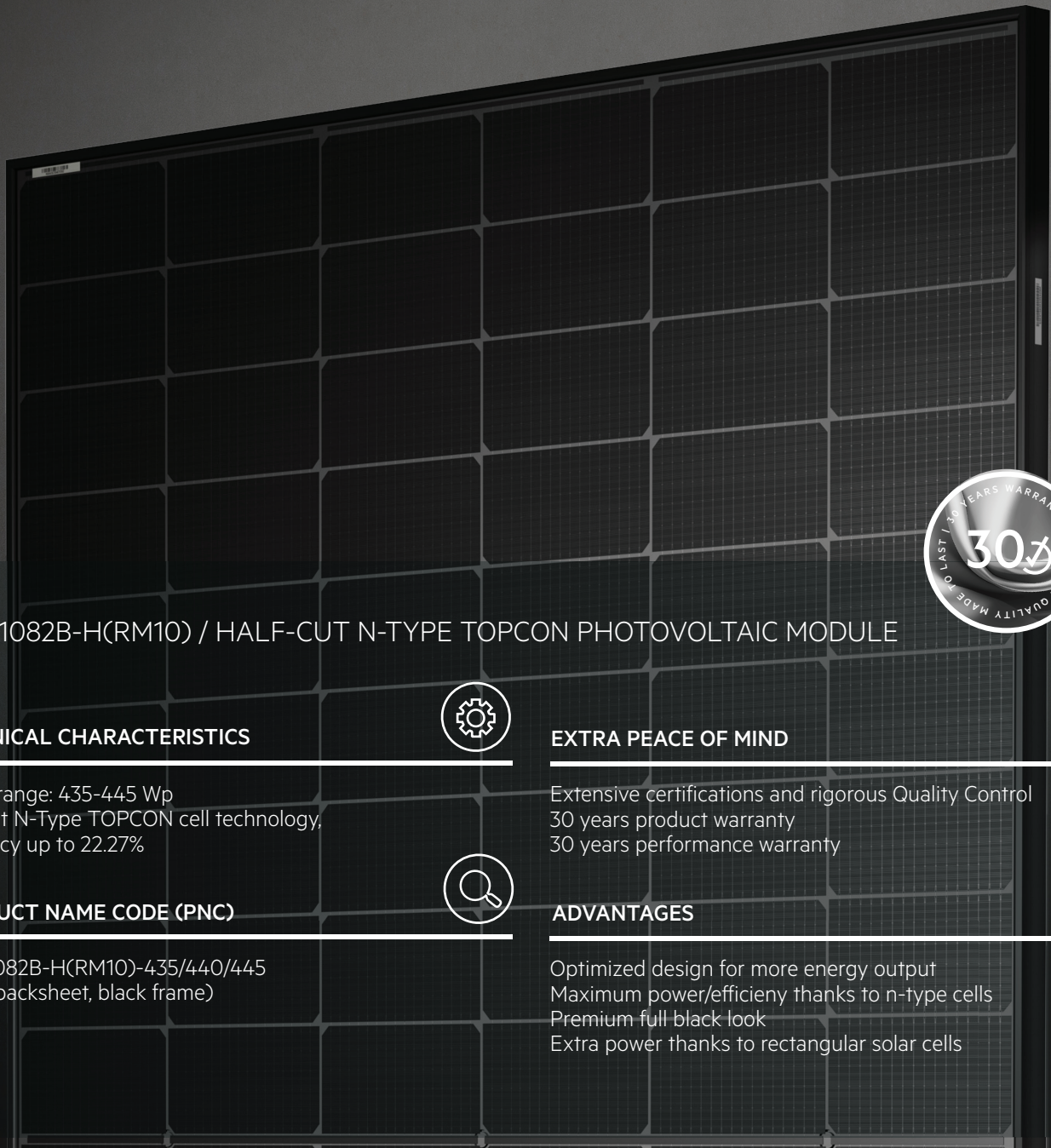




AEG HIGH EFFICIENCY SERIES



AS-M1082B-H(RM10) / HALF-CUT N-TYPE TOPCON PHOTOVOLTAIC MODULE

TECHNICAL CHARACTERISTICS



Power range: 435-445 Wp
Half-cut N-Type TOPCON cell technology,
Efficiency up to 22.27%

PRODUCT NAME CODE (PNC)



AS-M1082B-H(RM10)-435/440/445
(black backsheet, black frame)

EXTRA PEACE OF MIND



Extensive certifications and rigorous Quality Control
30 years product warranty
30 years performance warranty

ADVANTAGES



Optimized design for more energy output
Maximum power/efficiency thanks to n-type cells
Premium full black look
Extra power thanks to rectangular solar cells

AS-M1082B-H(RM10) / HALF-CUT N-TYPE TOPCON PHOTOVOLTAIC MODULE

PRODUCT SERIES & NAMECODE (PNC)

AEG HIGH EFFICIENCY SERIES
AS-M1082B-H(RM10)-435/440/445
black frame, black backsheet

ELECTRICAL CHARACTERISTICS AT STC^{1,2}

Nominal Power (Pmax)	[Wp]	435	440	445
Power Sorting ³	[W]	0-5	0-5	0-5
Maximum Power Voltage (Vmp)	[V]	32.59	32.81	33.03
Maximum Power Current (Imp)	[A]	13.35	13.42	13.48
Open Circuit Voltage (Voc)	[V]	39.20	39.40	39.60
Short Circuit Current (Isc)	[A]	13.78	13.84	13.90
Module Efficiency (ηm)	[%]	21.77	22.02	22.27
Maximum System Voltage	[V]	1000	1000	1000
Series Fuse Maximum Rating	[A]	25	25	25

ELECTRICAL CHARACTERISTICS AT NMOT⁴

Maximum Power (Pmax)	[W]	327	331	335
Maximum Power Voltage (Vmp)	[V]	30.45	30.65	30.86
Maximum Power Current (Imp)	[A]	10.78	10.84	10.89
Open Circuit Voltage (Voc)	[V]	37.13	37.32	37.51
Short Circuit Current (Isc)	[A]	11.15	11.20	11.25

MECHANICAL CHARACTERISTICS

Solar cells	monocrystalline [pcs]	108
	Dimensions [mm]	RM10 Half-cut [182 x 199]
Front glass	high-transparency	
	Thickness [mm] / [in]	3.2 / 0.125
Backsheet	Black	
Encapsulant	EVA	
Frame	Anodized aluminum alloy	Black
Junction box	Split-type, IP68	
	Bypass diodes	3
UV-resistant cables	Length [mm] / [in]	1100 / 43.30
	Section [mm ²]	4
Connectors	MC4 Original	
Dimensions	H x L x W [mm]	1762 x 1134 x 30
	H x L x W [in]	69.37 x 44.64 x 1.18
Weight	[kg] / [lbs]	20.6 / 45.40
Maximum load	Wind / Snow [Pa]	2400 / 5400
Fire Class	Class C	

PACKAGING

Packing configuration	[pcs/pallet]	36
Loading capacity	[pcs/40 ft container]	936

NOTES

- Standard Test Conditions (STC): Irradiance 1000 W/m², Air Mass AM = 1.5, Cell Temperature 25°C
 - Measurement tolerances (IEC 61215:2016): Pmax±3%, Voc±3%, Isc±4%
 - 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
 - NMOT: Nominal operating temperature of module, Irradiance 800 W/m², Wind Speed 1m/s, Ambient Temperature 20°C, Air Mass AM=1.5
 - Full text of the Warranty Terms available at: www.aeg-solar.com
 - (HE/GB) No less than 99% of the minimum "Peak Power at STC" in the first year; power output decline no more than 0.4% per year thereafter, ending with 87.4%.
- Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (±0.079") / Version 2023.11.01.EN © Solar Solutions Group. Specifications in this datasheet are subject to change without notice.
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CERTIFICATIONS

System	ISO 9001, ISO 14001, ISO 45001
Product	IEC 61215-1:2016, IEC 61215-2:2016, IEC 61730-1:2016, IEC 61730-2:2016, EN 61215-1:2016, EN 61215-2:2016, EN IEC 61730-1:2018/AC:2018-06

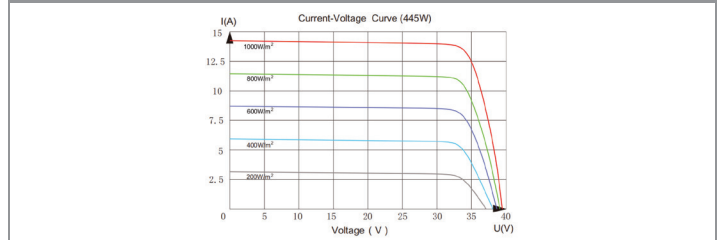
WARRANTIES

Product warranty ⁵	[years]	30
Performance warranty (linear) ⁶	[years]	30

TEMPERATURE CHARACTERISTICS

NMOT	[°C]	45 (±2)
Pmax Temp. Coefficient (γ)	[%/°C]	-0.31
Voc Temp. Coefficient (β)	[%/°C]	-0.25
Isc Temp. Coefficient (α)	[%/°C]	0.06
Operating temperature	[°C]	-40~+85

I/V CURVES - IRRADIANCES



TECHNICAL DRAWINGS

