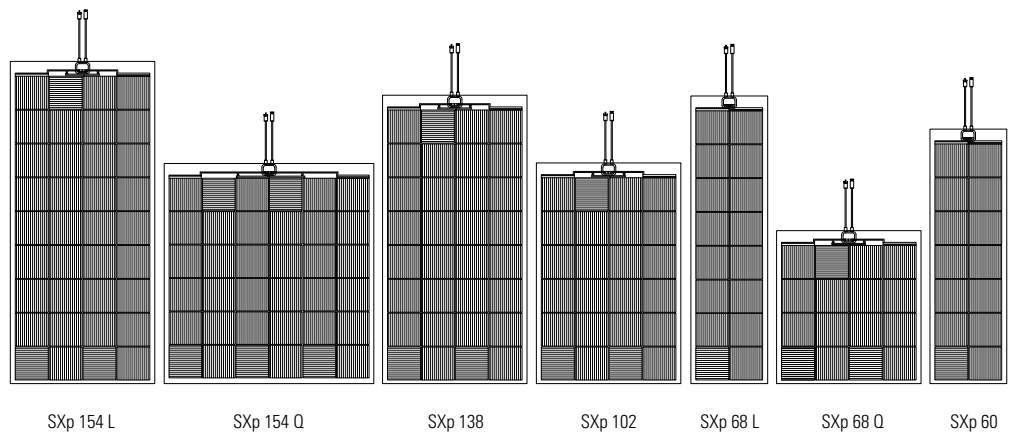


SOLBIANFLEX SxP

Aesthetics, reliability and price.

SxP series

MADE IN ITALY



The polycrystalline solar cells used in the SxP series are electrically connected using ultra-thin copper wires that form a very fine mesh on the cell surface, resulting in thousands of contact points. This alternative to the standard bus-bar method allows a higher module power and increases the energy yield. This technology is optimally suited to flexible modules, due to its intrinsic insensitivity to microcracks, that are the most common cause of energy loss in solar modules. Another advantage is a reduced sensitiveness to shading, a quite important issue in marine and mobility applications. The new connection technology, together with the use of high efficiency polycrystalline silicon cells, makes SxP panels especially powerful and reliable.

Features

- ✓ High resistance to mechanical stresses thanks to the thin wires thick mesh on the cell surface
- ✓ Flexible and lightweight (2.2 kg/m²)
- ✓ Completely waterproof and resistant to salt water
- ✓ Thin (less than 2 mm)
- ✓ IEC 61215 and IEC 61730 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

SOLBIANFLEX SXp

SXp series inside

Day4 Energy's laminated cell with patented Stay-powerful™ Technology, uniquely interconnects solar electric cells and collects the power they generate.

This innovation is a direct replacement of the conventional, high temperature solar cell soldering process. Cells are connected using a matrix of electrically-efficient copper wires coated with a custom, low melting point alloy. This technology guarantees high efficiency in low light conditions and wires act as a "bridge" across any interruption: if a microcrack occurs, the electron flow continues.

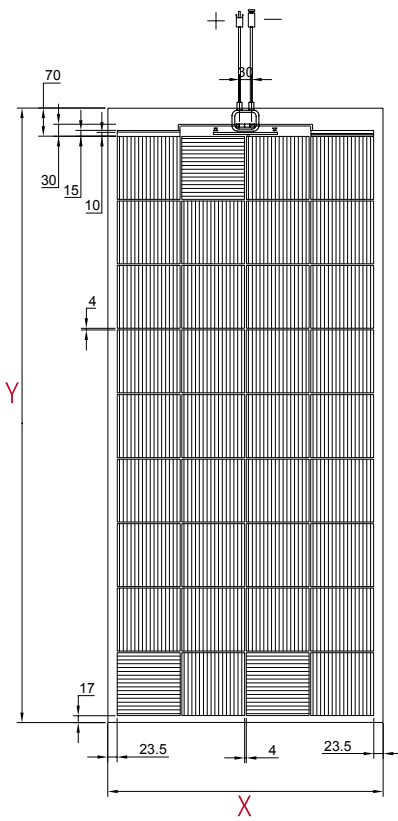
Day4 Energy™ cell



On the front of the cell electrically-efficient copper wires form a mesh that creates a very high number of connection points.
High efficiency also in low light.



The unique rear pattern offers an optimal contact ground and allows for complex geometries.
Broad customization capabilities and long-lasting electric contacts.

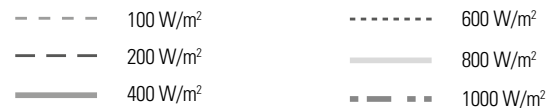
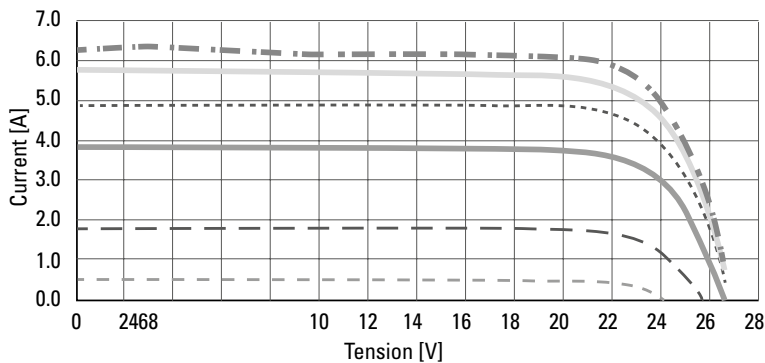


Datasheet

	SXp 154 L	SXp 154 Q	SXp 136	SXp 102	SXp 68 L	SXp 68 Q	SXp 60
Maximum power [W]	154	154	136	102	68	68	60
Length Y [mm]	1523	1046	1364	1046	1364	728	1205
Width X [mm]	683	996	683	683	365	683	365
Thickness [mm]	2	2	2	2	2	2	2
Weight [kg]	2,40	2,40	2,10	1,70	1,20	1,20	1,10
Max power Voltage Vmp [V]	18,2	18,2	16,1	12,1	8,0	8,0	7,1
Max power Current Imp [A]	8,5	8,5	8,5	8,5	8,5	8,5	8,5
Open circuit voltage Voc [V]	23,0	23,0	20,4	15,3	10,2	10,2	8,9
Short circuit current Isc [A]	9,1	9,1	9,1	9,1	9,1	9,1	9,1
NOCT [°C]	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
Temp. coeff. Pmax [%/°C]	-0.38	-0.38	-0.38	-0.38	-0.38	-0.38	-0.38
Temp. coeff. Voc [%/°C]	-0.27	-0.27	-0.27	-0.27	-0.27	-0.27	-0.27
Temp. coeff. Isc [%/°C]	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Columns x Rows (cells n°)	4x9 (36)	4x9 (36)	4x8 (32)	4x6 (24)	2x8 (16)	4x4 (16)	2x7 (14)
Maximum system voltage [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
Safety class	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

