

UNI-545-144BMH-DG

545W

Highest power output

21.32%

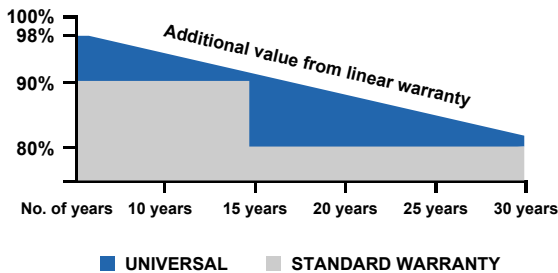
Module efficiency

12 years

Material & Workmanship warranty

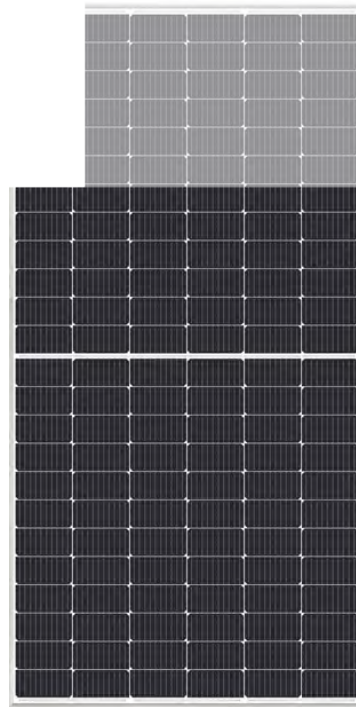
30 years





Linear power output warranty








UNI-545-144BMH-DG
UNI-535-144BMH-DG

UNI-540-144BMH-DG
UNI-530-144BMH-DG



-  MBB technology with Circular Ribbon
-  Higher output power
-  Half-cell technology
-  Positive tolerance offer

-  Micro Gap
-  Up to 30% extra power generation yield from the back side
-  Fire safety: Class A
-  Load certificates: wind to 2400Pa and snow to 5400Pa
-  Lower LCOE

Universal Solar is committed to providing readily available, high-quality, renewable energy products and services at competitive prices. This includes modules made in Panama, which are manufactured to the highest standards with all Tier 1 BOM, utilizing fully automated high-tech manufacturing lines and surpassing Tier 1 processes. Universal's modules are tariff-free, use WRO-compliant silicon, and can be delivered to any U.S. port in 5 days.

Electrical Characteristics at Standard Test Conditions (STC)

| Module Type | UNI-545-144BMH-DG | UNI-540-144BMH-DG | UNI-535-144BMH-DG | UNI-530-144BMH-DG |
|----------------------------------|-------------------|-------------------|-------------------|-------------------|
| Maximum Power - Pmax (W) | 545 | 540 | 535 | 530 |
| Open Circuit Voltage - Voc (V) | 49.81 | 49.65 | 49.5 | 49.35 |
| Short Circuit Current - Isc (A) | 13.92 | 13.85 | 13.78 | 13.71 |
| Maximum Power Voltage - Vmpp (V) | 41.8 | 41.65 | 41.5 | 41.35 |
| Maximum Power Current - Impp (A) | 13.04 | 12.97 | 12.9 | 12.82 |
| Module Efficiency | 21.32% | 21.13% | 20.93% | 20.74% |

Standard Test Conditions(STC): irradiance 1,000W/m²; AM1,5; module temperature 25°C. Pmax Sorting: 0~5W. Measuring Tolerance: ±3%.
 Remark: Electrical data do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

Electrical Characteristics with different rearside power gain (reference to 445 front)

| Pmax (W) | Voc (V) | Isc (A) | Vmpp (V) | Impp (A) | Pmax gain |
|----------|---------|---------|----------|----------|-----------|
| 567 | 49.65 | 14.54 | 41.65 | 13.62 | 5% |
| 594 | 49.65 | 15.24 | 41.65 | 14.27 | 10% |
| 648 | 49.75 | 16.62 | 41.61 | 15.56 | 20% |
| 675 | 49.75 | 17.31 | 41.61 | 16.21 | 25% |

Temperature Characteristics

| | |
|---------------------------------|-------------|
| NOCT | 45°C (±2°C) |
| Voltage Temperature Coefficient | -0.27%/°C |
| Current Temperature Coefficient | +0.048%/°C |
| Power Temperature Coefficient | -0.32%/°C |

Maximum Ratings

| | |
|----------------------------|---------|
| Maximum System Voltage [V] | 1500 |
| Series Fuse Rating [A] | 30 |
| Bifaciality | 70%±10% |

Material Characteristics

| | |
|------------------------------|---|
| Dimensions | 2256 × 1133 × 35mm (L×W×H) |
| Weight | 32.5kg |
| Frame | Silver anodized aluminum profile |
| Front Glass | High-transparency, antireflection-coated, semi-toughened safety glass, 2.0mm |
| Cell Encapsulation | EVA or POE |
| Back Sheet | Glazed & semi-toughened safety glass, 2.0mm |
| Cells | 12×12 pieces monocrystalline solar cells series strings |
| Junction Box | IP68, 3 diodes |
| Cable & Connector | Potrait: 500mm (cable length can be customized), 1×4 mm ² , Connector: PV-ZH202B |

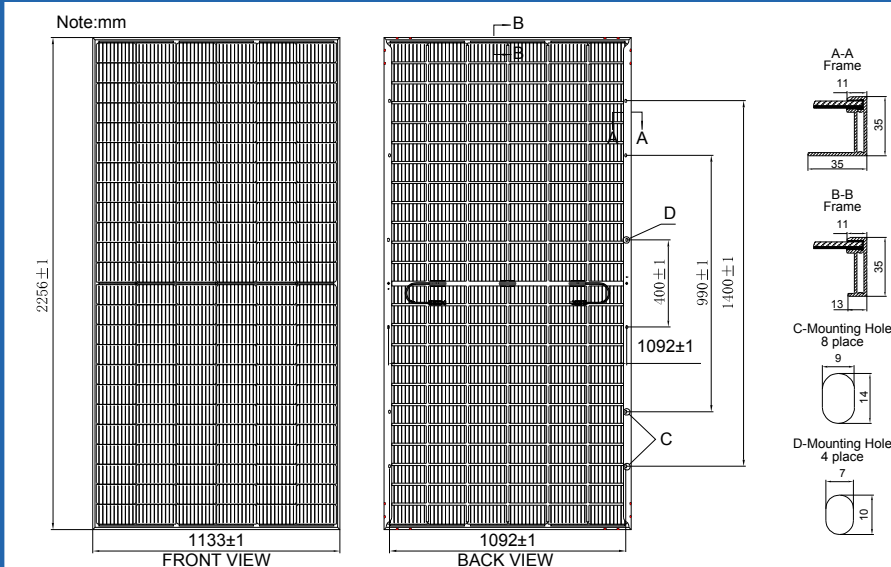
Packaging

| | |
|---------------------------|------------------|
| Dimensions (L×W×H) | 2290×1125×1253mm |
| Container 20' | 150 |
| Container 40' | 300 |
| Container 40'HC | 600 |

System Design

| | |
|-----------------------------|--|
| Temperature Range | -40°C to +85°C |
| Withstanding Hail | Maximum diameter of 25mm with impact speed of 23 m/s |
| Maximum Surface Load | 5,400 Pa |
| Application Class | class A |

Dimensions



IV-Curves

