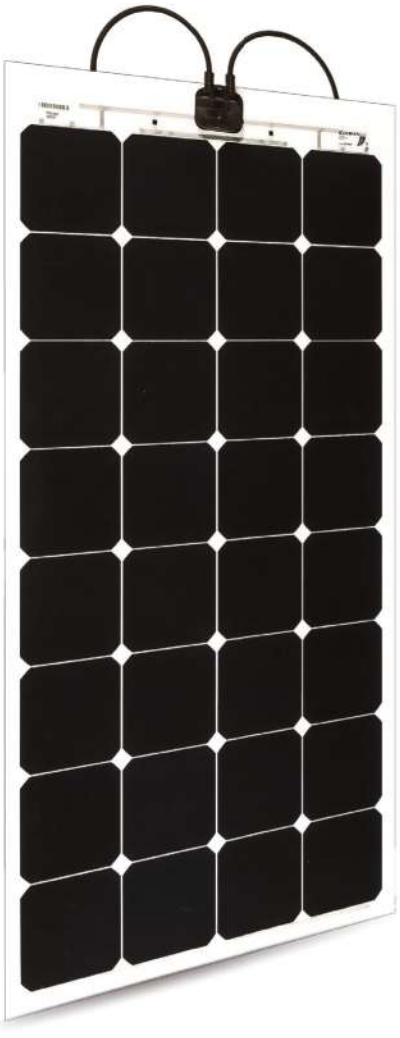
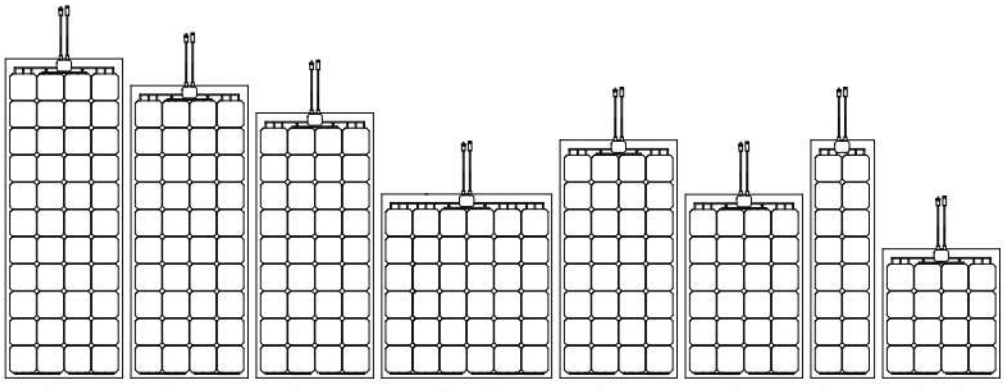


Power at the highest level.

SP series

MADE IN ITALY



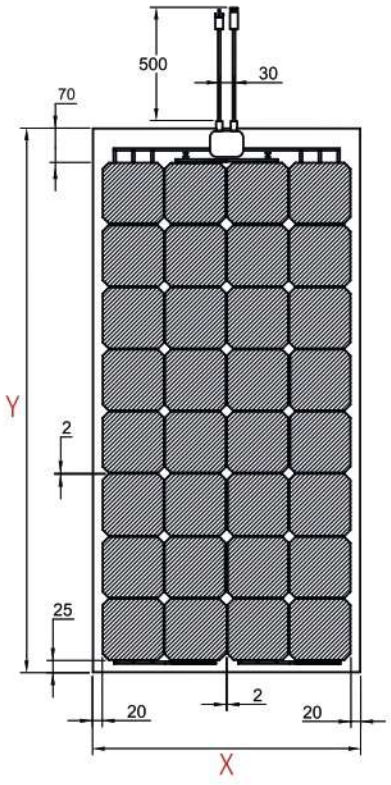
The SP series is at the the top of the range, thanks to its selected SunPower® monocrystalline silicon cells, reaching a record 24% conversion of sunlight into electricity. The electrical contacts hidden on the rear of the cell make these panels especially pleasing in appearance. SunPower® back-contact cells represent the most advanced technology on the market, and make the SP Solbian panels the highest-efficiency flexible panels.

Flexible, powerful and robust, the panels of the SP series are recommended for all installations where maximum reliability and power are required, and they remain the most iconic symbol of high quality photovoltaic modules.They can be used in all situations and are a best seller in marine applications.

Features

- ✓ The most efficient flexible modules on the market
- ✓ Flexible and lightweight (2.2 kg/m^2)
- ✓ Completely waterproof and resistant to salt water
- ✓ Thin (less than 2 mm)
- ✓ IEC 61215, IEC 61730 and IEC 61701 certified
- ✓ 5 year warranty against manufacturing defects
- ✓ Integrated bypass diodes to minimise output losses associated with partial shading
- ✓ Available with different front sheets, many fixing and electrical wiring options
- ✓ White, black or transparent back sheet
- ✓ Adaptable to any battery: from 5 to 48 volt, lead-acid or lithium
- ✓ Designed and manufactured in Italy

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SOLBIANFLEX SP

SP series SUNPOWER® inside

SunPower® cells used in SP series panels are high efficiency monocrystalline cells (the highest available on the market). The electric contacts create a thick pattern resembling two interpenetrating combs on the rear of the cell, this guarantees an optimal management of micro fractures, without power loss. Back-contact cells are also the best choice when it comes to efficiency in low light and sensitivity at higher temperatures. In fact the temperature coefficient is 25% lower than the other cristalline cells.

Back-contact Cell



No grid lines on the front of the cell means no obstacles to the absorption of sunlight.

Maximum efficiency and great aesthetics.



Solid copper backing.

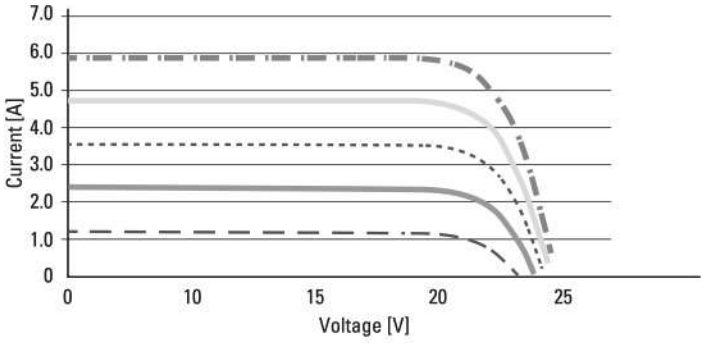
Massive strength and resistance to corrosion.

Datasheet

	SP 144	SP 130	SP 118 L	SP 118 Q	SP 104	SP 78	SP 52 L	SP 52 Q
Maximum power (±5%) [W]	144	130	118	118	104	78	52	52
Length Y [mm]	1490	1363	1236	855	1109	855	1109	601
Width X [mm]	546	546	546	800	546	546	292	546
Thickness [mm]	2	2	2	2	2	2	2	2
Weight [kg]	1.90	1.70	1.60	1.60	1.40	1.10	0.80	0.80
Max power Voltage Vmp [V]	25.3	22.8	20.7	20.7	18.2	13.7	9.1	9.1
Max power Current Imp [A]	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Open circuit voltage Voc [V]	30.0	27.3	24.5	24.5	21.8	16.4	10.9	10.9
Short circuit current Isc [A]	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
NOCT [°C]	45 ± 2	45 ± 2	45 ± 2	45 ± 2	45 ± 2	45 ± 2	45 ± 2	45 ± 2
Operating temperature [°C]	-40/+85	-40/+85	-40/+85	-40/+85	-40/+85	-40/+85	-40/+85	-40/+85
Temp. coeff. Pmax [%/°C]	-0.35	-0.35	-0.35	-0.35	-0.35	-0.35	-0.35	-0.35
Temp. coeff. Voc [%/°C]	-0.28	-0.28	-0.28	-0.28	-0.28	-0.28	-0.28	-0.28
Temp. coeff. Isc [%/°C]	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Columns x Rows (cells n°)	4x11 (44)	4x10 (40)	4x9 (36)	6x6 (36)	4x8 (32)	4x6 (24)	2x8 (16)	4x4 (16)
Maximum system voltage [V]	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V
Maximum reverse current [A]	12 A	12 A	12 A	12 A	12 A	12 A	12 A	12 A
Safety class	A	A	A	A	A	A	A	A

* Values at STC = Standard Test Conditions: (a) light Spectrum for an Air Mass of 1.5; (b) irradiance of 1000 W/m² with perpendicular incidence and (c) cell temperature of 25 °C. Measurements carried out according to the Standard IEC 61215 requirements.

Electrical Characteristics





Certifications

SOLBIAN