

## Photovoltaic modules

### MAGE POWERTEC PLUS 260–275 MONO CLASSIC



MAGE POWERTEC PLUS convinces by:

#### 1. Flexible Planning

- › Modules for all installation sizes
- › Maximum efficiency
- › Suitable for use in extreme site conditions

#### 2. Easy Installation

- › Low weight, convenient format
- › Horizontal and vertical installation possible
- › Optimal utilisation of the roof surface

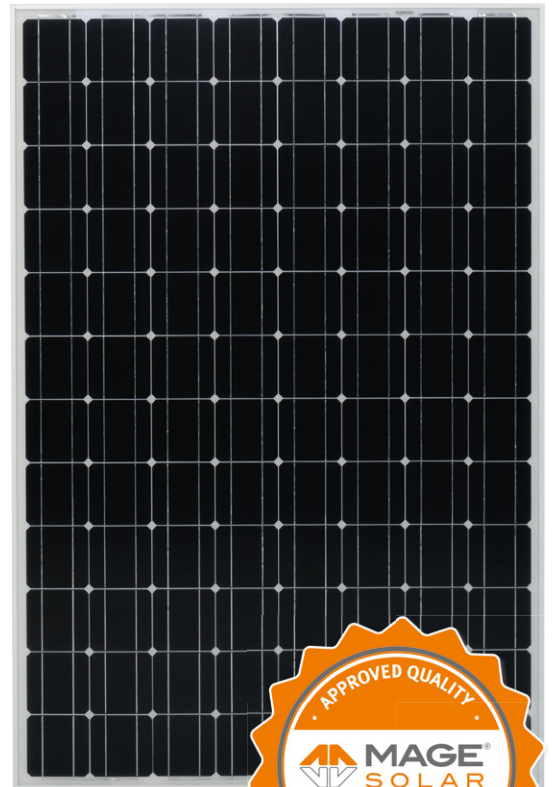
#### 3. Maximum Yield

- › Only positive tolerances of up to 5 Wp
- › Only the best performance

#### 4. Long Lifetime

- › Product warranty: 10 years\*
- › Performance guarantee: 25 years linear at 80%\*
- › Certified according to the strictest German and international standards

\* according to our warranty conditions valid at the time of purchase, available from your MAGE SOLAR qualified partner or from MAGE SOLAR GmbH.



+5

WATTS  
POSITIVE  
TOLERANCE

10

YEAR  
PRODUCT  
WARRANTY\*

25

YEAR  
LINEAR PERFORMANCE  
GUARANTEE 80%\*

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Electrical characteristics at STC*		260	265	270	275
Nominal power	$P_{nom}$ [Wp]	260	265	270	275
Tolerance of $P_{nom}$	$P$ [Wp]	-0/+5	-0/+5	-0/+5	-0/+5
Voltage at $P_{nom}$	$U_{nom}$ [V]	49.40	49.50	49.60	49.70
Current at $P_{nom}$	$I_{nom}$ [A]	5.27	5.36	5.45	5.54
Short circuit current	$I_{sc}$ [A]	5.80	5.90	6.00	6.10
Open circuit voltage	$U_{oc}$ [V]	59.40	59.60	59.90	60.20
Maximum system voltage	$U_{syst}$ [V]	1000	1000	1000	1000
Reverse current	$I_r$ [A]	10	10	10	10

\* Typical parameters at standard test conditions (STC): 1,000 W/m<sup>2</sup> irradiation on the module surface, 25°C module temperature, 1.5 AM spectral diffusion of irradiation simulating Air-Mass.

Electrical characteristics at NOCT**		260	265	270	275
Nominal power	$P_{noct}$ [Wp]	187.96	191.71	195.33	198.95
Voltage at $P_{noct}$	$U_{noct}$ [V]	44.86	44.95	45.05	45.14
Current at $P_{noct}$	$I_{noct}$ [A]	4.19	4.26	4.33	4.40
Short circuit current	$I_{sc}$ [A]	4.63	4.71	4.79	4.87
Open circuit voltage	$U_{oc}$ [V]	53.55	53.73	54.00	54.27

\*\* Typical parameters at nominal operating cell temperature (NOCT): 800 W/m<sup>2</sup> irradiation, 20°C ambient temperature, 1 m/s wind speed.

Efficiency		260	265	270	275
Cell efficiency up to [%]		17.66	17.99	18.33	18.66
Module efficiency up to [%]		15.79	16.09	16.38	16.68

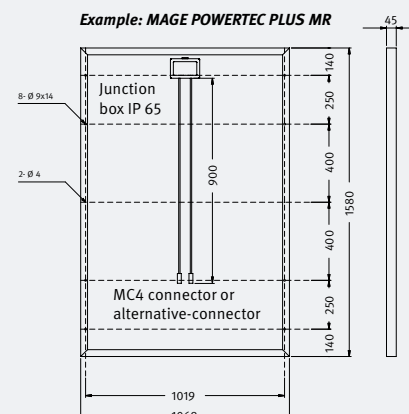
Minimal efficiency reduction in low irradiation at 25°C: at 200 W/m<sup>2</sup> irradiation a minimal efficiency reductions occurs, this leads to a functionality of 96% of the STC efficiency.

Technical characteristics***	
Number of cells (Matrix)	96 (8 x 12)
Solar cell type	Monocrystalline silicon, 125 x 125 mm, 5"
Front cover	3.2 mm solar glass
Frame material	Aluminium
Dimensions [L x W x D]	Refer to drawing
Weight up to	19.5 kg
Maximum mechanical load	5400 Pa (IEC 61215)
Number of bypass diodes	4

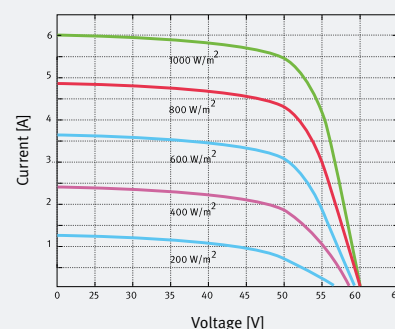
\*\*\*Typical technical specifications

Thermal characteristics		
NOCT	[°C]	+45 +/-3
Temperature coefficient	$I_{sc}$ [%/K]	+0.05
Temperature coefficient	$U_{oc}$ [%/K]	-0.32
Temperature coefficient	$P_{nom}$ [%/K]	-0.42

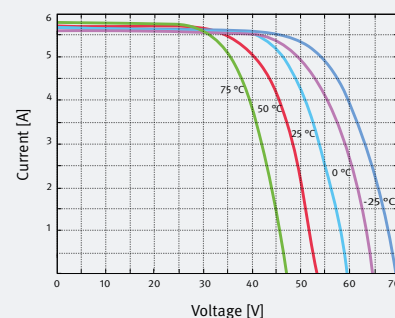
This data sheet conforms to standard EN 50380. All information subject to measurement inaccuracies (up to a maximum of three per cent depending on the parameter). Availability of the following product groups will be examined in the order: MAGE POWERTEC PLUS 260-275 MR, MO.



MR: 1580 x 1069 x 45  
MO: 1580 x 1062 x 40  
Drawings on request  
All lengths in mm



Module characteristics at constant module temperatures (25°C) and differing levels of irradiance



Module characteristics at different temperatures and constant module irradiance (1,000 W/m<sup>2</sup>)



IEC 61215, IEC 61730, ISO 9001  
Dependent on market and/or product

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