

Spectralite SemiFlex & SemiFlex Pro HPBC

Data Sheet



Spectralite SemiFlex & SemiFlex Pro HPBC

Our latest range of Spectralite SemiFlex solar panels are more compact and efficient than before thanks to their high quality design, ETFE polymer coating and class A solar cell construction. This new range is split into two product lines, the Spectralite SemiFlex that uses Mono crystalline cells and the Spectralite SemiFlex PRO HPBC which uses LONGi cells. Thanks to their robust design the panels are tough enough to be walked on and enables them to be effective in low power commercial applications where their non-glass construction makes them shatter-proof and vandal resistant.

Spectralite SemiFlex 10W & 35W

Features:

- Aluminium back plate to prevent cracking of the cells and improves heat dissipation.
- Panels are semi-flexible so can be slightly flexed without cell damage unlike conventional panels.
- Corners are rounded with 4 cut out eyelets for safe and easy installation.
- Lightweight, ultra flat, extremely robust, scratch-proof, and sea/salt water resistant.
- Built in blocking diode and 3M twin core cable included.
- Anti-Slip and anti-soil ETFE polymer coating for scratch, heat and corrosion resistant.
- Uses Class A monocrystalline solar cells.



New design junction box secured from the rear of panel to prevent accidental damage.

Spectralite SemiFlex Pro HPBC

Features:

- Utilises latest generation LONGi HPBC cells, with efficiency reaching 26.4%.
- 0BB (Zero Busbar) back-contact cell construction for improved power production.
- Reinforced multilayer construction for durability and micro-crack protection.
- LONGi HPBC cells lose less power in hot weather compared to other solar cell technologies.
- Marine-resistant construction and IEC-certified.
- Anti-Slip and foot traffic resistant surface tested to 2000 passes.
- Full black panel with black mounting eyelets. 0.9M cable with MC4 connectors.
- Damage resistant slimline junction box with integrated diodes.

SemiFlex

Panel Model	Spectra SemiFlex 10	Spectra SemiFlex 35	Spectra SemiFlex Pro HPBC 50	Spectra SemiFlex Pro HPBC 100	Spectra SemiFlex Pro HPBC 150	Spectra SemiFlex Pro HPBC 200
Part No	CA-10/450	CA-10/453A	CA-10/455HPBC	CA-10/456HPBC	CA-10/457HPBC	CA-10/458HPBC
Cell Technology	PERC Mono	PERC Mono	LONGi HPBC	LONGi HPBC	LONGi HPBC	LONGi HPBC
Dimensions (mm)	450 x 200 x 4	600 x 365 x 4	650 x 400 x 2.8	845 x 590 x 2.8	1230 x 590 x 2.8	1230 x 775 x 2.8
Weight (kg)	0.7	1.35	0.9	1.14	2.53	3.3
Power at STC (Pmax)	10W	35W	50W	100W	150W	200W
Maximum Power Voltage (Vmp)	18V	20V	20V	20V	20V	20V
Maximum Power Current (Imp)	0.55A	1.75A	2.50A	5A	7.50A	10A
Open Circuit Voltage (Voc)	21.6V	24V	24V	24V	24V	24V
Short Circuit Current (Isc)	0.6A	1.89A	2.7A	5.4A	8.1A	10.8A
Tolerance (%)	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%
Module Efficiency	22.5%	22.5%	25.8%	25.8%	25.8%	25.8%
Power Temperature Coefficiency	-0.24%/°C	-0.24%/°C	-0.24%/°C	-0.24%/°C	-0.24%/°C	-0.24%/°C
Voltage Temperature Coefficiency	-0.25%/°C	-0.25%/°C	-0.25%/°C	-0.25%/°C	-0.25%/°C	-0.25%/°C
Current Temperature Coefficiency	-0.06%/°C	-0.06%/°C	-0.06%/°C	-0.06%/°C	-0.06%/°C	-0.06%/°C
Max System Voltage	600V DC	600V DC	600V DC	600V DC	600V DC	600V DC
Front Material	ETFE	ETFE	Anti-Slip ETFE	Anti-Slip ETFE	Anti-Slip ETFE	Anti-Slip ETFE
Junction Box	Low Profile Sealed	Low Profile Sealed	Central Sealed	Central Sealed	Central Sealed	Central Sealed
Cable	3M	3M	0.9M	0.9M	0.9M	0.9M
Connector Type	2x 1.5mm Cable	2x 1.5mm Cable	MC4	MC4	MC4	MC4

Characteristics can change without any notice. Please visit our website for latest specifications.



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