



LASER CUT TECHNOLOGY



3 BUSBAR CELL



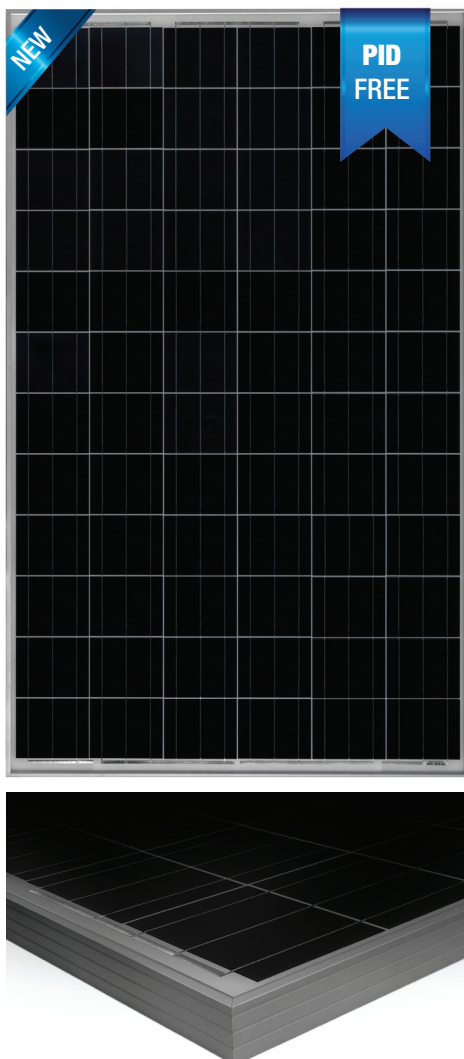
ANTI REFLECTIVE GLASS



BETTER EFFICIENCY



ULTIMATE PROTECTION



AEON SERIES

MünchenSolar
MAXIMALENERGIE

AEON SERIES Multicrystalline MSPxxxSC-36

LASER CUT TECHNOLOGY

By reducing the area of each wafer before cell production, with precision revolutionizing laser cut processing, then connecting cells in a parallel formation, the amount of electrical current carried by each busbar is reduced by 20%. This results in the decrease of electrical resistance within the busbars and an increase in overall efficiency of up to 2.5%.

3 BUSBAR CELL

Through an industry-leading innovation of integrating 3 busbars into each cell, internal electrical resistance is reduced, boosting cell output up to 3%*. This is possible because the distances between the busbars are shorter and less current flows through each smaller electrode where resistance is the highest.

*Approximate improvement compared to a standard 2 busbar cell.

ANTI REFLECTIVE GLASS

An anti-reflective coating has been added to the glass of our modules. It improves the light transmittance of the glass by reducing the amount of reflection on the surface. This improvement has led to a module output increase of 2%. Furthermore, München Solar modules use a non-porous type of anti-reflective coating, which is more resistant to the adhesion of dust than porous types.

PID (POTENTIAL INDUCED DEGRADATION) FREE

Our AEON Series PID Free modules are tested under the condition of 60°C/ 85% RH, setting a new standard for Quality and Performance of PV modules. Our modules can be used in all areas, especially ideal for installations in regions of high temperature and high humidity. Our 60°C/ 85% RH certified PID Free module ensures highest reliability under extreme conditions.

FRAME FIXATION

Traditionally this process has been achieved through the use of silicon sealant. All AEON series modules utilize industry leading high-end adhesive tapes, for a tighter seal to guarantee higher reliability when bonding frames to solar laminates.

12 year
product
warranty

25 year
power output
warranty



AEON SERIES

Multicrystalline MSPxxxSC-36



ELECTRICAL PERFORMANCE

Electrical parameters at Standard Test Conditions (STC)

Module Type	MSPxxxSC-36 (xxx=P _{max})						
Power output	P _{max}		235	240	245	250	255
Power output tolerances	ΔP _{max}	%	0 / +3				
Module efficiency	η _m	%	14.47	14.78	15.09	15.40	15.71
Voltage at P _{max}	V _{mpp}	V	37.22	37.66	37.8	37.81	38.18
Current at P _{max}	I _{mpp}	A	6.31	6.37	6.48	6.61	6.68
Open circuit voltage	V _{oc}	V	44.50	44.93	45.07	45.40	45.55
Short circuit current	I _{sc}	A	6.76	6.82	6.94	7.07	7.15

STC: 1000W/m² irradiance, 25°C cell temperature, AM1.5G spectrum

Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/- 3%

THERMAL CHARACTERISTICS

Nominal operating cell temperature	NOCT	°C	47 +/-2
Temperature coefficient of P _{max}	γ	% / °C	-0.45
Temperature coefficient of V _{oc}	β _{Voc}	% / °C	-0.33
Temperature coefficient of I _{sc}	α _{Isc}	% / °C	+0.04
Temperature coefficient of V _{mpp}	β _{Vmpp}	% / °C	-0.35

NOCT: open-circuit module operation temperature at 800W/m² irradiance, 20°C ambient temperature, 1m/s wind speed.

Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/- 3%

OPERATING CONDITIONS

Max. System Voltage	1000VDC
Max. series fuse rating	15A
Limiting reverse current	15A
Operating temperature range	-40°C to 85°C
Max. static load, front (e.g., snow and wind)	5400Pa
Max. static load, back (e.g., wind)	2400Pa
Max. hailstone impact (diameter / velocity)	25mm / 23m/s

MECHANICAL CHARACTERISTICS

Front Cover (material / thickness)	Micro - structured solar glass / 3.2mm
Cell (quantity / material / dimensions)	72 / multicrystalline silicon / 156 x 130mm
Encapsulant (material)	EVA
Frame material	anodized aluminum alloy
Junction box (protection degree)	≥ IP67 (3 bypass-diodes)
Cable (length / cross sectional area)	900mm / 4mm ²
Plug connector (type / protection degree)	MC4 / IP67
Fire Safety Classification (IEC 61730)	Class C

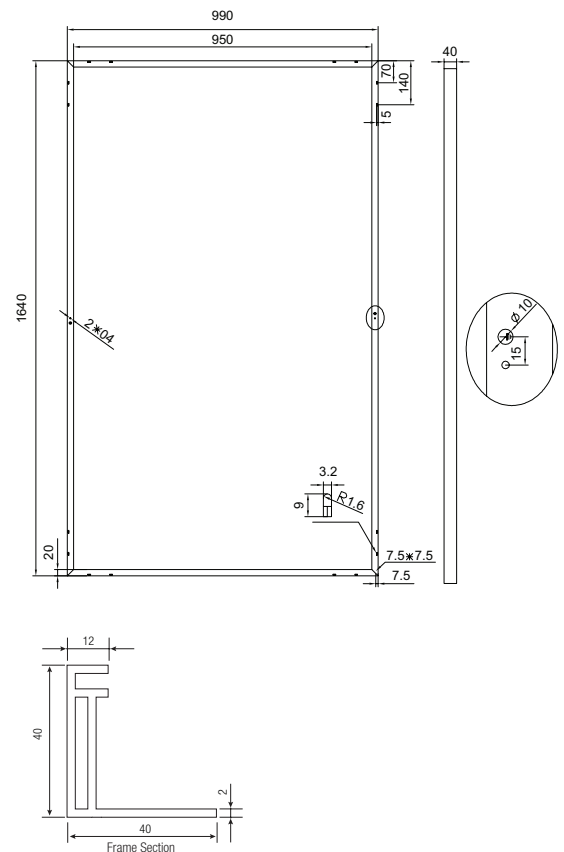
All values indicated in this data sheet are subject to change without prior announcement. The specifications may vary slightly. All specifications are in accordance with standard EN 50380. Color differences of the modules relative to the figures as well as discolorations of/in the modules which do not impair their proper functioning are possible and do not constitute a deviation from the specification.

PARTNERS

GENERAL CHARACTERISTIC

Dimensions	1640mm / 990mm / 40mm
Weight	18.6kg

Unit: mm



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REV2014Q1