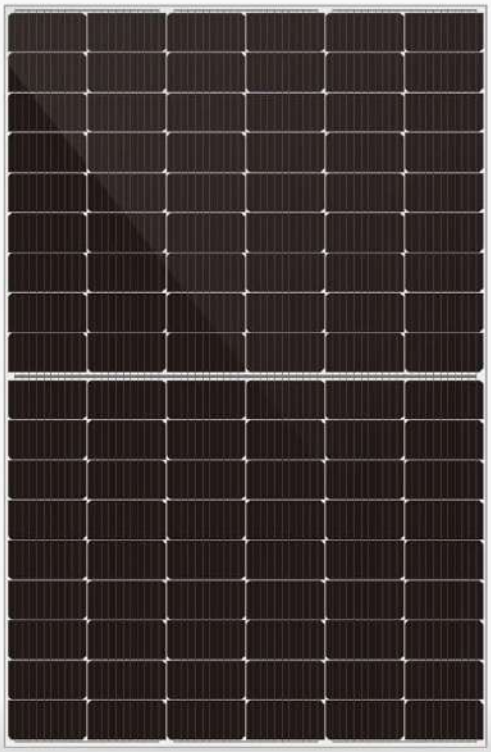
## DHM-54X10

0~+5W

# 390~420W

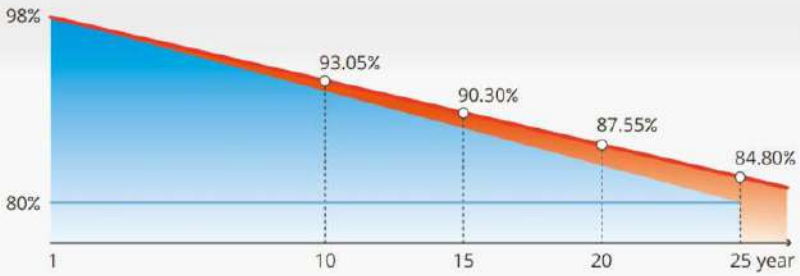
Half-Cell High Efficiency PV Module



Max Module Efficiency
21.51%

## Quality Guarantee

12-Year material & technology warranty
25-Year linear power output warranty




DAH Solar linear power output guarantee
Standard linear power output guarantee

### More Power Generation
Larger size of light receiving area and higher module conversion efficiency

### 10 Busbar Technology
Higher power collection density improves power generation

### Stable Generation Performance
Guaranteed 0~+5W positive tolerance and slower power attenuation:
first year ≤2%, 0.55% per year from 2-25

### Higher Power Gains and Lower Losses
Excellent low irradiance performance and low shadow loss

### Process Optimized and Upgraded
Lower risk of hot spot and stronger anti-PID ablity

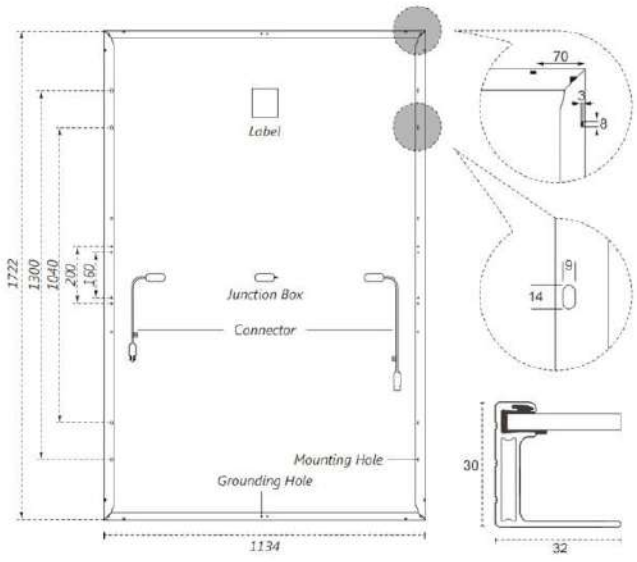
### Strong Environmental Adaptability and Great Durability
Certified by Dust-Sand, Salt-Mist, Ammonia etc. weather resistance tests and enhanced mechanical load: wind load (2400 Pascal) and snow load (5400 Pascal)

## Comprehensive Products and System Certificates

IEC 61215 / IEC 61730 / CE / FIDE / INMETRO
ISO 45001-
2018/International standards for occupational health & safety
ISO 14001-
2015/Standards for environmental management system
ISO 9001-
2015/Quality management system

# DHM-54X10 **390~420W**

## Design




## Mechanical Specification

| | |
|---|---|
| Cells Type | Dimension (L×W×T) |
| Mono 182×91mm | 1722×1134×30mm |
| Weight | Packing |
| 22kg | 36pcs/pallet, 936pcs/40HQ |
| *Output Cable* | 4.0mm², 300/400mm in length, |
| *(Including connector)* | length can be customized |
| *No.of Cells* | 108 (6×18) |
| *Glass* | 3.2mm High Transmission, Antireflection Coating |
| *Junction box* | IP68, 3 Bypass Diodes |
| *Connector* | MC4 Compatible |

## Operating Parameters

| | |
|---|---|
| *Maximum system voltage* | 1500V DC |
| *Operating Temperature* | -40 ~ +85°C |
| *Maximum series fuse rating* | 25A |
| *Snow load, frontside* | 5400Pa |
| *Wind load, backside* | 2400Pa |
| *Nominal operating cell temperature* | 45°C±2°C |
| *Application level* | Class A |

## STC-Electrical Characteristics

| Module Type | DHM-54X10 | | | | | | |
|---|---|---|---|---|---|---|---|
| *Maximum Power (Pmax/W)* | 390 | 395 | 400 | 405 | 410 | 415 | 420 |
| *Open-circuit Voltage (Voc/V)* | 36.4 | 34.6 | 36.8 | 37.0 | 37.2 | 37.4 | 37.6 |
| *Maximum Power Voltage (Vmp/V)* | 30.9 | 31.1 | 31.3 | 31.5 | 31.7 | 31.9 | 32.1 |
| *Short-circuit Current (Isc/A)* | 13.40 | 13.42 | 13.48 | 13.54 | 13.60 | 13.66 | 13.72 |
| *Maximum Power Current (Imp/A)* | 12.60 | 12.69 | 12.77 | 12.85 | 12.92 | 13.00 | 13.07 |
| *Module Efficiency (%)* | 19.97 | 20.23 | 20.48 | 20.74 | 21.00 | 21.25 | 21.51 |
| *Temperature Coefficient of Isc* | | | | 0.05%/°C | | | |
| *Temperature Coefficient of Voc* | | | | -0.31%/°C | | | |
| *Temperature Coefficient of Pmax* | | | | -0.35%/°C | | | |

*Standard Test Environment : Irradiance 1000W/m², Cell temperature 25°C, Spectrum AM1.5*

## NOCT-Electrical Characteristics

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Maximum Power (Pmax/W)* | 290 | 294 | 298 | 301 | 305 | 309 | 312 |
| *Open-circuit Voltage (Voc/V)* | 34.1 | 34.3 | 34.5 | 34.7 | 34.9 | 35.1 | 35.3 |
| *Maximum Power Voltage (Vmp/V)* | 29.0 | 29.2 | 29.4 | 29.6 | 29.8 | 29.9 | 30.1 |
| *Short-circuit Current (Isc/A)* | 10.79 | 10.84 | 10.89 | 10.94 | 10.99 | 11.04 | 11.09 |
| *Maximum Power Current (Imp/A)* | 10.01 | 10.07 | 10.13 | 10.19 | 10.25 | 10.31 | 10.38 |

*Standard Test Environment : Irradiance 800W/m², Ambient temperature 20°C, Spectrum AM1.5, Wind speed 1m/s*

## I-V Curve (DHM-54X10-420W)