

# AS-P603: SMART SOLAR MODULE

POLYCRYSTALLINE CELLS  
255 - 265 Wp



High-performance solar module featuring an integrated solution for optimal monitoring at module level of PV installations.



The 'Individual Module Monitoring' (short: IMM) integrated in AEG AS-P603 modules is an innovative technology designed for highly accurate monitoring at module level of the overall performances of whole PV installation, allowing for safe and consistent energy production, with yield increases starting from 3% and savings in O&M up to 50%. Thanks to IMM the efforts in monitoring the performance of the power plant are minimized, as this smart technology -integrated in the junction box- is able to detect technical issues down to the individual module, to predict problem patterns from remote, and to provide clear indications on module and plant maintenance. This allows for tailored O&M interventions and saves you

relevant investments in expensive problem detection activities on site. As a result, the O&M intervention costs are reduced, yields from the power plant are maximised and ROI increase. AEG solar modules are made with selected materials to meet high quality standards. Our production facilities comply with the standards set out in ISO 9001, 14001 and OHSAS 18001.



Built-in module level monitoring



Best fit for big-scale installations



Patented Smart Technology

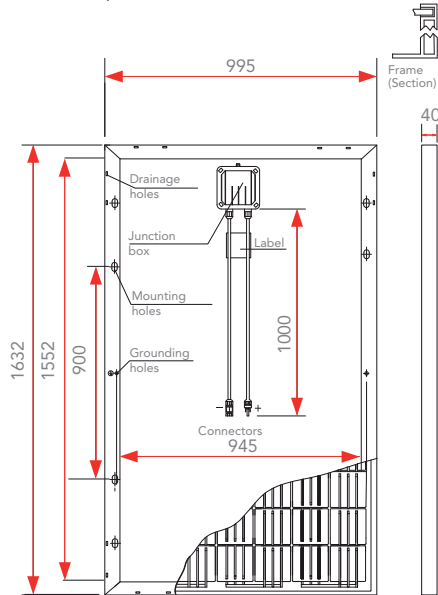


High module conversion efficiency

**AEG**  
perfekt in form und funktion

# AS-P603: SMART SOLAR MODULE

60 cells per module (156 x 156 mm / 6")



Module dimensions are expressed in mm with tolerance  $\pm 2$  mm ( $\pm 0.079$  ")

## TEMPERATURE CHARACTERISTICS:

NOCT	$46^{\circ}\text{C} \pm 2^{\circ}\text{C}$
$P_{\max}$ Temp. Coeff. ( $\gamma$ )	$-0,43\ \% / ^{\circ}\text{C}$
$V_{oc}$ Temp. Coeff. ( $\beta$ )	$-0,34\ \% / ^{\circ}\text{C}$
$I_{sc}$ Temp. Coeff. ( $\alpha$ )	$0,08\ \% / ^{\circ}\text{C}$
Operating temperature	$-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$

## PACKING CONFIGURATION:

Packing Config.	26 pcs / pallet
Loading Capacity	728 pcs / 40 ft HC

## ELECTRICAL CHARACTERISTICS AT STC\*:

Module Type: AS-P603		255	260	265
Nominal Power ( $P_{\max}$ )	[Wp]	255	260	265
Tolerance on Nominal Power $P_{\max}^{**}$	[Wp]	-0 / +5	-0 / +5	-0 / +5
Maximum Power Voltage ( $V_{mp}$ )	[V]	30.93	31.16	31.52
Maximum Power Current ( $I_{mp}$ )	[A]	8.24	8.34	8.41
Open Circuit Voltage ( $V_{oc}$ )	[V]	38.16	38.40	38.65
Short Circuit Current ( $I_{sc}$ )	[A]	8.91	9.03	9.14
Module Efficiency ( $\eta_m$ )		15.7%	16.0%	16.3%
Maximum System Voltage	[V]	1000	1000	1000
Series Fuse Maximum Rating	[A]	15	15	15

\*Standard Test Conditions (STC): Irradiance  $1000\ \text{W}/\text{m}^2$ , Air Mass  $AM = 1.5$ , Cell Temperature  $25^{\circ}\text{C}$ ; Power measurement uncertainty within  $\pm 3\%$ .

\*\* AEG photovoltaic modules are classified according to a principle of positive power tolerance: the Power Output measured at STC of the delivered modules exceeds their assigned Nameplate Nominal Power at STC within a power tolerance range between -0 Wp and +5 Wp.

© Solar Solutions PV GmbH. Specifications in this datasheet are subject to change without notice. Product code: AS-P603-A6S1-3BB 255-265, version201606.1.EN

## MECHANICAL CHARACTERISTICS

Solar Cells	60 (6 x 10) polycrystalline silicon, 156 x 156 mm (6") solar cells
Front Glass	3.2 mm (0.13") high-transparency AR coating glass
Backsheet	White backsheet
Encapsulant	EVA (Ethylene-Vinyl Acetate)
Frame	Anodized aluminum alloy
Junction Box	IP65 / IP67 rated, with 3 bypass diodes
Cables	UV resistant solar cable 1000 mm (39.37"), sec. $4.0\ \text{mm}^2$ (12 AWG)
Connectors	MC4 compatible connectors
Dimensions	1632 x 995 x 40 mm (64.25 x 39.17 x 1.57 ")
Weight	19.5 kg (42.9 lbs)
Max. Load	Wind load: 2400 Pa / Snow load: 5400 Pa

Solar Solutions PV GmbH  
Ludwig-Feuerbach-Str. 69  
90489 Nürnberg  
Deutschland / Germany  
[www.aeg-industrialsolar.de](http://www.aeg-industrialsolar.de)

AEG is a registered trademark used under license from AB Electrolux (publ).

**AEG**  
perfekt in form und funktion