ECLIPSE

N-TYPE BACK CONTACT TECHNOLOGY

Wood Mackenzie Grade A | TIER 1 BloombergNEF | SMM TIER 1 GLOBAL TIER 1 AWARD

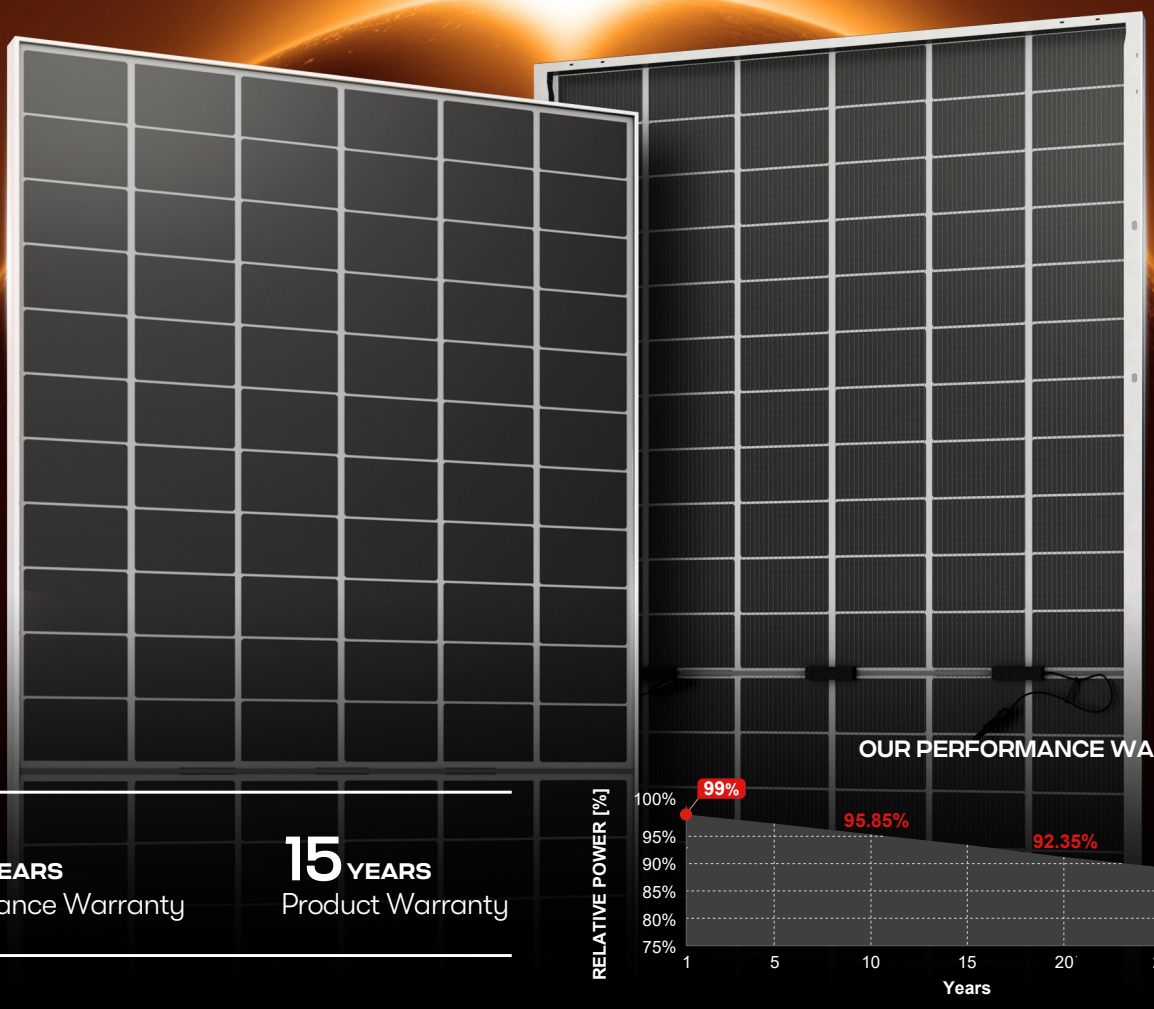
Deutsche Qualität Garantiert

640W-660W / ICME-132BDS

132
HALF CELLS

24.43%
MAXIMUM EFFICIENCY

- **5%** higher power density per unit area versus conventional modules
- True minimalist aesthetics with **front gridless cells** for architectural integration
- **>88.8%** power retention guaranteed after 30 years – industry-leading durability
- **Hotspot-resistant** design prevents fire risks under shading conditions
- **-0.26%/°C** temperature coefficient ensures superior performance in heat



30 YEARS Performance Warranty

15 YEARS Product Warranty

OUR PERFORMANCE WARRANTY

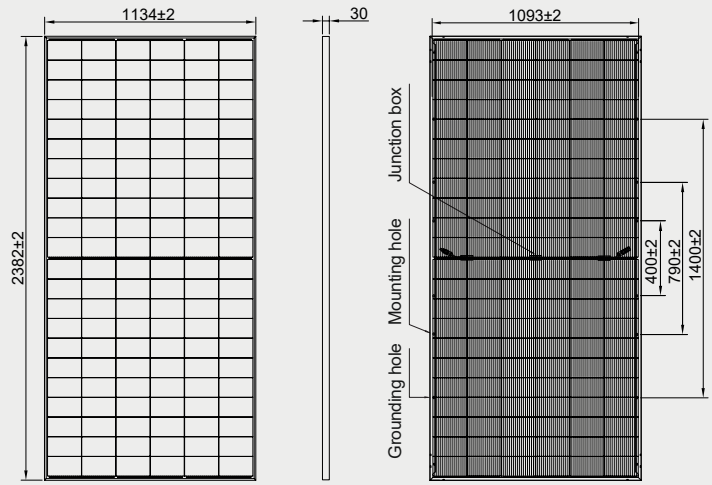
AESOLAR SINCE 2003

Ver. 26.11.1

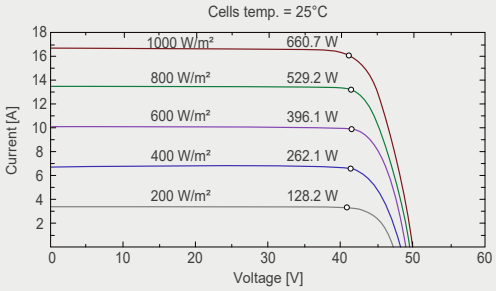
AE ICME-132BDS 640W-660W

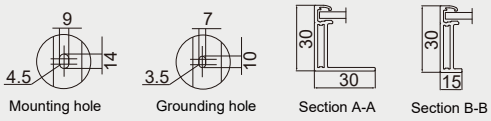
N-TYPE BACK CONTACT TECHNOLOGY

BIFACIAL • DOUBLE-GLASS



Units: mm





Electrical specifications (STC*):

Nominal max. power	P_{max} (Wp)	640	645	650	655	660
Maximum operating voltage	V_{MPP} (V)	40.78	40.88	40.98	41.08	41.18
Maximum operating current	I_{MPP} (A)	15.69	15.78	15.86	15.94	16.03
Open-circuit voltage	V_{oc} (V)	49.52	49.62	49.72	49.82	49.92
Short-circuit current	I_{sc} (A)	16.38	16.46	16.54	16.62	16.70
Module efficiency	η (%)	23.69	23.88	24.06	24.25	24.43
Power tolerance		0~3%				
Maximum system voltage	(V)	DC1500V (IEC)				
Maximum series fuse rating	(A)	35				

*STC: Standard Test Conditions (irradiance 1000 W/m², cell temperature 25°C and air mass of AM1.5), measurement tolerance Pmax: ±3%

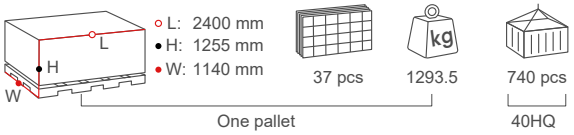
Electrical specifications
with different rear side power gain (Taking 645W as the baseline)

Nominal max. power	P_{max} (Wp)	677	710	744	776	808
Maximum operating voltage	V_{MPP} (V)	40.88	40.88	40.98	40.98	40.98
Maximum operating current	I_{MPP} (A)	16.57	17.36	18.15	18.94	19.73
Open-circuit voltage	V_{oc} (V)	49.62	49.62	49.72	49.72	49.72
Short-circuit current	I_{sc} (A)	17.28	18.11	18.93	19.75	20.58
$P_{max\ gain}$		5%	10%	15%	20%	25%

Mechanical and design specification

Cell type	n-Type Back Contact technology, half-cut cells
No. of cells	132
Glass	Dual glass, 2.0+2.0 mm, semi-tempered
Bifaciality	75 ± 5%
Junction box	IP68 rated, 3 bypass diodes
Frame	30 mm anodized aluminium alloy
Cable (Including Connector)	4mm² +400, -200mm/±1400mm length can be customized
Connectors	MC 4 / MC 4 compatible
Dimension	2382 mm x 1134 mm x 30 mm
Weight	33.5 kg
Hail resistance	Max. Ø 25 mm at 23 m/s
Wind load	2400 Pa or 244 kg/m²
Snow load	5400 Pa or 550 kg/m²
Fire rating	IEC Class C
Protection class	Class II

Packaging information



Temperature ratings

Operating temperature	-40 to +85°C
Temp. coefficient of P_{max}	-0.26 %/°C
Temp. coefficient of V_{oc}	-0.20 %/°C
Temp. coefficient of I_{sc}	0.050 %/°C
Nom. operating cell temp. NOCT	45 ± 2°C

SYSTEM AND PRODUCT CERTIFICATIONS

ISO 9001:2015 · ISO 45001:2018 · ISO14001 · CE · Ariel Re

The specifications and characteristics contained in this datasheet may deviate slightly from our actual products due to the product developments and uncertainty of measurement devices. The specifications included in the datasheet are subject to change without prior notice.

AESOLAR Since 2003

+49 8231 978268 0
sales@ae-solar.com
www.ae-solar.com

AESOLAR
Senefelderstraße 23
86368 Gersthofen, Germany