

# AEG

## HYBRID PASSIVATED BACK CONTACT DOUBLE GLASS SOLAR MODULE AS-M1081B-GA(M10)/HV

### CHARACTERISTICS

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Power range: 475-490 Wp  
Hybrid Passivated Back Contact Cell technology  
Half-Cut N-Type cell technology with zero bus bar  
Efficiency up to 24.0%

### ADVANTAGES

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Anti-Shading design & Prevent localized overheating  
Maximum power/ efficiency thanks to HPBC technology  
Exchange and refund service up to 30 years  
Premium full black look



**25 YEARS PRODUCT WARRANTY AND  
30 YEARS PERFORMANCE WARRANTY  
30 YEARS EXCHANGE AND REFUND SERVICE**



# HYBRID PASSIVATED BACK CONTACT DOUBLE GLASS SOLAR MODULE

## AS-M1081B-GA(M10)/HV

| PRODUCT SERIES & NAMECODE (PNC)       |  |
|---------------------------------------|--|
| AEG PREMIUM SERIES                    |  |
| AS-M1081B-GA(M10)-475/480/485/490/ HV |  |
| black frame, black rear glass         |  |

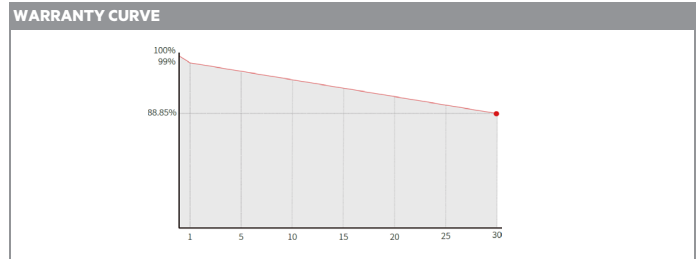
| CERTIFICATIONS |                                 |
|----------------|---------------------------------|
| System         | ISO 9001, ISO 14001, ISO 45001  |
| Product        | IEC 61215, IEC 61730, IEC 62941 |

| ELECTRICAL CHARACTERISTICS AT STC <sup>1,2</sup> |      |       |       |       |       |
|--------------------------------------------------|------|-------|-------|-------|-------|
| Nominal Power (Pmax)                             | [Wp] | 475   | 480   | 485   | 490   |
| Power Sorting <sup>3</sup>                       | [W]  | 0-5   | 0-5   | 0-5   | 0-5   |
| Maximum Power Voltage (Vmp)                      | [V]  | 33.4  | 33.51 | 33.62 | 33.73 |
| Maximum Power Current (Imp)                      | [A]  | 14.23 | 14.33 | 14.43 | 14.53 |
| Open Circuit Voltage (Voc)                       | [V]  | 40.42 | 40.53 | 40.64 | 40.75 |
| Short Circuit Current (Isc)                      | [A]  | 14.88 | 14.98 | 15.08 | 15.18 |
| Module Efficiency (ηm)                           | [%]  | 23.3  | 23.5  | 23.8  | 24.0  |
| Maximum System Voltage                           | [V]  | 1500  | 1500  | 1500  | 1500  |
| Series Fuse Maximum Rating                       | [A]  | 30    | 30    | 30    | 30    |

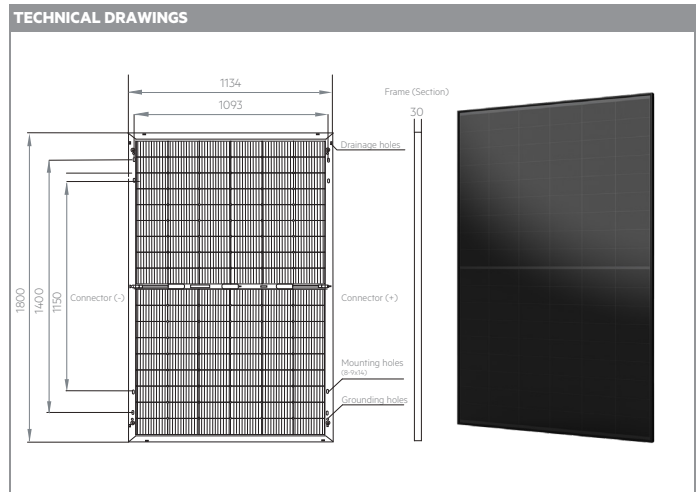
| WARRANTIES                                 |         |    |
|--------------------------------------------|---------|----|
| Product warranty <sup>5</sup>              | [years] | 25 |
| Performance warranty (linear) <sup>6</sup> | [years] | 30 |

| TEMPERATURE CHARACTERISTICS |        |         |
|-----------------------------|--------|---------|
| NOCT                        | [°C]   | 45 (±2) |
| Pmax Temp. Coefficient (γ)  | [%/°C] | -0.26   |
| Voc Temp. Coefficient (β)   | [%/°C] | -0.20   |
| Isc Temp. Coefficient (α)   | [%/°C] | +0.050  |
| Operating temperature       | [°C]   | -40~+85 |

| ELECTRICAL CHARACTERISTICS AT NOCT <sup>4</sup> |     |       |       |       |       |
|-------------------------------------------------|-----|-------|-------|-------|-------|
| Maximum Power (Pmax)                            | [W] | 361   | 365   | 369   | 373   |
| Maximum Power Voltage (Vmp)                     | [V] | 31.71 | 31.82 | 31.93 | 32.05 |
| Maximum Power Current (Imp)                     | [A] | 11.39 | 11.48 | 11.56 | 11.65 |
| Open Circuit Voltage (Voc)                      | [V] | 38.39 | 38.50 | 38.61 | 38.73 |
| Short Circuit Current (Isc)                     | [A] | 11.93 | 12.02 | 12.10 | 12.19 |



| MECHANICAL CHARACTERISTICS |                                |                         |
|----------------------------|--------------------------------|-------------------------|
| Solar cells                | monocrystalline [pcs]          | 108                     |
|                            | Dimensions [mm]                | M10 Half-cut [182 x 91] |
| Front glass                | Semi-tempered glass            |                         |
|                            | Thickness [mm] / [in]          | 2.0 / 0.08              |
| Back glass                 | Semi-tempered glass            | 1.6 / 0.06              |
| Encapsulant                | EVA                            |                         |
| Frame                      | Anodized aluminum alloy        | Black                   |
|                            | Junction box                   | Split-type, IP68        |
| UV-resistant cables        | Bypass diodes                  | 3                       |
|                            | Length [mm] / [in]             | 1200 / 47.24            |
| Connectors                 | Section [mm <sup>2</sup> /AWG] | 4 / 12                  |
|                            | MC4                            |                         |
| Dimensions                 | H x L x W [mm]                 | 1800 x 1134 x 30        |
|                            | H x L x W [in]                 | 70.87 x 44.65 x 1.18    |
| Weight                     | [kg] / [lbs]                   | 23.5 / 51.79            |
| Hail resistance            | Max. Ø 25 mm at 23 m/s         |                         |
| Maximum Static Load        | Rear / Front [Pa]              | 2400 / 5400             |
| Fire Class                 | Class C                        |                         |



| PACKAGING             |                       |     |
|-----------------------|-----------------------|-----|
| Packing configuration | [pcs/pallet]          | 36  |
| Loading capacity      | [pcs/40 ft container] | 864 |

| NOTES                                                                                                                                                                                                          |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1-Standard Test Conditions (STC): Irradiance 1000 W/m <sup>2</sup> , Air Mass AM = 1.5, Wind Speed 1m/s, 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-NOCT: Nominal Operating Cell Temperature, Irradiance 800 W/m <sup>2</sup> , Wind Speed 1m/s; Ambient Temperature 20°C, Air Mass AM=1.5                                                                       |  |
| 5-Full text of the Warranty Terms available at: <a href="http://www.aeg-solar.com">www.aeg-solar.com</a>                                                                                                       |  |
| 6-(PRE/GG) No less than 99.0% of the minimum "Peak Power at STC" in the first year; power output decline no more than 0.35% per year thereafter, ending with 88.85%.                                           |  |
| Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (≠0.079") / Version 2025.03.V1.EN © Solar Solutions Group. Specifications in this datasheet are subject to change without notice. |  |
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