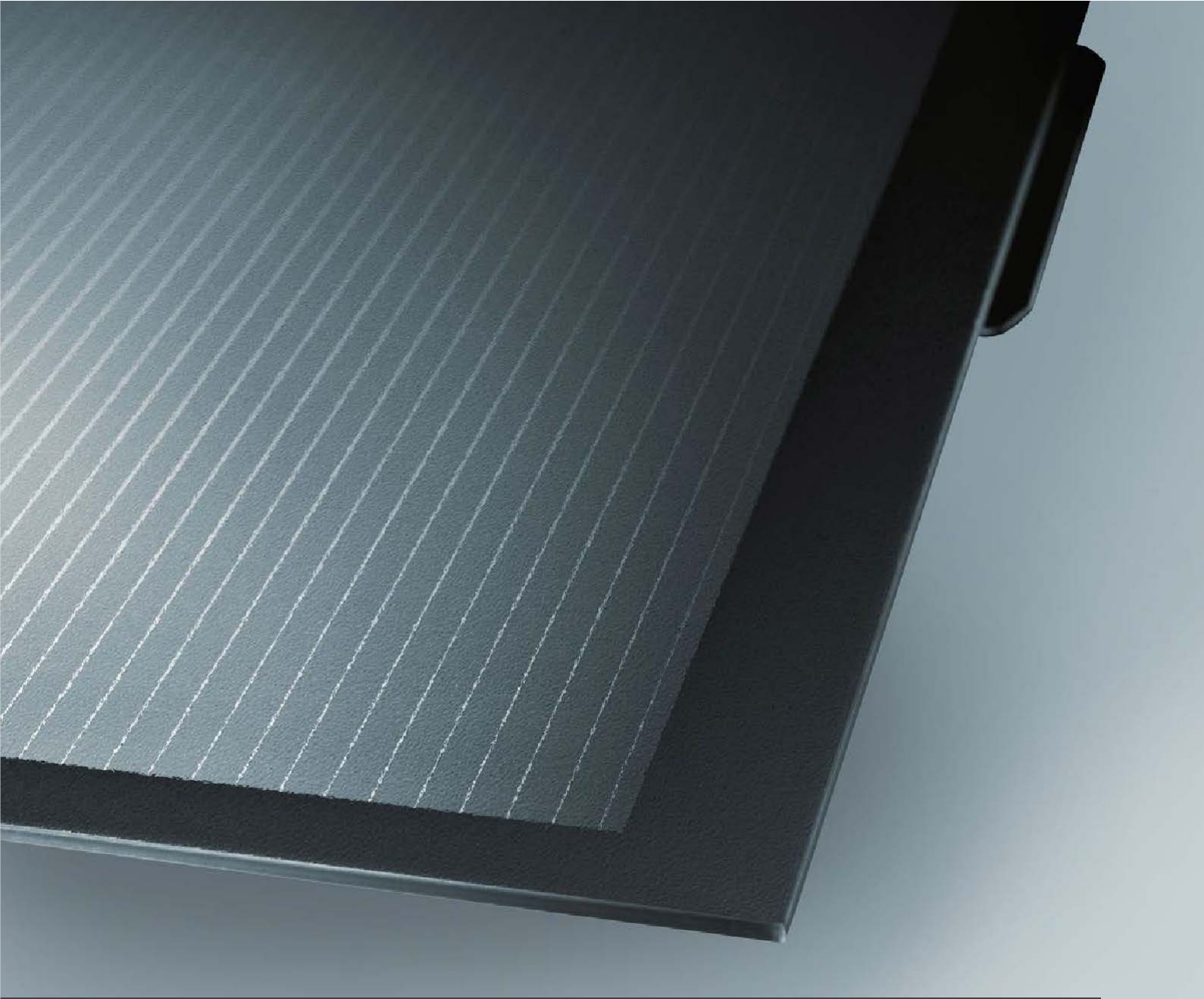


*PowerMax<sup>®</sup> 3.5*



SOLAR MODULES FOR ROOFTOP SYSTEMS  
AND SOLAR PARKS

ENGLISH

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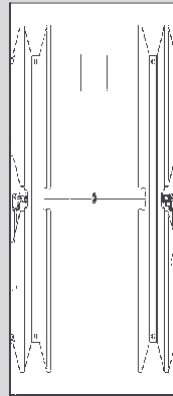
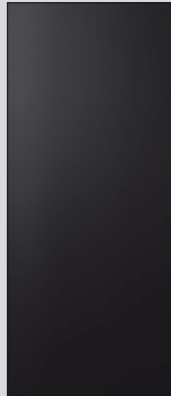
# PowerMax<sup>®</sup>3.5

## MECHANICAL SPECIFICATIONS

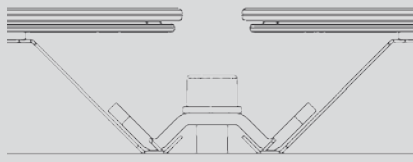
PowerMax <sup>®</sup> 3.5	Value
External dimensions	1,587 x 664 mm <sup>2</sup>
Thickness	38 mm
Weight	17 kg
Cell type	CIGS
Frame	none
Front cover	3.2 mm tempered glass
Junction box protection class	IP65
Dimensions of the junction boxes	70 x 64 x 13 mm <sup>3</sup>
Cable lengths ( plug   socket)	180   310 mm
Cable cross section	2.5 mm <sup>2</sup>
Connector type	LC4



- Design qualification and type approval, IEC 61646
- Safety qualification, IEC 61730
- Ammonia corrosion, IEC 62716
- Salt mist corrosion, IEC 61701



Backside of the module with backrail system



Secure mounting with AVANCIS clamps

BespaarPartner B.V.  
Roomweg 5 8334NR Tuk  
0521-764012  
Info@bespaarpartner.nl

[www.bespaarpartner.nl](http://www.bespaarpartner.nl)

## ELECTRICAL SPECIFICATIONS

Data measured under standard test conditions (STC)\*:

PowerMax <sup>®</sup> 3.5	130	135	140	145
Nominal power $P_{nom}$	130 W	135 W	140 W	145 W
Tolerance of nominal power $P_{nom}$	-0/+4%	-0/+4%	-0/+4%	-0/+4%
Module efficiency	12.3 %	12.8 %	13.3 %	13.8 %
Aperture efficiency	13.6 %	14.2 %	14.7 %	15.2 %
Open-circuit voltage $V_{oc}$	58.6 V	59.2 V	59.8 V	60.4 V
Short-circuit current $I_{sc}$	3.35 A	3.35 A	3.36 A	3.36 A
Voltage at mpp $V_{mpp}$	43.7 V	44.9 V	46.1 V	47.4 V
Current at mpp $I_{mpp}$	2.98 A	3.01 A	3.04 A	3.06 A
Limiting reverse current $I_r$	5.0 A	5.0 A	5.0 A	5.0 A
Max. system voltage $V_{sys}$ (IEC)	1000 V	1000 V	1000 V	1000 V
Max. system voltage $V_{sys}$ (UL)	600 V	600 V	600 V	600 V

\* Insolation intensity 1000 W/m<sup>2</sup> in the plane of the module, module temperature 25 °C and a spectral distribution of the sunlight according to the atmospheric mass (AM) 1.5.

Data measured at nominal operating cell temperature (NOCT)\*\* and AM 1.5:

PowerMax <sup>®</sup> 3.5	130	135	140	145
NOCT	40 °C	40 °C	40 °C	40 °C
Nominal power $P_{nom}$	97 W	101 W	105 W	109 W
Open-circuit voltage $V_{oc}$	55.6 V	56.2 V	56.8 V	57.4 V
Short-circuit current $I_{sc}$	2.68 A	2.68 A	2.69 A	2.69 A
Voltage at mpp $V_{mpp}$	41.1 V	42.3 V	43.5 V	44.7 V

\*\* Module operating temperature at 800 W/m<sup>2</sup> insolation intensity in the plane of the module, air temperature 20 °C, wind speed 1 m/s and open-circuit condition.

Temperature coefficients:

PowerMax <sup>®</sup> 3.5	Value
Temperature coefficient $P_{nom}$	-0.39 %/°C
Temperature coefficient $V_{oc}$	-170 mV/°C
Temperature coefficient $I_{sc}$	0 mA/°C

Data measured at low light intensity:

The relative reduction in the module efficiency at a light intensity of 200 W/m<sup>2</sup> relative to 1000 W/m<sup>2</sup> at 25 °C module temperature and spectrum AM1.5 is 6%. At 500 W/m<sup>2</sup> the relative improvement in module efficiency is +1%.

The measurement accuracy of  $P_{nom}$  is ±3.5%. As a result of ongoing research and product improvements, the specifications in this product data sheet are subject to changes without prior publication. This data sheet is not allowed to be used for deriving any rights, and AVANCIS does not accept any liability with regard to and resulting from the use of information contained herein. Installation equipment is not supplied with the product.