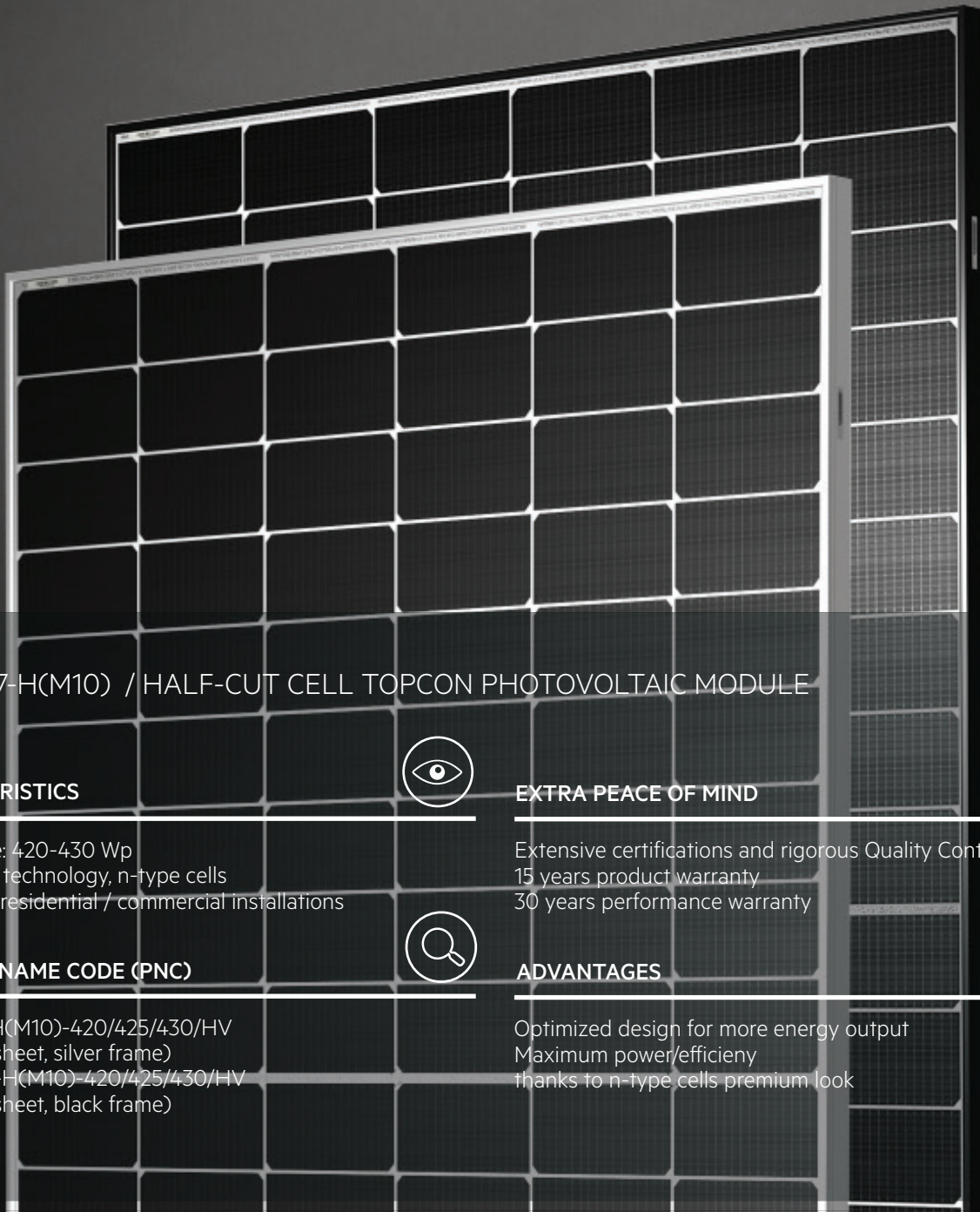




AEG HIGH EFFICIENCY SERIES



AS-M1087-H(M10) / HALF-CUT CELL TOPCON PHOTOVOLTAIC MODULE

CHARACTERISTICS



Power range: 420-430 Wp
Half-cut cell technology, n-type cells
Suitable for: residential / commercial installations

EXTRA PEACE OF MIND



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

PRODUCT NAME CODE (PNC)



AS-M1087-H(M10)-420/425/430/HV
(white backsheet, silver frame)
AS-M1087Z-H(M10)-420/425/430/HV
(white backsheet, black frame)

ADVANTAGES



Optimized design for more energy output
Maximum power/efficiency
thanks to n-type cells premium look

AS-M1087-H(M10) / HALF-CUT CELL TOPCON PHOTOVOLTAIC MODULE

| PRODUCT SERIES & NAMECODE (PNC) | |
|---|--|
| AEG HIGH EFFICIENCY SERIES | |
| AS-M1087-H(M10)-420/425/430/HV, silver frame, white backsheet | |
| AS-M1087Z-H(M10)-420/425/430/HV, black frame, white backsheet | |

| ELECTRICAL CHARACTERISTICS AT STC ^{1,2} | | | | |
|--|------|-------|-------|-------|
| Nominal Power (Pmax) | [Wp] | 420 | 425 | 430 |
| Power Sorting ³ | [W] | 0-5 | 0-5 | 0-5 |
| Maximum Power Voltage (Vmp) | [V] | 31.41 | 31.57 | 31.73 |
| Maximum Power Current (Imp) | [A] | 13.37 | 13.46 | 13.55 |
| Open Circuit Voltage (Voc) | [V] | 38.00 | 38.15 | 38.30 |
| Short Circuit Current (Isc) | [A] | 14.27 | 14.32 | 14.37 |
| Module Efficiency (ηm) | [%] | 21.5 | 21.8 | 22.0 |
| Maximum System Voltage | [V] | 1500 | 1500 | 1500 |
| Series Fuse Maximum Rating | [A] | 25 | 25 | 25 |

| ELECTRICAL CHARACTERISTICS AT NMOT ⁴ | | | | |
|---|-----|-------|-------|-------|
| Maximum Power (Pmax) | [W] | 316 | 320 | 324 |
| Maximum Power Voltage (Vmp) | [V] | 29.34 | 29.50 | 29.66 |
| Maximum Power Current (Imp) | [A] | 10.77 | 10.85 | 10.92 |
| Open Circuit Voltage (Voc) | [V] | 36.14 | 36.30 | 36.46 |
| Short Circuit Current (Isc) | [A] | 11.57 | 11.63 | 11.69 |

| MECHANICAL CHARACTERISTICS | | |
|----------------------------|----------------------------|-------------------------|
| Solar cells | monocrystalline [pcs] | 108 |
| | Dimensions [mm] | M10 Half-cut [182 x 91] |
| Front glass | high-transparency | |
| | Thickness [mm] / [in] | 3.2 / 0.13 |
| Backsheet | White | |
| Encapsulant | EVA | |
| Frame | Anodized aluminum alloy | silver or black |
| Junction box | Split type, IP68 | |
| | Bypass diodes | 3 |
| UV-resistant cables | Length [mm] / [in] | 1200 / 47.24 |
| | Section [mm ²] | 4 |
| Connectors | MC4 original | |
| Dimensions | H x L x W [mm] | 1722 x 1134 x 30 |
| | H x L x W [in] | 67.79 x 44.65 x 1.18 |
| Weight | [kg] / [lbs] | 20.5 / 45.19 |
| 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 |
|--|
| 1-Standard Test Conditions (STC): Irradiance 1000 W/m ² , Air Mass AM = 1.5, Cell Temperature 25°C |
| 2-Measurement tolerances (IEC 61215:2016): Pmax±3%, Voc±3%, Isc±3% |
| 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 |
| 4-NMOT: Nominal operating temperature of module, Irradiance 800 W/m ² , Wind Speed 1m/s, Ambient Temperature 20°C, Air Mass AM=1.5 |
| 5-Full text of the Warranty Terms available at: www.aeg-solar.com . If not offered by your distributor, the standard warranty conditions apply. |
| 6-(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 87.40%. |
| Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (±0.079") / Version 2023.06.V2.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 | IEC61215-1:2016, IEC61215-1:2016, IEC61215-2:2016, IEC61730-1:2016, IEC61730-2:2016, EN61215-1:2016, EN61215-2:2016, EN61730-1:2018, EN61730-2:2018 |

| WARRANTIES | | |
|--|---------|----------------------|
| Product warranty ⁵ | [years] | 15 (opt. ext. to 20) |
| Performance warranty (linear) ⁶ | [years] | 30 |

| TEMPERATURE CHARACTERISTICS | | |
|-----------------------------|--------|---------|
| NMOT | [°C] | 45 (±2) |
| Pmax Temp. Coefficient (γ) | [%/°C] | -0.30 |
| Voc Temp. Coefficient (β) | [%/°C] | -0.25 |
| Isc Temp. Coefficient (α) | [%/°C] | 0.046 |
| Operating temperature | [°C] | -40~+85 |

