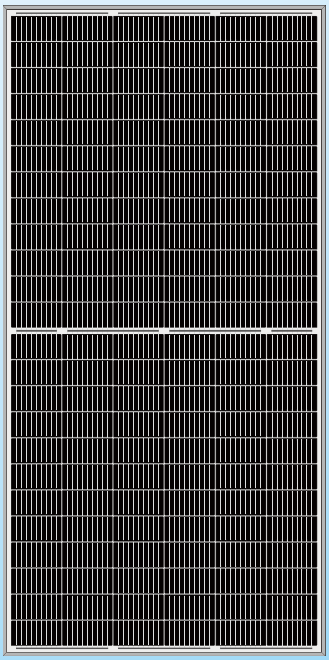
mono HCM72X9

# 400~415W

## *Half-Cell*
## *High Efficiency*
## *PV Module*

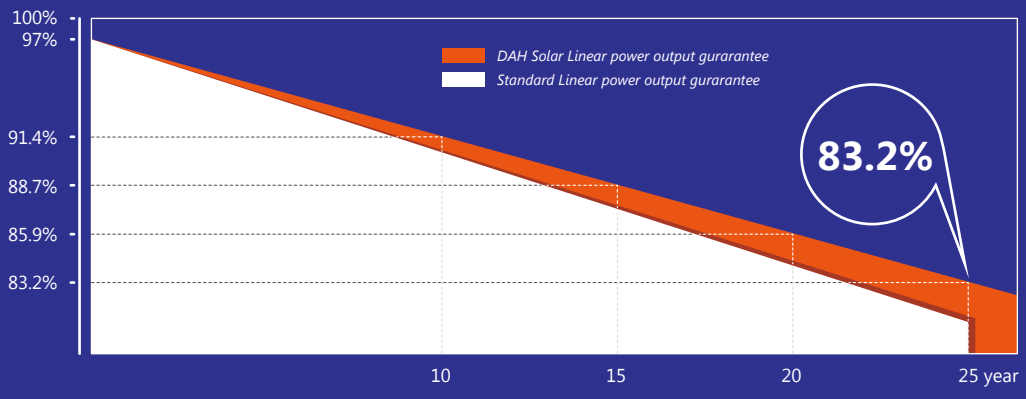


HIGH EFF.

HALF CELL

## Quality Guarantee

*10-year material & technology warranty*
*25-year linear power output warranty*




**20.63%**
*Max Module Eff.*

**0~+5W**
*Positive Tolerance*

## Performance Advantage

> **More Busbars**, the Less of Broken and cracking, As the Narrowed Cell Bus Bar Width, the Light Receiving Area and Power are Increased too.
> **Half-Cell technology and back passivation technology**, excellent photoelectric conversion efficiency.
> **Excellent low-light power generation performance**, even if it is half blocked, there is still 50% power output.
> **Series-parallel combined circuit design**, higher output power than conventional PERC.

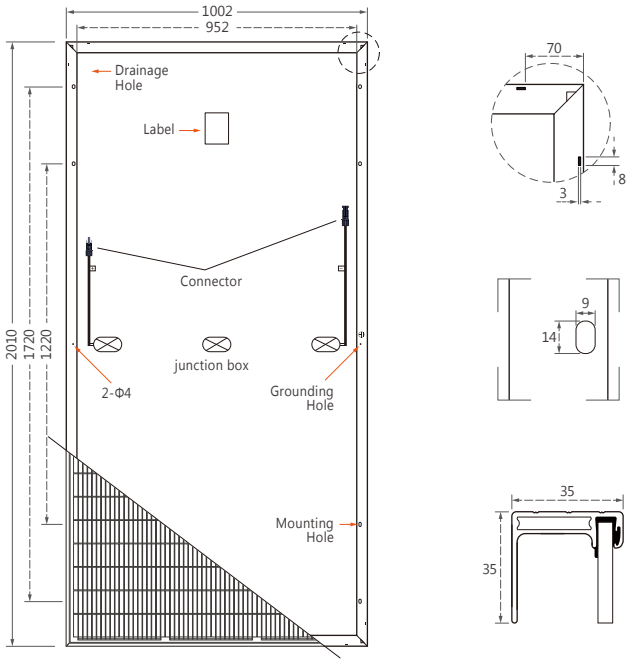
DAH Solar
— Top Runner of Smart PV Module —

SMART SOLAR SYSTEM

mono

*Half-Cell High Efficiency PV Module* **HCM72X9 400~415W**

## Design




### Mechanical Specification

| | |
|---|---|
| Cells Type | Mono 158.75×79.375mm |
| Weight | 23kg |
| Dimension (L×W×T) | 2010×1002×35mm |
| Cable | 4.0mm²; Portrait: N 400mm/P 300mm, Landscape: N 1400mm/P 1400mm |
| No.of Cells | 144 (6×24) |
| Glass | 3.2 mm High Transmission, Antireflection Coating |
| Junction box | IP68, 3 Bypass Diodes |
| Connector | QC4 or MC4 Compatible |
| Packing | 30pcs/pallet, 300pcs/20GP, 715pcs/40HQ |

### Operating Parameters

| | |
|---|---|
| Maximum system voltage | 1000V/1500V DC |
| Operating Temperature | -40 ~ +85℃ |
| Maximum series fuse rating | 20A |
| Snow load, frontside | 5400Pa |
| Wind load, backside | 2400Pa |
| Nominal operating cell temperature | 45℃±2℃ |
| Application level | Class A |

## Electrical Characteristics(STC)

| Module Type | HCM72X9-400W | HCM72X9-405W | HCM72X9-410W | HCM72X9-415W |
|---|---|---|---|---|
| Maximum Power (Pmax) | 400W | 405W | 410W | 415W |
| Open-circuit Voltage (Voc) | 49.0V | 49.2V | 49.4V | 49.6V |
| Maximum Power Voltage (Vmp) | 40.6V | 40.8V | 41.0V | 41.2V |
| Short-circuit Current (Isc) | 10.32A | 10.35A | 10.40A | 10.43A |
| Maximum Power Current (Imp) | 9.86A | 9.93A | 10.00A | 10.08A |
| Module Efficiency (%) | 19.87% | 20.12% | 20.37% | 20.63% |

| | |
|---|---|
| Power Tolerance | 0~+5W |
| Temperature Coeffcient of Isc | 0.05%/℃ |
| Temperature Coeffcient of Voc | -0.29%/℃ |
| Temperature Coeffcient of Pmax | -0.37%/℃ |
| Standard Test Environment | Irradiance 1000w/m², Cell temperature 25℃, Spectrum AM1.5 |

## Electrical Characteristics(NOCT)

| Module Type | HCM72X9-400W | HCM72X9-405W | HCM72X9-410W | HCM72X9-415W |
|---|---|---|---|---|
| Maximum Power (Pmax) | 302W | 305W | 309W | 313W |
| Open-circuit Voltage (Voc) | 47.3V | 47.5V | 47.7V | 47.9V |
| Maximum Power Voltage (Vmp) | 39.6V | 39.8V | 40.1V | 40.3V |
| Short-circuit Current (Isc) | 8.19A | 8.23A | 8.27A | 8.31A |
| Maximum Power Current (Imp) | 7.63A | 7.67A | 7.71A | 7.77A |
| Standard Test Environment | Irradiance 800w/m², Cell temperature 20℃, Spectrum AM1.5, Wind speed 1m/s | | | |

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