



**DAHAI SOLAR**

**NEW ENERGY NEW WORLD**  
www.dahaisolar.com

**DAHAI SOLAR**

Add: Shandong, China  
Web: www.dahaisolar.com  
Version No.: DH-EN-202510



CHINA'S DISTRIBUTED  
SOLAR LEADER

NEW  
ENERGY  
NEW  
WORLD

# COMPANY PROFILE

DAHAI SOLAR

Since our founding in 2011, at Dahai Solar we hold a profound belief in the power of the sun to provide clean and sustainable energy to the world. That is why we have made it our mission to manufacture premium photovoltaic cells and green energy products for businesses and consumers alike. Our team of dedicated experts works tirelessly to ensure that every single one of our photovoltaic cells is crafted to perfection, using the most advanced PV technologies available today. They produce superior energy output with optimum efficiency, meaning more energy can be produced from a smaller number of solar panels. This in turn permits end users to save on installation and maintenance costs while at the same time reducing their carbon footprint.

We implement rigorous quality control testing at every stage of the manufacturing process to make sure every panel we produce can withstand even the harshest weather conditions.

Clean energy only works if you can use it dependably and efficiently. To help achieve this, Dahai also manufactures hybrid inverters and a wide range of batteries to the same rigorous standards as our solar panels, ensuring top-notch performance and durability for a steady supply of renewable power.

So whether you need a battery to power your home or a portable energy source to take anywhere you might need it, Dahai has a solution for you.

With warehouses located in strategic locations around the globe, Dahai provides an efficient sale-to-service ecosystem, and we back up each one of our products with an industry-leading warranty and on-site support.

You can rely on our modules to generate energy for your businesses without worrying about frequent replacements or repairs. As a global leader in photovoltaic cell manufacturing, we understand every customer is different, so we will take into account all the unique factors that are most important to you, like budgets and energy production targets, while striving to help you achieve a fast return on your investment.

Dahai believes that clean energy should be made as accessible as possible to everyone on the planet. That is why we offer highly competitive pricing while still providing industry-leading products in service. We understand that the transition to clean energy is crucial to our future, and that's why we're committed to energy sustainability.

So if you're looking for a reliable and sustainable clean energy solution, look no further than Dahai Solar. At Dahai, we provide customized services and one-stop, one-to-one system solutions tailored to your specific needs.

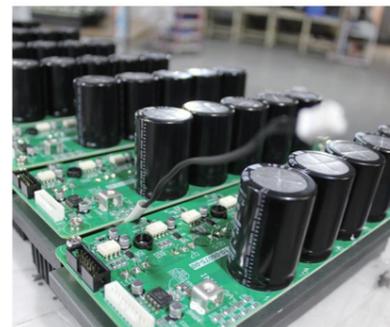
Contact us today to learn more about how our wide range of clean energy products can benefit you and our planet.

Dahai Solar. New energy for a new world.

## SOLAR PANELS BRAND CONTROLLED BY CENTRAL ENTERPRISES



A COMPREHENSIVE ENERGY SERVICE PROVIDER WITH SMART ENERGY MANAGEMENT AS ITS CORE





# PROJECT CASE

DAHAI SOLAR



1.1MW PV Power Plant Project of Louisvuitton Plant in Sibiu Province, Romania



Gansu Tianju power station project 49MW



Photovoltaic inverters in European photovoltaic parks project



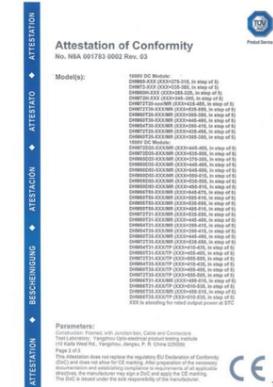
Laiwu Jinneng power station project 13MW



Distributed project of Dahai Group factory

# QUALIFICATION

DAHAI SOLAR



# QUALIFICATION

DAHAI SOLAR

# QUALIFICATION

DAHAI SOLAR

**IEC CB TEST CERTIFICATE**

Product: Rechargeable Lithium Iron Phosphate Battery System

Name and address of the applicant: Shandong Dahai New Energy Development Co., Ltd

Name and address of the manufacturer: Far East Battery Jiangsu Co., Ltd

Name and address of the factory: Far East Battery Jiangsu Co., Ltd

Model / Type Ref: DHV120-S1-2S, DHV120-S1-3S, DHV120-S1-4S, DHV120-S1-5S, DHV120-S1-6S, DHV120-S1-7S, DHV120-S1-8S, DHV120-S1-9S, DHV120-S1-10S, DHV120-S1-11S, DHV120-S1-12S, DHV120-S1-13S, DHV120-S1-14S, DHV120-S1-15S, DHV120-S1-16S, DHV120-S1-17S, DHV120-S1-18S, DHV120-S1-19S, DHV120-S1-20S

Additional information (if necessary may also be reported on page 2):

Customer's Testing Facility (CTF) (Stage used):

Signature: C. Lin

**ATTESTATION OF CONFORMITY**

Issued to: Shandong Dahai New Energy Development Co., Ltd

For the product: Rechargeable Lithium Iron Phosphate Battery System

Trade name: DAHAI

Type/Model: DHV120-S1-2S, DHV120-S1-3S, DHV120-S1-4S, DHV120-S1-5S, DHV120-S1-6S, DHV120-S1-7S, DHV120-S1-8S, DHV120-S1-9S, DHV120-S1-10S, DHV120-S1-11S, DHV120-S1-12S, DHV120-S1-13S, DHV120-S1-14S, DHV120-S1-15S, DHV120-S1-16S, DHV120-S1-17S, DHV120-S1-18S, DHV120-S1-19S, DHV120-S1-20S

Requirements: EN 301 488-17 V3.2:2020-06, EN 501 466-1 V2.3:2019-11, EN 503 202 V2.2:2019-07, EN 503 202 V2.2:2019-07, EN 61000-6-3:2019, EN 61000-6-3:2021

Signature: Minzhu Zhou

**ATTESTATION OF CONFORMITY**

Issued to: Shandong Dahai New Energy Development Co., Ltd

For the product: Rechargeable Lithium Iron Phosphate Battery System

Trade name: DAHAI

Type/Model: DHV120-S1-6S, DHV120-S1-7S, DHV120-S1-8S

Requirements: EN 301 488-17 V3.2:2020-06, EN 501 466-1 V2.3:2019-11, EN 503 202 V2.2:2019-07, EN 503 202 V2.2:2019-07, EN 61000-6-3:2019, EN 61000-6-3:2021

Signature: Minzhu Zhou

**SGS VERIFICATION OF COMPLIANCE**

Product Name: Solar Inverter

Product Description: Inverter used in PV system

Model No.: HYH, HYK, HYB, HYH, HYK, HYB, HYK

Trade Mark: DAHAI

Rating: Refer to page 2

Protection against Electric Shock: Class I

Software version: V1.0.2

Software version: CPUS DSP V1.0.1

Software version: CPUS ARM V1.0.2

Signature: David Liu

**SGS VERIFICATION OF COMPLIANCE**

Product Name: Solar Inverter

Product Description: Inverter used in PV system

Model No.: HYH, HYK, HYB, HYH, HYK, HYB, HYK

Trade Mark: DAHAI

Rating: Refer to page 2

Protection against Electric Shock: Class I

Software version: V1.0.2

Software version: CPUS DSP V1.0.1

Software version: CPUS ARM V1.0.2

Signature: David Liu

**Certificat de conformitate**

Product: Inverter fotovoltaic

Model: Inverter utilizat în sistem fotovoltaic

Model No.: HYH, HYK, HYB, HYH, HYK, HYB, HYK

Program de certificare: NBP-002-001-ZE-V01

Data de emitere: 2023-08-18

Program de certificare: NBP-002-001-ZE-V01

Data de emitere: 2023-08-18

**TEST REPORT Radio Spectrum Matters (RF)**

Test report No: 4910574.53

Identification of item tested: Rechargeable Lithium Iron Phosphate Battery System

Trade Mark: DAHAI

Model and/or type reference: DHV120-S1-2S, DHV120-S1-3S, DHV120-S1-4S, DHV120-S1-5S, DHV120-S1-6S, DHV120-S1-7S, DHV120-S1-8S, DHV120-S1-9S, DHV120-S1-10S, DHV120-S1-11S, DHV120-S1-12S, DHV120-S1-13S, DHV120-S1-14S, DHV120-S1-15S, DHV120-S1-16S, DHV120-S1-17S, DHV120-S1-18S, DHV120-S1-19S, DHV120-S1-20S

Features: Normal Voltage: 304.8 VDC for DHV120-S1-2S, 307.2 VDC for DHV120-S1-3S, 408.6 VDC for DHV120-S1-4S, 408.6 VDC for DHV120-S1-5S, 510.2 VDC for DHV120-S1-6S, 510.2 VDC for DHV120-S1-7S, 611.8 VDC for DHV120-S1-8S, 611.8 VDC for DHV120-S1-9S, 713.4 VDC for DHV120-S1-10S, 713.4 VDC for DHV120-S1-11S, 815.0 VDC for DHV120-S1-12S, 815.0 VDC for DHV120-S1-13S, 916.6 VDC for DHV120-S1-14S, 916.6 VDC for DHV120-S1-15S, 1018.2 VDC for DHV120-S1-16S, 1018.2 VDC for DHV120-S1-17S, 1119.8 VDC for DHV120-S1-18S, 1119.8 VDC for DHV120-S1-19S, 1221.4 VDC for DHV120-S1-20S

Signature: Tim Yan

**TEST REPORT Electromagnetic Compatibility (EMC)**

Test report No: 4910574.54

Identification of item tested: Rechargeable Lithium Iron Phosphate Battery System

Trade Mark: DAHAI

Model and/or type reference: DHV120-S1-2S, DHV120-S1-3S, DHV120-S1-4S, DHV120-S1-5S, DHV120-S1-6S, DHV120-S1-7S, DHV120-S1-8S, DHV120-S1-9S, DHV120-S1-10S, DHV120-S1-11S, DHV120-S1-12S, DHV120-S1-13S, DHV120-S1-14S, DHV120-S1-15S, DHV120-S1-16S, DHV120-S1-17S, DHV120-S1-18S, DHV120-S1-19S, DHV120-S1-20S

Features: Normal Voltage: 304.8 VDC for DHV120-S1-2S, 307.2 VDC for DHV120-S1-3S, 408.6 VDC for DHV120-S1-4S, 408.6 VDC for DHV120-S1-5S, 510.2 VDC for DHV120-S1-6S, 510.2 VDC for DHV120-S1-7S, 611.8 VDC for DHV120-S1-8S, 611.8 VDC for DHV120-S1-9S, 713.4 VDC for DHV120-S1-10S, 713.4 VDC for DHV120-S1-11S, 815.0 VDC for DHV120-S1-12S, 815.0 VDC for DHV120-S1-13S, 916.6 VDC for DHV120-S1-14S, 916.6 VDC for DHV120-S1-15S, 1018.2 VDC for DHV120-S1-16S, 1018.2 VDC for DHV120-S1-17S, 1119.8 VDC for DHV120-S1-18S, 1119.8 VDC for DHV120-S1-19S, 1221.4 VDC for DHV120-S1-20S

Signature: Tim Yan

**SHANDONG DAHAI NEW ENERGY DEVELOPMENT CO., LTD**

Technical Report: (8023)206-0002(RZ)

Sample Description: RECHARGEABLE LITHIUM ION PHOSPHATE BATTERY

Manufacturer: FAR EAST BATTERY JIANGSU CO., LTD

Labelled Age Grade: NOT RECORDED

Approved Age Grade: NOT RECORDED

Tested Age Grade: N/A

Test Starting Date: NOV 16, 2022

Signature: Lisa Bai

**Zertifikat für den NA-Schutz**

Hersteller / Antragssteller: Shandong Dahai New Energy Development Co., Ltd

Typ NA-Schutz: Integrierter NA-Schutz

Erzeuger des Erzeugergerätes Typ: HYH, HYK, HYB, HYH, HYK, HYB, HYK

Erzeuger des Erzeugergerätes: CPUS DSP V1.0.3, CPUS ARM V1.0.2

Neuzulassungsurteil: VDE-AR 816:2011-11 - Einwirkungsregeln um Niederspannungswerte

Mitgeteilte Normen / Normen: DIN VDE V 0184-100:2011-11, DIN VDE V 0184-100:2011-11

Signature: David Liu

**Potvrzení o nezávadnosti**

Zažadatel: Shandong Dahai New Energy Development Co., Ltd

Výrobek: Fotovoltaický a bateriový inverter

Model: Inverter použitý v systému fotovoltaického napájení

Model No.: HYH, HYK, HYB, HYH, HYK, HYB, HYK

Program de certificare: NBP-002-001-ZE-V01

Data de emitere: 2023-08-18

Program de certificare: NBP-002-001-ZE-V01

Data de emitere: 2023-08-18

**Certyfikat zgodności**

Zgłaszający: Shandong Dahai New Energy Development Co., Ltd

Produkt: Inwerter fotowoltaiczny (PV) i bateriowy (BIPV)

Model: Inwerter używany w systemie fotowoltaicznym

Model No.: HYH, HYK, HYB, HYH, HYK, HYB, HYK

Program de certificare: NBP-002-001-ZE-V01

Data de emitere: 2023-08-18

Program de certificare: NBP-002-001-ZE-V01

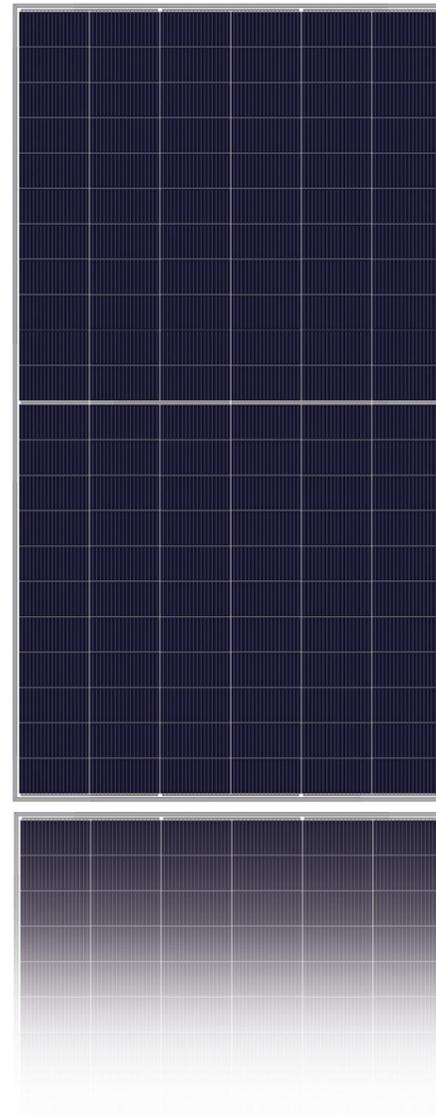
Data de emitere: 2023-08-18

# DHM66D50-HJT 700-725W

Ultra-high power 210 HJT double glass bifacial solar module

**30 YEARS** 30 YEAR LINEARITY POWER OUTPUT WARRANTY  
**25 YEARS** 25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

CE TUV UK CA MCS ISO 9001:2008 ISO 14001:2004 ISO 45001:2018 TUV CE CQC IEC 61215, IEC 61730



### MECHANICAL PROPERTIES

Cell Type	210R HJT
Component Weight	38kg
Component Size	2384x1303x35mm
Number of Cells	132(6x22)
Cable Cross-Sectional Area	4mm <sup>2</sup>
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	31 pcs/pallet/216Pcs per20'GP 558 pcs per 40 'HC

### WORKING PARAMETERS

Maximum System Voltage	1500V (TUV)
Operating Temperature	-40°C~+ 85°C
Maximum Series Fuse Rating	35A
Application Level	ClassA

### ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	DHM66D50-700/HJT	DHM66D50-705/HJT	DHM66D50-710/HJT	DHM66D50-715/HJT	DHM66D50-720/HJT	DHM66D50-725/HJT
Maximum Power (Pmax/W)	700	705	710	715	720	725
Voltage at Maximum Power Point (Vmp/V)	41.50	41.70	41.90	42.10	42.30	42.50
Current at Maximum Power Point (Imp/A)	16.87	16.91	16.95	16.98	17.02	17.06
Open Circuit Voltage (Voc/V)	49.50	49.80	50.10	50.30	50.50	50.70
Short Circuit Current (Isc/A)	18.02	18.09	18.16	18.34	18.30	18.37
Component Efficiency [%]	22.53%	22.70%	22.86%	23.02%	23.18%	23.34%
Power Tolerance (W)	0~+5					
Temperature Coefficient of Pmax	-0.29%/°C					
Temperature Coefficient of Voc	-0.24%/°C					
Temperature Coefficient of Isc	0.04%/°C					

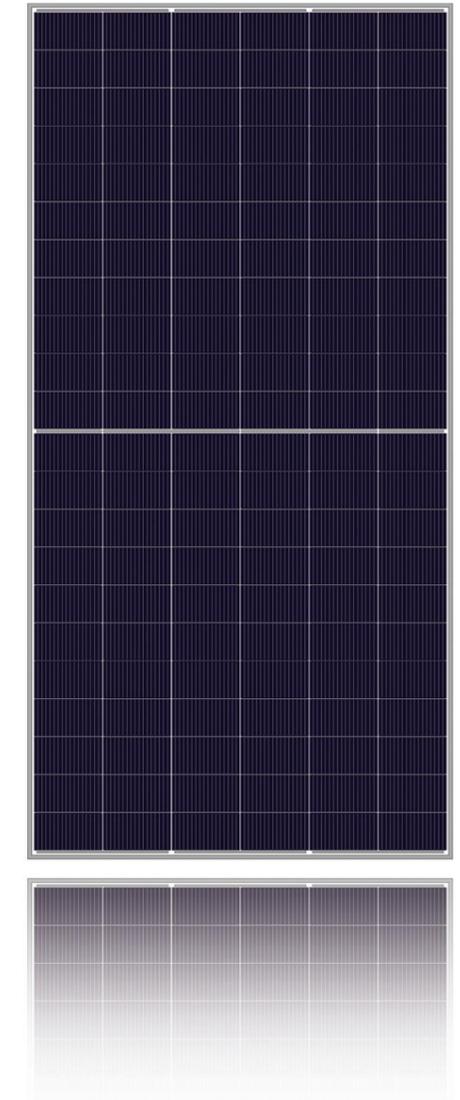
Standard Test Environment Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, spectrum AM1.5

# DHM66D50-TP 695-720W

High performance transparent N-type double glass bifacial solar module

**30 YEARS** 30 YEAR LINEARITY POWER OUTPUT WARRANTY  
**25 YEARS** 25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

CE TUV UK CA MCS ISO 9001: Quality Management System ISO 45001:Occupational Health And Safety Management System IEC 61215, IEC 61730



### MECHANICAL PROPERTIES

Cell Type	210 N-type
Component Weight	38kg
Component Size	2384x1303x30mm
Number of Cells	132(6x22)
Cable Cross-Sectional Area	4mm <sup>2</sup>
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	36 pieces/pallet 648 pieces /40 'container

### WORKING PARAMETERS

Maximum System Voltage	1500V (TUV)
Operating Temperature	-40°C~+ 85°C
Maximum Series Fuse Rating	35A
Application Level	ClassA

### ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	DHM66D50-695/TP	DHM66D50-700/TP	DHM66D50-705/TP	DHM66D50-710/TP	DHM66D50-715/TP	DHM66D50-720/TP
Maximum Power (W)	695	700	705	710	715	720
Voltage at Maximum Power Point (Vmp/V)	40.25	40.50	40.75	41.00	41.25	41.50
Current at Maximum Power Point (Imp/A)	17.27	17.28	17.30	17.32	17.33	17.35
Open Circuit Voltage (Voc/V)	48.20	48.50	48.80	49.10	49.40	49.70
Short Circuit Current (Isc/A)	18.31	18.34	18.37	18.40	18.45	18.51
Component Efficiency [%]	22.37%	22.53%	22.70%	22.86%	23.02%	23.18%
Power Tolerance (W)	0~+5					
Temperature Coefficient of Pmax	-0.29%/°C					
Temperature Coefficient of Voc	-0.24%/°C					
Temperature Coefficient of Isc	0.04%/°C					

Standard Test Environment Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, spectrum AM1.5

# DHM78D30-TP

## 630-660W

High performance transparent N-type double glass bifacial solar module

**30 YEARS** 30 YEAR LINEARITY POWER OUTPUT WARRANTY

**25 YEARS** 25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY






 ISO 9001: 2008 ISO 14001:2004  
 ISO 45001:2018 TUV CE CQC  
 IEC 61215, IEC 61730



### MECHANICAL PROPERTIES

Cell Type	Monocrystalline-N-type
Component Weight	35.5kg
Component Size	2465x1134x30mm
Number of Cells	156(6x26)
Cable Cross-Sectional Area	4mm <sup>2</sup>
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	36 pieces/pallet 576 pieces /40 'container

### WORKING PARAMETERS

Maximum System Voltage	1500V (TUV)
Operating Temperature	-40°C~+ 85°C
Maximum Series Fuse Rating	30A
Application Level	ClassA

### ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	DHM78D30-635/TP	DHM78D30-640/TP	DHM78D30-645/TP	DHM78D30-650/TP	DHM78D30-655/TP	DHM78D30-660/TP
Maximum Power (Pmax) [W]	635	640	645	650	655	660
Voltage at Maximum Power Point (VMP) [V]	47.70	47.90	48.10	48.30	48.50	48.70
Current at Maximum Power Point (Imp) [A]	13.31	13.36	13.41	13.46	13.51	13.55
Open Circuit Voltage (Voc) [V]	57.15	57.30	57.45	57.60	57.75	57.90
Short Circuit Current (Isc) [A]	13.94	14.00	14.06	14.12	14.18	14.24
Component Efficiency [%]	22.72%	22.90%	23.07%	23.25%	23.43%	23.61%
Power Tolerance	0~+5					
Temperature Coefficient of Pmax	-0.29%/°C					
Temperature Coefficient of Voc	-0.25%/°C					
Temperature Coefficient of Isc	0.044%/°C					
Standard Test Environment	Irradiance 1000W/m <sup>2</sup> , cell temperature 25°C, spectrum AM1.5					

# DHM66D60-TP

## 585-610W

Double glass bifacial solar module

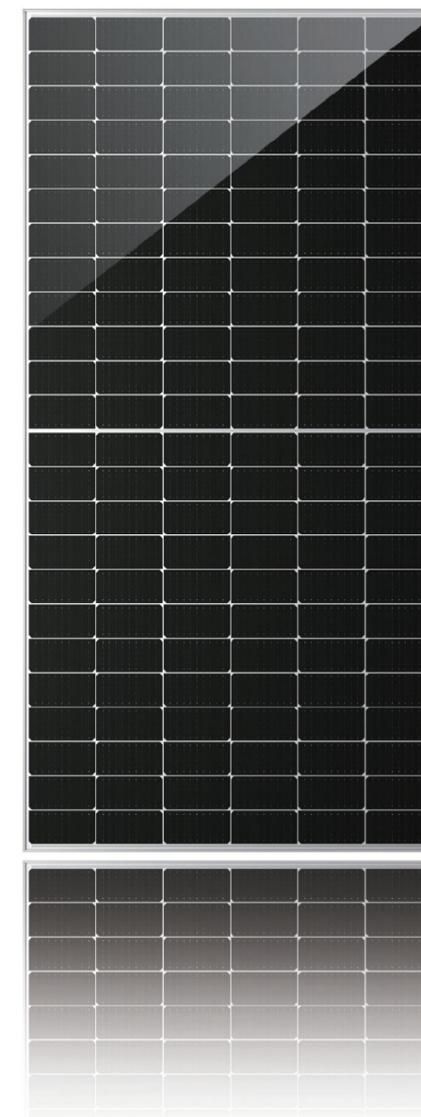
**30 YEARS** 30 YEAR LINEARITY POWER OUTPUT WARRANTY

**25 YEARS** 25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY






 ISO 9001: 2008 ISO 14001:2004  
 ISO 45001:2018 TUV CE CQC  
 IEC 61215, IEC 61730



### MECHANICAL PROPERTIES

Cell Type	210R+N-type
Component Weight	33.5kg
Component Size	2382x1134x30mm
Number of Cells	132(6x22)
Cable Cross-Sectional Area	4mm <sup>2</sup>
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	36 pieces/pallet 720 pieces /40' container

### WORKING PARAMETERS

Maximum System Voltage	1500V (TUV)
Operating Temperature	-40°C~+ 85°C
Maximum Series Fuse Rating	30A
Application Level	ClassA

### ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	DHM66D60-585/TP	DHM66D60-590/TP	DHM66D60-595/TP	DHM66D60-600/TP	DHM66D60-605/TP	DHM66D60-610/TP
Maximum Power (Pmax) [W]	585	590	595	600	605	610
Voltage at Maximum Power Point (Vmp) [V]	39.52	39.75	40.03	40.25	40.50	40.70
Current at Maximum Power Point (Imp) [A]	14.80	14.84	14.86	14.91	14.94	14.99
Open Circuit Voltage (Voc) [V]	47.50	47.70	47.90	48.10	48.30	48.90
Short Circuit Current (Isc) [A]	15.64	15.67	15.70	15.73	15.76	15.80
Component Efficiency [%]	21.64%	21.82%	22.01%	22.19%	22.38%	22.56%
Power Tolerance	0~+5					
Temperature Coefficient of Pmax	-0.30%/°C					
Temperature Coefficient of Voc	-0.25%/°C					
Temperature Coefficient of Isc	0.044%/°C					
Standard Test Environment	Irradiance 1000W/m <sup>2</sup> , cell temperature 25°C, spectrum AM1.5					

# DHM72D30-TP

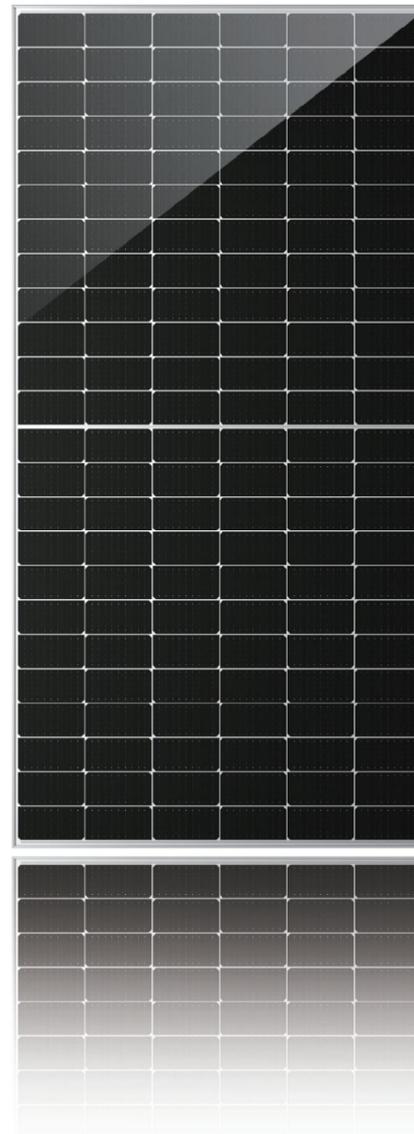
## 580-610W

High performance transparent N-Type double glass bifacial solar module

**30 YEARS** 30 YEAR LINEARITY POWER OUTPUT WARRANTY

**25 YEARS** 25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

ISO 9001: 2008 ISO 14001:2004  
 ISO 45001:2018 TUV CE CQC  
 IEC 61215, IEC 61730



### MECHANICAL PROPERTIES

Cell Type	Monocrystalline-N-type
Component Weight	31kg
Component Size	2279x1134x30mm
Number of Cells	144(6x24)
Cable Cross-Sectional Area	4mm <sup>2</sup>
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	36 pieces/pallet 720 pieces /40' container

### WORKING PARAMETERS

Maximum System Voltage	1500V (TUV)
Operating Temperature	-40°C~+ 85°C
Maximum Series Fuse Rating	30A
Application Level	ClassA

### ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	DHM72D30-580/TP	DHM72D30-585/TP	DHM72D30-590/TP	DHM72D30-595/TP	DHM72D30-600/TP	DHM72D30-605/TP	DHM72D30-610/TP
Maximum Power (Pmax) [W]	580	585	590	595	600	605	610
Voltage at Maximum Power Point (Vmp) [V]	44.45	44.75	45.05	45.25	45.45	45.65	45.85
Current at Maximum Power Point (Imp) [A]	13.05	13.07	13.10	13.15	13.20	13.25	13.30
Open Circuit Voltage (Voc) [V]	52.10	52.30	52.50	52.70	52.90	53.10	53.30
Short Circuit Current (Isc) [A]	14.31	14.37	14.41	14.47	14.53	14.59	14.65
Component Efficiency [%]	22.44%	22.64%	22.83%	23.02%	23.22%	23.41%	23.60%
Power Tolerance	0~+5						
Temperature Coefficient of Pmax	-0.29%/°C						
Temperature Coefficient of Voc	-0.25%/°C						
Temperature Coefficient of Isc	0.044%/°C						
Standard Test Environment	Irradiance 1000W/m <sup>2</sup> , cell temperature 25°C, spectrum AM1.5						

# DHM72T31-TP

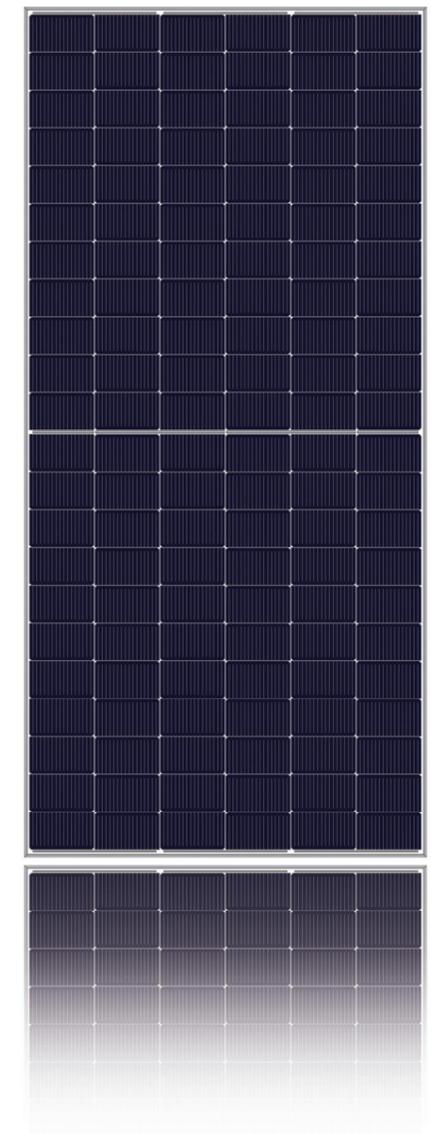
## 555-585W

High efficiency N-type module

**30 YEARS** 30 YEAR LINEARITY POWER OUTPUT WARRANTY

**25 YEARS** 25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

ISO 9001: 2008 ISO 14001:2004  
 ISO 45001:2018 TUV CE CQC  
 IEC 61215, IEC 61730



### MECHANICAL PROPERTIES

Cell Type	Monocrystalline-N-type
Component Weight	28kg
Component Size	2279x1134x35mm
Number of Cells	144(6x24)
Cable Cross-Sectional Area	4mm <sup>2</sup>
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	31 pieces/pallet 620 pieces /40' container

### WORKING PARAMETERS

Maximum System Voltage	1500V DC
Operating Temperature	-40°C~+ 85°C
Maximum Fuse Current Rating	25A
Application Level	ClassA

### ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	DHM72T31-555/TP	DHM72T31-560/TP	DHM72T31-565/TP	DHM72T31-570/TP	DHM72T31-575/TP	DHM72T31-580/TP	DHM72T31-585/TP
Maximum Power (Pmax) [W]	555	560	565	570	575	580	585
Voltage at Maximum Power Point (Vmp) [V]	42.95	43.25	43.55	43.85	44.15	44.45	44.75
Current at Maximum Power Point (Imp) [A]	12.92	12.95	12.97	13.00	13.02	13.05	13.07
Open Circuit Voltage (Voc) [V]	50.10	50.30	50.50	50.70	50.90	51.10	51.30
Short Circuit Current (Isc) [A]	14.01	14.07	14.13	14.19	14.25	14.31	14.37
Component Efficiency [%]	21.48%	21.67%	21.86%	22.06%	22.25%	22.44%	22.64%
Power Tolerance	0~+5						
Temperature Coefficient of Pmax	-0.29%/°C						
Temperature Coefficient of Voc	-0.25%/°C						
Temperature Coefficient of Isc	0.044%/°C						
Standard Test Environment	Irradiance 1000W/m <sup>2</sup> , cell temperature 25°C, spectrum AM1.5						

# DHM60D30-TP

## 485-510W

High performance transparent N-type double glass bifacial solar module

**30 YEARS** 30 YEAR LINEARITY POWER OUTPUT WARRANTY

**25 YEARS** 25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

ISO 9001: 2008 ISO 14001:2004  
 ISO 45001:2018 TUV CE CQC  
 IEC 61215, IEC 61730



### MECHANICAL PROPERTIES

Cell Type	Monocrystalline-N-type
Component Weight	26kg
Component Size	1908x1134x30mm
Number of Cells	120(6x20)
Cable Cross-Sectional Area	4mm <sup>2</sup>
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	36 pieces/pallet 864 pieces /40 'container

### WORKING PARAMETERS

Maximum System Voltage	1500V (TUV)
Operating Temperature	-40°C~+ 85°C
Maximum Series Fuse Rating	30A
Application Level	ClassA

### ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	DHM60D30-485/TP	DHM60D30-490/TP	DHM60D30-495/TP	DHM60D30-500/TP	DHM60D30-505/TP	DHM60D30-510/TP
Maximum Power (Pmax/W)	485	490	495	500	505	510
Voltage at Maximum Power Point (Vmp/V)	36.55	36.75	36.95	37.15	37.35	37.55
Current at Maximum Power Point (Imp/A)	13.27	13.33	13.40	13.46	13.52	13.58
Open Circuit Voltage (Voc/V)	43.50	43.70	43.90	44.10	44.30	44.50
Short Circuit Current (Isc/A)	13.87	13.93	13.99	14.05	14.11	14.17
Component Efficiency [%]	22.42%	22.65%	22.88%	23.11%	23.34%	23.57%
Power Tolerance (W)	0~+5					
Temperature Coefficient of Pmax	-0.29%/°C					
Temperature Coefficient of Voc	-0.25%/°C					
Temperature Coefficient of Isc	0.044%/°C					

Standard Test Environment Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, spectrum AM1.5

# DHM54D35-TP

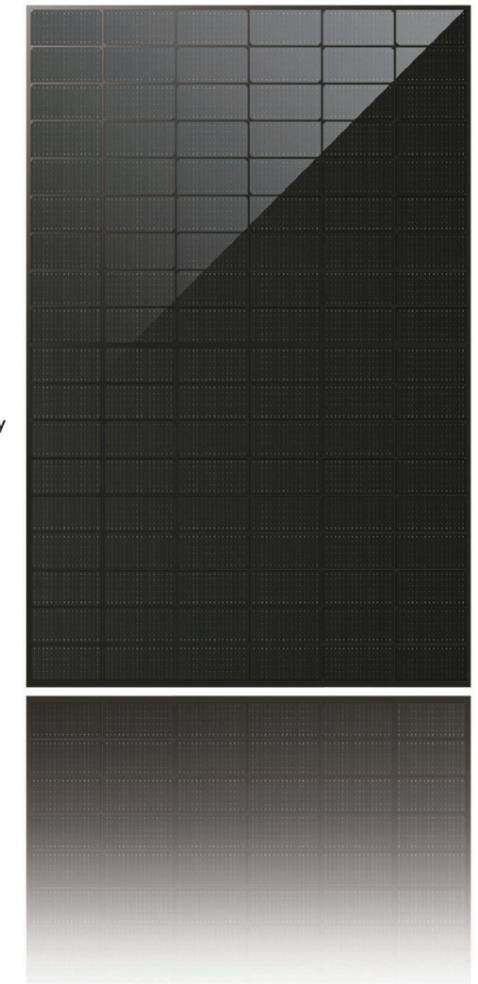
## 425-450W

High performance N-Type double glass bifacial solar module

**30 YEARS** 30 YEAR LINEARITY POWER OUTPUT WARRANTY

**25 YEARS** 25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

ISO 9001: Quality Management System  
 ISO 45001: Occupational Health And Safety Management System  
 IEC 61215, IEC 61730



### MECHANICAL PROPERTIES

Cell Type	Monocrystalline-N-type
Component Weight	22kg
Component Size	1762x1134x30mm
Number of Cells	108(6x18)
Cable Cross-Sectional Area	4mm <sup>2</sup>
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	36 pcs/pallet/216Pcs per20"GP 936 pcs per 40 'HC

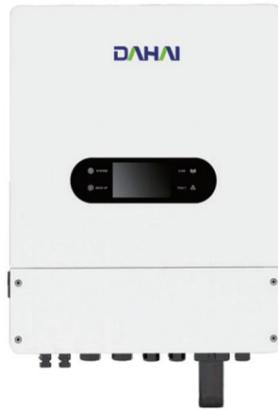
### WORKING PARAMETERS

Maximum System Voltage	1500V (TUV)
Operating Temperature	-40°C~+ 85°C
Maximum Series Fuse Rating	25A
Application Level	ClassA

### ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	DHM54D35-425/TP	DHM54D35-430/TP	DHM54D35-435/TP	DHM54D35-440/TP	DHM54D35-445/TP	DHM54D35-450/TP
Maximum Power (Pmax/W)	425	430	435	440	445	450
Voltage at Maximum Power Point (Vmp/V)	32.15	32.35	32.55	32.75	32.95	33.15
Current at Maximum Power Point (Imp/A)	13.22	13.29	13.36	13.44	13.51	13.57
Open Circuit Voltage (Voc/V)	37.35	37.55	37.75	37.95	38.15	38.35
Short Circuit Current (Isc/A)	13.94	14.01	14.08	14.15	14.21	14.28
Component Efficiency [%]	21.27%	21.52%	21.77%	22.02%	22.27%	22.52%
Power Tolerance (W)	0~+5					
Temperature Coefficient of Pmax	-0.350%/°C					
Temperature Coefficient of Voc	-0.274%/°C					
Temperature Coefficient of Isc	0.044%/°C					

Standard Test Environment Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, spectrum AM1.5



## Single Phase Hybrid Inverter

HyS-3/3.6/4/4.6/5/6/8K



## Low Voltage Three Phase Low Voltage Hybrid Inverter

HyL8/10/12K

Model	HyS3K	HyS3.6K	HyS4K	HyS4.6K	HyS5K	HyS6K	HyS8K
<b>Battery Input Data</b>							
Battery Type	Lithium or lead acid battery						
Rated Battery Voltage(V)	48						
Maximum Charging Voltage(V)	≤60 (Configurable)						
Maximum Charge/Discharge Current(A)	75	90	100	110	120	120	190
<b>PV Input Data</b>							
Maximum DC Input Power(kw)	6	7.2	8	9.2	10	12	16
Maximum DC Input Voltage(V)	500						
MPPT Operating Voltage Range(V)	150~450						
Starting Voltage(V)	125						
Maximum Input Current(A)	18	18/18	18/18	18/18	18/18	18/18	30/18
MPPT Number	1	2	2	2	2	2	2
<b>AC Output Parameters (On-Grid)</b>							
Maximum Output Apparent Power (KW)	3.3	3.96	4.4	5	5.5	6	8.8
Rated Output Voltage(V)	220/230						
Rated Output Frequency(Hz)	50/60HZ						
Max. Output Current(A)	15	18	20	22	25	27	40
Output Power Factor	~1 (-0.8 leading~+0.8 lagging)						
<b>AC Output Parameters(Off-Grid)</b>							
Rated Output Apparent Power(VA)	3000	3600	4000	4600	5000	6000	8000
Maximum Output Apparent Power(VA)	>200%,15sec						
Rated Output Voltage(V)	220/230						
Rated Output Frequency(Hz)	50/60(±0.2%)						
Max. Output Current(A)	14	16	18	21	23	27	40
<b>Efficiency</b>							
Max. Efficiency(PV)	98%						
Max. Efficiency(battery)	94.5%						
Europe. Efficiency	97.5%						
<b>Protection</b>							
PV Input Reverse Polarity Protection	Yes						
PV Insulation Resistance Detection	Yes						
Residual Current Detection	Yes						
Output Over Current Protection	Yes						
Output Short Circuit Protection	Yes						
Output Over Voltage Protection	Yes						
<b>Basic Data</b>							
Operation Temperature (°C)	-25~60						
Storage Temperature (°C)	-30~65						
Relative Humidity	0~95%						
Working Altitude (m)	≤4000m (frequency-decreasing above 2000m)						
Cooling	Intelligent forced air cooling						
Noise (db)	<55						
Weight (Kg)	21.5						
Size (Width x Height x Depth) (mm)	427*554*198						
Protection Class	IP66						
Topology	HF isolation (Battery side)						

Model	HyL8K	HyL10K	HyL12K
<b>Battery Input Data</b>			
Battery Type	Lithium or lead acid battery		
Rated Battery Voltage(V)	48		
Maximum Charging Voltage(V)	≤60 (Configurable)		
Maximum Charge/Discharge Current(A)	190	210	250
<b>PV Input Data</b>			
Maximum DC Input Power(kw)	16	20	24
Maximum DC Input Voltage(V)	1000		
MPPT Operating Voltage Range(V)	200~800		
Starting Voltage(V)	150		
Maximum Input Current(A)	18/18	36/18	36/18
MPPT Number	2	2	2
<b>AC Output Parameters (On-Grid)</b>			
Maximum Output Apparent Power (VA)	8800	11000	13200
Rated Output Voltage(V)	380/400		
Rated Output Frequency(Hz)	50/60HZ		
Max. Output Current(A)	13.3	16.7	20
Output Power Factor	1 (0.8 leading~0.8 lagging)		
<b>AC Output Parameters(Off-Grid)</b>			
Rated Output Apparent Power(VA)	8000	10000	12000
Maximum Output Apparent Power(VA)	>200%,15sec		
Rated Output Voltage(V)	380/400		
Rated Output Frequency(Hz)	50/60		
Max. Output Current(A)	13.3	16.7	20
<b>Efficiency</b>			
Max. Efficiency(PV)	98%		
Max. Efficiency(battery)	94.5%		
Europe. Efficiency	97.5%		
<b>Protection</b>			
PV Input Reverse Polarity Protection	Yes		
PV Insulation Resistance Detection	Yes		
Residual Current Detection	Yes		
Output Over Current Protection	Yes		
Output Short Circuit Protection	Yes		
Output Over Voltage Protection	Yes		
<b>Basic Data</b>			
Operation Temperature (°C)	-25~60(>45derate)		
Storage Temperature (°C)	-30~65		
Relative Humidity	0~95%		
Working Altitude (m)	≤4000m (frequency-decreasing above 2000m)		
Cooling	Intelligent forced air cooling		
Noise (db)	<55		
Weight (Kg)	38		
Size (Width x Height x Depth) (mm)	475X683X256		
Protection Class	IP66		
Topology	HF isolation (Battery side)		



## Three Phase High Voltage Hybrid Inverter

Hy-8/10/12K



## Three Phase High Voltage Hybrid Inverter

Hy-29.9/30/40/50/60K

Model	Hy8K	Hy10K	Hy12K
<b>Inverter Input / Output(Grid)</b>			
Rated Power (Input/Output)(kw)	12 / 8	14 / 10	16 / 12
Rated Voltage		380 / 400V a.c., 3W+N+PE	
Rated Frequency (Hz)		50 / 60	
Power Factor Range		0.8 leading~0.8 lagging	
Switch Time (ms)		<10	
Max.Continuous Current (Input/Output) (A a.c.)	17.4 / 11.6	20.3 / 14.5	23.2 / 17.4
Max.Output Overcurrent Protection (A a.c.)		400 / 60	
<b>Battery</b>			
Battery Type		Lithium / Lead-acid	
Battery Voltage Range (V d.c.)		125~800	
Rated Battery Voltage (V d.c.)	200	250	300
Max.Charge Current (A d.c.)		40	
Max.Discharge Current (A d.c.)		40	
Reverse Connect Protection		Yes	
<b>PV Input</b>			
No.of MPPT Tracker/ Strings		2 / 1+1	
Max.PV Input Power (kw)	12	15	18
Max.DC Voltage (v d.c.)		1000	
MPPT Voltage Range (V d.c.)		150~950	
Start-up Voltage (V d.c.)		200	
Max.Input Current/ String (A d.c.)		2*16	
Isc PV (Absolute Maximum)/ String (A d.c.)		2*24	
<b>AC Output(EPS) / Generator</b>			
EPS Rated Output Voltage		380 / 400V a.c., 3W+N+PE	
EPS Rated Output Frequency (Hz)		50 / 60	
EPS Rated Output Active Power (kW)	8	10	12
EPS Rated Output Apparent Power (kVA)	8	10	12
EPS Rated Output Current (A a.c.)	11.6	14.5	17.4
Overload Capacity (Off Grid)		110% 30s / 120% 10s / 150% 0.2s	
<b>Efficiency</b>			
MPPT Efficiency		99.90%	
Euro.Efficiency		97.50%	
Max.Efficiency		98%	
<b>Protection &amp; Feature</b>			
Insulation Monitoring		Yes	
Residual Current Monitoring		Yes	
Parallel Function		Yes	
Protection Degree		IP65	
Certifications	IEC 62109-1/2, IEC 62477-1, IEC 61000-6-1, IEC 61000-6-3, EN 50549-1, VDE-AR-N 4105, OVE R25, NA/EEA-NE7-CHUNE 217001&2/NTS 631, etc.		
Other Protection	Ground fault current monitoring, Earth fault detection, Residual current(RCD)Detection etc.		
<b>General Parameter</b>			
Storage Temperature		-25°C~+60°C	
Operating Temperature	-25°C ~ +60°C (Linely derating to 60% when exceed +45°C ~ +60°C)		
Humidity		0%~100% (Non-condensing)	
Max.Operating Altitude(m)		4000 (>2000 Derating)	
Noise (dB)		<35	
Machine Dimensions(W*H*D)(mm)		530*600*210	
Machine Weight/N.w. (kg)		35	

Model	Hy29.9K	Hy30K	Hy40K	Hy50K	Hy60K
<b>Inverter Input / Output(Grid)</b>					
Rated Power(kW)	29.9	30	40	50	60
Rated Voltage			380/400V a.c., 3W+N+PE		
Rated Frequency(Hz)			50/60		
Power Factor Range			0.8 leading~0.8 lagging		
Max.Continuous Current (Input/Output)(A a.c.)	90.8/45.4	91.2/45.6	121.6/60.8	152/76	182.4/91.2
Max.Output Overcurrent Protection (A a.c.)	68.1/64.7	68.4/65	91.2 /86.6	114/108.3	136.7/129.9
<b>Battery</b>					
Battery Type			Lithium / Lead-acid		
Battery Voltage Range (V d.c.)			135~850		
Rated Battery Voltage (V d.c.)	150	150	200	250	300
Max.Charge Current (A d.c.)			2*100		
Max.Discharge Current (A d.c.)			2*100		
Reverse Connect Protection			Yes		
<b>PV Input</b>					
No.of MPPT Tracker/Strings			4 / 2+2+2+2		
Max.PV Input Power (kW)	59.8	60	80		100
Max.DC Voltage(V d.c.)			1000		
MPPT Voltage Range (V d.c.)			150~850		
Start-up Voltage (V d.c.)			200		
Max.Input Current/ String (A d.c.)			8*20		
Isc PV (Absolute Maximum)/ String (A d.c.)			8*30		
<b>AC Output(EPS) / Generator</b>					
EPS Rated Output Voltage			380 / 400V a.c., 3W+N+PE		
EPS Rated Output Frequency (Hz)			50/60		
EPS Rated Output Active Power (kW)	29.9	30	40	50	60
EPS Rated Output Apparent Power (kVA)	29.9	30	40	50	60
EPS Rated Output Current (A a.c.)	45.4 / 43.2	45.6 / 43.3	60.8 / 57.7	76 / 72.2	91.2 / 86.6
Overload Capacity (Off Grid)			110% 30s / 120% 10s / 150% 0.2s		
<b>Efficiency</b>					
MPPT Efficiency			99.90%		
Euro.Efficiency			97.50%		
Max.Efficiency			98.5%		
<b>Protection &amp; Feature</b>					
Insulation Monitoring			Yes		
Residual Current Monitoring			Yes		
Parallel Function			Yes, up to 6pcs		
Protection Degree			IP66		
Certifications	EN IEC 62477-1, EN IEC 62109-1/2, EN IEC 61000-6-2, EN50549-1/10, VDE-AR-N 4105, G99:2022, AS/NZS 477.2:2020 etc.				
Other Protection	Ground fault current monitoring, Earth fault detection, Residual current(RCD)Detection etc.				
<b>General Parameter</b>					
Storage Temperature			-25°C~+60°C		
Operating Temperature	-25°C ~ +60°C (Linely derating to 60% when exceed +45°C ~ +60°C)				
Humidity			0%~100% (Non-condensing)		
Max.Operating Altitude (m)			4000		
Noise (dB)			<65		
Machine Dimensions(W*H*D)(mm)			544*880*278		
Machine Weight/N.w. (kg)			88		



## Single Phase on Grid Inverter

HonS-1.5/2/2.7/3/3.3/3.6/4K

Model No	HonS1.5K	HonS2K	HonS2.7K	HonS3K	HonS3.3K	HonS3.6K	HonS4K
<b>Input</b>							
Max. DC Input Power	3000W	4000W	5400W	6000W	6600W	7200W	8000W
Max. DC Input Voltage				550V			
Max. DC Input Current				20A			
MPPT Voltage Range				40-550V			
Recommended MPP Operating Voltage				360V			
No. of MPPT				1			
Max. No. of Strings Per MPPT				1			
<b>Output</b>							
Rated Output Power	1500W	2000W	2700W	3000W	3300W	3600W	4000W
Max. Output Power	1650VA	2200VA	2970VA	3300VA	3630VA	3960W	4400VA
Max. Output Current	7.5A	10A	13.5A	15A	15A	16.5A	18.5A
Rated Grid Voltage				220/230/240V			
Grid Voltage Range				90-290Vac			
Rated Grid Frequency				50Hz/60Hz			
Grid Frequency Range				45-55Hz/55-65Hz			
THD				<3% (Under rated power)			
Power Factor	>0.99 (Under rated power) / Adjustable range: 0.8 leading-0.8 lagging						
DC Current Injection	<0.5% (Under rated power)						
<b>System Data</b>							
Max. Efficiency				98.00%			
Euro. Efficiency				97.00%			
Humidity Range				0-100% non-condensing			
Cooling Type				Natural cooling			
Temperature Range				-25~+60°C			
Power Consumption at Night				<1W			
Max. Working Altitude				4000m			
Display				LED(optional: LCD)			
Communication Interface				WIFI(optional: RS485 or GPRS)			
<b>Protection</b>							
DC Reverse-Polarity Protection				Yes			
Short Circuit Protection				Yes			
Output Over Current Protection				Yes			
Output Over Voltage Protection				Yes			
Insulation Resistance Monitoring				Yes			
Residual Current Detection				Yes			
Surge Protection				Yes			
Grid Monitoring				Yes			
Islanding Protection				Yes			
Temperature Protection				Yes			
Integrated DC Switch				Optional			
<b>Mechanical Data</b>							
Dimensions (W*H*D)				295*210*120mm			
Weight				5.5kg			
Protection Class				IP66			



## Single Phase on Grid Inverter

HonS-4/5/6/8/10K

Model No	HonS4K	HonS5K	HonS6K	HonS8K	HonS10K
<b>Input</b>					
Max. DC Input Power	6000W	7500W	9000W	12000W	15000W
Max. DC Input Voltage				550V	
Max. DC Input Current	20/20A	20/20A	20/20A	20/26A	20/30A
MPPT Voltage Range				80-550V	
Recommended MPP Operating Voltage				360V	
No. of MPPT				2	
Max. No. of Strings Per MPPT	1/1				1/2
<b>Output</b>					
Rated Output Power	4000W	5000W	6000W	8000W	10000W
Max. Output Power	4.4kVA	5.5kVA	6.6kVA	8.8kVA	11kVA
Max. Output Current	20A	25A	27.3A	36.4A	45.5A
Rated Grid Voltage				230V	
Grid Voltage Range				160~270Vac (adjustable)	
Rated Grid Frequency				50Hz/60Hz	
Grid Frequency Range				45~55Hz/55~65Hz	
THD				<2% (Under the rated power)	
Power Factor	>0.99 (Under the rated power) /Adjustable range: 0.8 leading~0.8 lagging				
DC Current Injection	<0.5% (Under the rated power)				
<b>System Data</b>					
Max. Efficiency	98.1%	97.5%	98.1%	97.5%	98.1%
Euro. Efficiency	97.5%	98.1%	97.5%	98.1%	97.6%
Humidity Range				0-100% non-condensing	
Cooling Type				Natural cooling	Intelligent forced air cooling
Temperature Range				-25~+60°C	
Power Consumption at Night				<1W	
Max. Working Altitude				4000m	
Display				LED(optional: LCD)	
Communication Interface				WIFI(optional: RS485 or GPRS)	
<b>Protection</b>					
DC Reverse-Polarity Protection				Yes	
Short Circuit Protection				Yes	
Output Over Current Protection				Yes	
Output Over Voltage Protection				Yes	
Insulation Resistance Monitoring				Yes	
Residual Current Detection				Yes	
Surge Protection				Yes	
Grid Monitoring				Yes	
Islanding Protection				Yes	
Temperature Protection				Yes	
Integrated DC Switch				Yes	
<b>Mechanical Data</b>					
Dimensions (W*H*D)				347*368*167mm	347*368*190mm
Weight				10kg	11kg
Protection Class				IP66	



## Three Phase on Grid Inverter

HonT-6/8/10/12/15/17K

Model No	HonT6K	HonT8K	HonT10K	HonT12K	HonT15K	HonT17K
<b>Input</b>						
Max. DC Input Power	9000W	12000W	15000W	18000W	22500W	25500W
Max. DC Input Voltage				1100V		
Max. DC Input Current	20/20A				20/30A	
MPPT Voltage Range				180-1000V		
Recommended MPP Operating Voltage				650V		
No. of MPPT				2	2	
Max. No. of Strings Per MPPT	1/1				1/2	
<b>Output</b>						
Rated Output Power	6000W	8000W	10000W	12000W	15000W	17000W
Max. Output Power	6.6kVA	8.8kVA	11kVA	13.2kVA	16.5kVA	17.7kVA
Max. Output Current	10A	13.3A	16.7A	20A	24A	28.3A
Rated Grid Voltage				400V		
Grid Voltage Range				310-480Vac		
Rated Grid Frequency				50Hz/60Hz		
Grid Frequency Range				45~55Hz/55~65Hz		
THD				<2% (Under the rated power)		
Power Factor	>0.99 (Under the rated power)/Adjustable range: 0.8 leading~0.8 lagging					
DC Current Injection	<0.5%(Under the rated power)					
<b>System Data</b>						
Efficiency	98.5%	98.5%	98.6%	98.7%	98.7%	98.7%
Euro. Efficiency	98%	98%	98.2%	98.1%	98.2%	98.2%
Humidity Range				0~100%, non-condensing		
Cooling Type				Intelligent forced air cooling		
Temperature Range				-25~60°C		
Power Consumption at Night				<1W		
Max. Working Altitude				4000m		
Display				LED(optional: LCD)		
Communication Interface				WIFI(optional: RS485 or GPRS)		
<b>Protection</b>						
DC Reverse-Polarity Protection				Yes		
Short Circuit Protection				Yes		
Output Over Current Protection				Yes		
Output Over Voltage Protection				Yes		
Insulation Resistance Monitoring				Yes		
Residual Current Detection				Yes		
Surge Protection				Yes		
Grid Monitoring				Yes		
Islanding Protection				Yes		
Temperature Protection				Yes		
Integrated DC Switch				Yes		
<b>Mechanical Data</b>						
Dimensions (W*H*D)				427*450*204mm		
Weight				15kg		
Protection Class				IP66		



## Three Phase on Grid Inverter

HonT-20/23/25/28K

Model No	HonT20K	HonT23K	HonT25K	HonT28K	
<b>Input</b>					
Max. DC Input Power	30000W	34500W	37500W	42000W	
Max. DC Input Voltage			1100V		
Max. DC Input Current	30/30A		40/30A		40/40A
MPPT Voltage Range			180-1000V		
Recommended MPP Operating Voltage			650V		
No. of MPPT			2		
Max. No. of Strings Per MPPT			2/2		
<b>Output</b>					
Rated Output Power	20000W	23000W	25000W	28000W	
Max. Output Power	22kVA	25.3kVA	27.5kVA	30.8kVA	
Max. Output Current	32A	36.5A	41A	45A	
Rated Grid Voltage			400V		
Grid Voltage Range			310-480Vac		
Rated Grid Frequency			50Hz/60Hz		
Grid Frequency Range			45~55Hz/55~65Hz		
THD			<2% (Under the rated power)		
Power Factor	>0.99 (Under the rated power) / Adjustable range: 0.8 leading~0.8 lagging				
DC Current Injection	<0.5% (Under the rated power)				
<b>System Data</b>					
Max. Efficiency			98.8%		
Euro. Efficiency			98.2%		
Humidity Range			0~100%, non-condensing		
Cooling Type			Intelligent forced air cooling		
Temperature Range			-25~+60°C		
Power Consumption at Night			<1W		
Max. Working Altitude			4000m		
Display			LED(optional: LCD)		
Communication Interface			WIFI(optional: RS485 or GPRS)		
<b>Protection</b>					
DC Reverse-Polarity Protection			Yes		
Short Circuit Protection			Yes		
Output Over Current Protection			Yes		
Output Over Voltage Protection			Yes		
Insulation Resistance Monitoring			Yes		
Residual Current Detection			Yes		
Surge Protection			Yes		
Grid Monitoring			Yes		
Islanding Protection			Yes		
Temperature Protection			Yes		
Integrated DC Switch			Yes		
<b>Mechanical Data</b>					
Dimensions (W*H*D)			427*450*204mm		
Weight			18kg		
Protection Class			IP66		



## Three Phase on Grid Inverter

HonT-30/33/36/40/45/50K



## Three Phase on Grid Inverter

HonT-80/90/100/110/125K

Model No	HonT30K	HonT33K	HonT36K	HonT40K-Plus	HonT45K	HonT50K
<b>Input</b>						
Max. DC Input Power	45000W	49500W	54000W	60000W	67500W	75000W
Max. DC Input Voltage	1100V					
Max. DC Input Current	40/40/20A	40/40/20/20A		40/40/20/20A	40/40/20/20A	
MPPT Voltage Range	200-1000V					
Recommended MPP Operating Voltage	650V					
No. of MPPT	3		4			
Max. No. of Strings Per MPPT	2					
<b>Output</b>						
Rated Output Power	30000W	33000W	36000W	40000W	45000W	50000W
Max. Output Power	33kVA	36.3kVA	39.6kVA	44kVA	49.5kVA	55kVA
Max. Output Current	48A	53A	56A	65A	72A	80A
Rated Grid Voltage	400Vac					
Grid Voltage Range	310-480Vac					
Rated Grid Frequency	50Hz/60Hz					
Grid Frequency Range	45-55Hz/55-65Hz					
THD	<2% (Under rated power)					
Power Factor	>0.99 (Under rated power) / Adjustable range: 0.8 leading-0.8 lagging					
DC Current Injection	<0.5% (Under rated power)					
<b>System Data</b>						
Max. Efficiency	98.6%	98.6%	98.6%	98.6%	98.6%	98.7%
Euro. Efficiency	98.1%	98.1%	98.1%	98.2%	98.2%	98.2%
Humidity Range	0~100% non-condensing					
Cooling Type	Intelligent forced air cooling					
Temperature Range	-25~+60°C					
Power Consumption at Night	<1W					
Max. Working Altitude	4000m					
Display	LED(optional: LCD)					
Communication Interface	WIFI(optional: RS485 or GPRS)					
<b>Protection</b>						
DC Reverse-Polarity Protection	Yes					
Short Circuit Protection	Yes					
Output Over Current Protection	Yes					
Output Over Voltage Protection	Yes					
Insulation Resistance Monitoring	Yes					
Residual Current Detection	Yes					
Surge Protection	Yes					
Grid Monitoring	Yes					
Islanding Protection	Yes					
Temperature Protection	Yes					
Integrated DC Switch	Yes					
<b>Mechanical Data</b>						
Dimensions (W*H*D)	610*564*218mm					
Weight	37kg					
Protection Class	IP66					

Model No	HonT80K	HonT90K	HonT100K	HonT110K	HonT125K
<b>Input</b>					
Max. DC Input Power	120kW	135kW	150kW	165kW	187.5kW
Max. DC Input Voltage	1100V				
Max. DC Input Current	30A*8	30A*9	30A*10	30A*10	30A*10
MPPT Voltage Range	200~1000V				
Recommended MPP Operating Voltage	600V				
No. of MPPT	8	9	10	10	10
Max. No. of Strings Per MPPT	2				
<b>Output</b>					
Rated Output Power	80kW	90kW	100kW	110kW	125kW
Max. Output Power	88kVA	99kVA	110kVA	121kVA	137.5kVA
Max. Output Current	127A	142.9A	158.8A	174.6A	199.3A
Rated Grid Voltage	400V				
Grid Voltage Range	310~480Vac				
Rated Grid Frequency	50Hz/60Hz				
Grid Frequency Range	45~55Hz/55~65Hz				
THD	< 2% (Under the rated power)				
Power Factor	>0.99 (Under rated power) / Adjustable range: 0.8 leading-0.8 lagging				
DC Current Injection	< 0.5% (Under the rated power)				
<b>System Data</b>					
Max. Efficiency	98.6%	98.6%	98.7%	98.7%	98.9%
Euro. Efficiency	98.1%	98.1%	98.1%	98.1%	98.2%
Humidity Range	0-100% non-condensing				
Cooling Type	Intelligent forced air cooling				
Temperature Range	-25~+60°C				
Power Consumption at Night	< 1W				
Max. Working Altitude	4000m				
Display	LED(optional: LCD)				
Communication Interface	WIFI(optional: RS485 or GPRS)				
<b>Protection</b>					
DC Reverse-Polarity Protection	Yes				
Short Circuit Protection	Yes				
Output Over Current Protection	Yes				
Output Over Voltage Protection	Yes				
Insulation Resistance Monitoring	Yes				
Residual Current Detection	Yes				
Surge Protection	Yes				
Grid Monitoring	Yes				
Islanding Protection	Yes				
Temperature Protection	Yes				
Integrated DC Switch	Yes				
<b>Mechanical Data</b>					
Dimensions (W*H*D)	1050*620*333mm				
Weight	85kg				
Protection Class	IP66				



# High Voltage Three Phase on Grid Inverter

HonT-100/125/136K-HV

Model No	HonT100K-HV	HonT125K-HV	HonT136K-HV
<b>Input</b>			
Max. DC Input Power	150kW	187.5kW	204kW
Max. DC Input Voltage		1100V	
Max. DC Input Current		30A*10	
MPPT Voltage Range		200~1000V	
Recommended MPP Operating Voltage		720V	
No.of MPPT		10	
Max. No. of Strings Per MPPT		2	
<b>Output</b>			
Rated Output Power	100kW	125kW	136kW
Max. Output Power	110kVA	138kVA	150kVA
Max. Output Current	127A	158.8A	172.6A
Rated Grid Voltage		500V	
Grid Voltage Range		422~550Vac	
Rated Grid Frequency		50Hz/60Hz	
Grid Frequency Range		45~55Hz/55~65Hz	
THD		< 2% (Under the rated power)	
Power Factor	> 0.99 (Under rated power) / Adjustable range: 0.8 leading-0.8 lagging		
DC Current Injection		< 0.5% (Under the rated power)	
<b>System Data</b>			
Max. Efficiency	98.9%	98.9%	98.9%
Euro. Efficiency	98.3%	98.4%	98.4%
Humidity Range		0-100% non-condensing	
Cooling Type		Intelligent forced air cooling	
Temperature Range		-25~+60°C	
Power Consumption at Night		< 1W	
Max. Working Altitude		4000m	
Display		LED(Optional: LCD)	
Communication Interface		WIFI(Optional: RS485 or GPRS)	
<b>Protection</b>			
DC Reverse-Polarity Protection		Yes	
Short Circuit Protection		Yes	
Output Over Current Protection		Yes	
Output Over Voltage Protection		Yes	
Insulation Resistance Monitoring		Yes	
Residual Current Detection		Yes	
Surge Protection		Yes	
Grid Monitoring		Yes	
Islanding Protection		Yes	
Temperature Protection		Yes	
Integrated DC Switch		Yes	
<b>Mechanical Data</b>			
Dimensions (W*H*D)	1050*620*333mm		
Weight	85kg		
Protection Class	IP66		



## DH-CNB-231005



Product Parameters	
Product Model	DH-CNB-231005
Nominal Voltage	51.2V
Rated Capacity	104Ah
Operating Voltage	42V~58.4V
Standard Charging Current	50A
Max. Charging Current	100A
Max. Discharge Current	100A
Working Temperature	0~40°C(Charging)-20~40°C(Discharging)
Storage Temperature	65%±20RH-10°C~35°C(1 month)25°C±2(3 months)
Communication	CAN/RS485
Cycle Life	>6000 cycles@25°C 50A charge and discharge 90%DOD
Altitude	0~3000
Waterproof Level	IP20
Humidity Range	5%~80%
Packaging Information	Net size: 580*460*172.4mm Carton packing: 630*500*260mm Pallet(1*1.1*1.2m)per pallet: 14 boxes 20-foot container: 150boxes40-foot container: 300boxes
Weight/kg	Net weight: 48±3 Packing weight: 50

# DHLV-LFP-5000

## Wall-Mounted Residential ESS



**Safety**  
-LiFePO4 safe battery chemistry  
-Smart built-in BMS and comprehensive hardware protection



**Expandability**  
-Support up to 6 PACKs in parallel connection



**Accuracy**  
-Dynamic SOC calibration



**Durability**  
6,000 cycles at 95% DOD



**Compatibility**  
-Compatible with most mainstream inverters  
-Compact furniture style, suitable for wallmounting that saves installation space



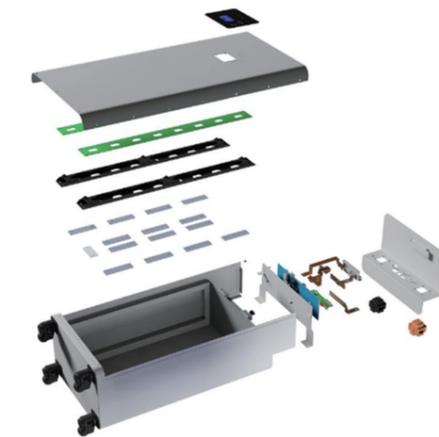
**Certificates**  
CE, IEC62619, UN38.3, MSDS



Model	DHLV-LFP-5000
Total Energy	5.22kwh
Usable Energy*	4.96kWh
Voltage Range	44.8~57.6V
Rated Capacity	102Ah
Nominal Voltage	51.2V
Max. Charge Voltage	57.6V
Nominal Charging Current	50A
Max. continuous charging current	50A
Nominal Discharge Current	80A
Max. continuous discharging current	80A
DOD	95%
Communication Interface	CAN/RS485/WiFi
Max parallel quantity	6
Dimension(L*W*H)	(420±2)*(161±2)*(640±2)(mm)
Net Weight	(45±1)(kg)
Operating Condition	Indoor
Storage Temperature Range	When the storage time is less than 3 months, it is recommended to store at a temperature of 0-45 °C, ≤ 90% RH, and an SOC range of 20%-50% SOC
	When the storage time is more than 3 months, it is recommended to store at a temperature of 15-30 °C, < 90% RH, and an SOC range of 20%-50% SOC
	When the storage time exceeds 6 months, it is necessary to adjust the SOC of the battery cell to 20- 50% SOC, ≤ 90% RH, and the recommended storage temperature is 5-25 °C
Operating Temperature	High SOC(>50% SOC) storage is not allowed during storage, and full charge storage is prohibited.
	Charging 0~55 °C Discharging -15~55 °C
Humidity	15%~85%(RH)(No Condensation)
Cooling Type	Natural
IP Rating of Enclosure	IP20
Configuration	16S
Class of Protection	Class I
Installation Method	Wall-mounted/Floor-standing
Supply Connection	Fixed power cord
Authentication Level	UN38.3/CE -EMC/CE-RED/CB-IEC62619



# DH-280T15



Items	Specifications
Rated Energy(kWh)	14.336KWh
Configuration	1P16S
Nominal Voltage(V)	51.2V
Working Voltage( V)	42V~58.4V
Nominal Capacity(Ah)	280Ah
Rated Charge/ Discharge Current( A)	100A @25± 2°C
Maximum Charging Current	200A@25± 2°C
Maximum Discharging Current	200A @25± 2°C
Working Temperature	0 - 4 0 °C( Charge) - 2 0 - 4 0 °C( Discharge)
Humidity(%)	5~80%
Altitude Limited( m)	0-3000m
Weight(Kg)	113Kg± 3kg
Dimension(mm)	817×412×267mm
Cycle Life	6000 cycles @25°C 100ACharge and discharge current 80%DOD
IP Grade	IP20
Communication Mode	CAN&RS485

## DH-314T16R



Items	Specifications
Rated Energy(kWh)	16.076KWh
Configuration	1 P16S
Nominal Voltage(V)	51.2V
Working Voltage( V)	45.2V~57.2V
Nominal Capacity(Ah)	31 4 Ah
Rated Charge/ Discharge Current( A)	150A @25+2°C
Maximum Charging Current	200A@25±2°C
Maximum Discharge Current	200A @25+ 2°C
Working Temperature	0-40°C(Charge)-20-40°C( Discharge)
Humidity(%)	5~80%
Altitude Limited( m)	0-3000m
Weight(Kg)	1 23Kg± 3kg
Dimension(mm)	817x41 5x267mm
Cycle Life	6000 cycles @25°C150ACharge and discharge current 80%DOD
IP Grade	IP20
Communication Mode	CAN&RS485



## DHV-DS-100 Stack-Mounted Residential ESS

- Safety**  
LFP Battery, Intelligent BMS and protective hardware providing complete protection
- Easy Installation**  
Modular design, stackable up to 21 packs
- Beauty**  
Furniture style that goes together with your home
- Durability**  
6,000 cycles at 90% DOD
- Compatibility**  
Suitable for most mainstream inverters
- Certificates**  
CE,EMC,IEC62619,IEC62477, UN38.3,MSDS

Model	DHV-DS-100					
Battery Type	LFP					
Number of Connection	2pcs	3pcs	4pcs	5pcs	6pcs	7pcs
Total Energy	10.44kWh	15.67kWh	20.89kWh	26.11kWh	31.33kWh	36.56kWh
Usable Energy	9.92kWh	14.88kWh	19.85kWh	24.81kWh	29.77kWh	34.73kWh
Max.Parallel Strings	3P					
Voltage	102.4V	153.6V	204.8V	256V	307.2V	358.4V
Nominal Charging Voltage	115.2V	172.8V	230.4V	288V	345.6V	403.2V
Max. Charging/Discharging Current	50A					
Discharge Cut-off Voltage	89.6V	134.4V	179.2V	224V	268.8V	313.6V
Battery Efficiency	95%					
Maximum Recommended DOD	95%					
Communication	RS485/CAN					
IP Rating	IP55					
Operating Temperature	-10~50°C					
Altitude	≤5,000m					
Humidity	5% ~ 95%					
Warranty	10 years					
Dimension	720*420*608mm 720*420*758mm 720*420*908mm 720*420*1058mm 720*420*1208mm 720*420*1358mm					
Net Weight	113kg	163kg	213kg	263kg	313kg	363kg
Certificates	CE, EMC,IEC62619, IEC62477,UN38.3, MSDS					



# VERTICAL RESIDENTIAL ALL-IN-ONE ESS



Model	Ares 3KAL	Ares 3.6KAL	Ares 4KAL	Ares 4.6KAL	Ares 5KAL	Ares 5.5KAL	Ares 6KAL
<b>PV Input</b>							
Max. Input Power	4.5kW	5.4kW	6.0kW	6.9kW	7.5kW	8.3kW	9.0kW
Max. PV Voltage				550V			
MPPT Range				80-500V			
Full MPPT Range	90-500V	110-500V	120-500V	130-500V	150-500V	160-500V	170-500V
Normal Voltage				360V			
Startup Voltage				100V			
Max. Input Current				18.5x2A			
Max. Short Current				26x 2A			
No. of MPP Tracker / No. of PV String				2/2			
<b>Battery Port</b>							
Max. Charge/Discharge Power	3.0kW	3.6kW	4.0kW	4.6kW	5.0kW	5.5kW	6.0kW
Max. Charge/Discharge Current	80A				120A		
Battery Normal Voltage				51.2Vd.c.			
Battery Voltage Range				40- 60Vd.c.			
Battery Type				Li-ion / Lead-acid etc.			
<b>AC Grid</b>							
Max. Continuous Current	14.0A	17.0A	19.0A	22.0A	23.0A	26.0A	28.0A
Max. Continuous Power	3.0kVA	3.6kVA	4.0kVA	4.6kVA	5.0kVA	5.5kVA	6.0kVA
Nominal Grid Current	13.7/13.1A	16.4/15.7A	18.2/17.4A	21.0/20.0A	22.8/21.8A	25.0/24.0A	27.3/26.1A
Nominal Grid Voltage			198 to 242 @ 220/207 to 253 @ 230 V				
Nominal Grid Frequency			50/60 Hz				
Power Factor	0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)						
Current THD	<3%						
<b>AC Load Output(Back-up)</b>							
Max. Continuous Current	14.0A	17.0A	19.0A	22.0A	23.0A	26.0A	28.0A
Max. Continuous Power	3.0kVA	3.6kVA	4.0kVA	4.6kVA	5.0kVA	5.5kVA	6.0kVA
Max. Peak Current (10min)	20.5/19.6A	24.6/23.5A	27.3/26.1A	31.4/30A	34.1/32.7A	37.8/36.1A	41.0/39.2A
Max. Peak Power (10min)	4.5kVA	5.4kVA	6.0kVA	6.9kVA	7.5kVA	8.3kVA	9.0kVA
Nominal AC Voltage L-N				220/230Vd.c.			
Nominal AC Frequency				50/60 Hz			
Switching Time				<10ms			
Voltage THD				<3c			
<b>Efficiency</b>							
CEC Efficiency		97.0 %			98.1 %		
Max. Efficiency		97.6 %			98.1 %		
PV to Bat. Efficiency		98.1 %			98.1 %		
Bat. between AC Efficiency		96.8 %			96.8 %		

Model	Ares 3KAL	Ares 3.6KAL	Ares 4KAL	Ares 4.6KAL	Ares 5KAL	Ares 5.5KAL	Ares 6KAL
<b>Protection</b>							
PV Reverse Polarity Protection							Yes
Over Current/Voltage Protection							Yes
Anti-Islanding Protection							Yes
AC Short Circuit Protection							Yes
Residual Current Detection							Yes
Ground Fault Monitoring							Yes
Insulation Resister Detection							Yes
PV Arc Detection							Yes
Enclosure Protect Level							IP65 / NEMA4X
<b>General Data</b>							
Dimensions (L*W*H)							600x430x210mm
Weight							25kg
Topology							Transformerless
Cooling							Intelligent Fan
Relatively Humidity							0-10 0 %
Operating Temperature Range							-25 to 60 ° C
Operating Altitude							≤2000 ° m
Noise Emission							<25dB
Standby Consumption							<10W
Mounting							Wall Bracket
Communication with RSD							SUNSPEC
Display & Communication Interfaces							LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G
Certification & Approvals	NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2						
EMC	EN61000-6-2, EN61000-6-3						

Battery Cell Technology	DH-LFP-VLV					
Number of Pack	1pcs	2pcs	3pcs	4pcs	5pcs	6pcs
Usable Energy*	4.87kWh	9.73kWh	14.6kWh	19.46kWh	24.32kWh	29.19kWh
Voltage Range	44.8 ~ 57.6Vd.c					
Nominal Voltage	51.2Vd.c.					
Max. Charge Voltage	57.6Vd.c.					
Max. Continuous Charging Current	50A	100A	150A	160A	160A	160A
Max. Continuous Discharge Current	50A	100A	150A	160A	160A	160A
DOD	95%					
Communication	CAN/WIFI					
Dimension(L*W*H)	(600±2) * (215±2) *	(600±2) * (215±2) *	(600±2) * (215±2) *	(600±2) * (215±2) *	(600±2) * (215±2) *	(600±2) * (215±2) *
Net Weight	(360±3) mm (49±2) kg	(680±5) mm (95±4) kg	(1000±7) mm (141±6) kg	(1320±9) mm (187±6) kg	(1640±9) mm (234±6) kg	(1960±9) mm (280±6) kg
Operating Condition	Indoor or outdoor					
Operating Charging Temperature	0~50 °C					
Discharging Temperature	-15~50 °C					
Humidity	15% ~ 85% RH (No Condensation)					
Cooling Type	Natural					
Installation Method	IP66					
Heating film power(W)(optional)	Stacked installation					
Supply connection	130W					
WiFi	Fixed power cord					
Warranty	Yes					
Configuration	10 years (5 free warranty + 5 paid warranty)					
	IEC62619,IEC63056,IEC61000-6-1,IEC61000-6-3,IEC62477-1,IEC60730,IEC62040,UN38.3,MSDS					



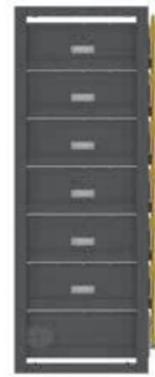
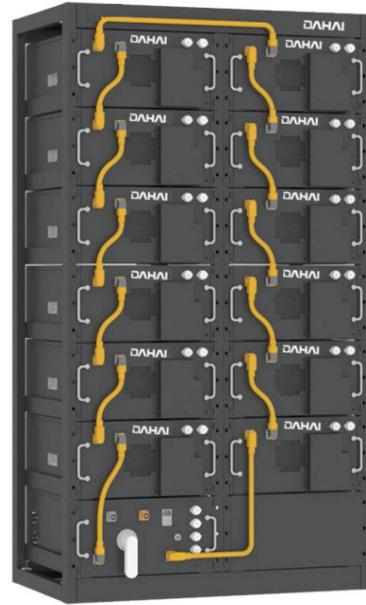
# VERTICAL RESIDENTIAL ALL-IN-ONE ESS – HV SERIES



Model	DH-LFP-VHV-9	DH-LFP-VHV-13	DH-LFP-VHV-18	DH-LFP-VHV-23
Number of Pack (pcs)	2	3	4	5
Total Energy (kWh)	9.21	13.82	18.43	23.04
Usable Energy* (kWh)	8.74	13.12	17.50	21.88
Voltage Range (Vd.c)	112~144	168~216	224~288	280~360
Nominal Voltage (V)	128	192	256	320
Charging Voltage Declared by Manufacturer (V)	144	216	288	360
Nominal Charging Current (A)		30		
Nominal Discharge Current (A)		30		
DOD (%)		95		
Communication	CAN/RS485			
Dimension ((L*W*H),mm)	(600±2)* (210±2)* (610±3)	(600±2)* (210±2)* (895±5)	(600±2)* (210±2)* (1180±7)	(600±2)* (210±2)* (1465±9)
Net Weight (kg)	(105±2)	(149±4)	(193±6)	(237±6)
Operating Condition	Indoor or outdoor			
Storage Temperature Range	> 1 month 0~35°C; ≤1 month -20~45°C			
Operating Charging Temperature	0~55 °C			
Discharging Temperature	0~55 °C			
Humidity	15% ~ 85%RH(No condensation)			
Cooling Type	Natural			
IP Rating of Enclosure	IP66			
Installation Method	Stacked installation			
Warranty	10 years (5 free warranty + 5 paid warranty)			
Battery Module Type	DH-LFP-VHV			
Total Energy	4.60kWh			
Usable Energy*	4.37kWh			
Voltage Range	56~72Vd.c			
Nominal Voltage	64V			
Charging Voltage Declared by Manufacturer	72V			
Upper Limit Charging Voltage	73V			
Discharge Cut-off Voltage	56V			
Lower Limit Discharging Voltage	52V			
Max. Continuous Charging Current	30A			
Max. Continuous Discharge Current	30A			
DOD	95%			
Dimension ((L*W*H),mm)	(600±2) * (210±2) * (285±2)			
Net Weight	(44±2) kg			

Battery Module Type	DH-LFP-VHV								
Operating Condition	Indoor or outdoor								
Operating Charging Temperature	0~55°C								
Discharging Temperature	0~55°C								
Humidity	15% ~ 85%RH(No Condensation)								
Configuration	(10S)2S								
Warranty	10 years (5 free warranty+5 paid warranty)								
PV Input									
Max. DC Input Power (kW)	5	6	7.5	9	12	15	18	22.5	
Max. PV Voltage (V)	1000								
Rated DC Input Voltage (V)	620								
DC Input Voltage Range (V)	150-1000								
MPPT Voltage Range (V)	150-850								
Full MPPT Range (V)	200-850		250-850		300-850		500-850		
Start-up Voltage (V)	160								
Max. DC Input Current (A)	20x2								
Max. Short Current (A)	30x2								
No. of MPPT Tracker/Strings	2/2								
Battery Port									
Battery Nominal Voltage (V)	150	200	200	250	300	350	450	500	
Battery Voltage Range (V)	80-600								
Max. Charge/Discharge Current (A)	30								
Max. Charge/Discharge Power (kW)	3	4	5	6	8	10	12	15	
Charging Curve	3 Stages								
Compatible Battery Type	Li-ion / Sodium-ion battery								
AC Grid									
Nominal AC Output Power (kW)	3	4	5	6	8	10	12	15	
Max. AC Input/Output Power (kVA)	4.5/3.3	6/4.4	7.5/5.5	9/6.6	12/8.8	15/11	18/13.2	22.5/16.5	
Max. AC Output Current (A)	5.3	7	8.5	10.5	13.5	17	21.5	27	
Nominal AC Voltage (V)	230/400								
Nominal AC Frequency (Hz)	50/60								
Power Factor	1 (-0.8-0.8) adjustable								
Current THD (%)	< 3%								
AC Load Output (Back-up)									
Nominal Output Power (VA)	3000	4000	5000	6000	8000	10000	12000	15000	
Nominal Output Voltage (V)	230/400								
Nominal Output Frequency (Hz)	50/60								
Nominal Output Current (A)	4.4	5.8	7.3	8.7	11.6	14.5	17.4	21.8	
Peak Output Power	3300VA,60s	4400VA,60s	5500VA,60s	6600VA,60s	8800VA,60s	11000VA,60s	13200VA,60s	16500VA,60s	
THDV (with linear load)	<3%								
Switching Time (ms)	<10								
Efficiency									
Europe Efficiency					97.50%		98.20%		98.30%
Max. Efficiency					98.00%		98.20%		98.30%
Battery Charge/Discharge Efficiency	98.00%								
Protection									
Reverse Polarity Protection	Yes								
Over Current / Voltage Protection	Yes								
Anti-islanding Protection	Yes								
AC Short-circuit Protection	Yes								
Leakage Current Detection	Yes								
Ground Fault Monitoring	Yes								
Grid Monitoring	Yes								
Enclosure Protect Level	IP66								
General Data									
Dimensions ((L*W*H),mm)	600 * 432 * 210								
Weight (kg)	25								
Topology	Transformerless								
Cooling Concept	Natural Convection						Intelligent Fan		
Relatively Humidity	0-100%								
Operating Temperature Range (°C)	-25 to 60°C								
Operating Altitude (m)	<4000								
Noise Emission (dB)	<40								
Standby Consumption (W)	<5								
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G								
Certification & Approvals	NRS097,G98/G99,EN50549-1,C10/C11,AS4777.2,VDE-AR-N4105,VDE0126, IEC62109-1, EC62109-2 EN61000-6-2,EN61000-6-3								
EMC									

## DHV-122 172 C & I ESS STE-HCI Series



## DHJ5120-J1 Rack-Mounted Residential ESS



- Safety**  
LFP Battery, Intelligent BMS and protective hardware providing complete protection
- Expandability**  
Support parallel connection number up to 10
- Accuracy**  
Dynamic SOC calibration
- Durability**  
6,000 cycles at 90% DOD, 15+ years design life
- Compatibility**  
Suitable for most mainstream inverters
- Certificates**  
UL, CE, IEC62619, UN38.3, MSDS

Model	DHV-122	DHV-172
Rated Energy	122.88kWh	172.032kWh
Cell Type	LFP(LiFePO4)	
Pack Capacity	10.24kWh	14.336kWh
Pack Number	12	
Rated Voltage	614.4V	
Working Voltage Range	537.6-700.8V	
Efficiency(@0.5C-rate)	96%	
Max.Charging/Discharging Current	200A	250A
Cycle Times	>6000 times(25°C, 0.5C, 90%DOD,80%EOL)	
Communication	LAN/CAN/RS485	
IP Level	IP20	
Working Temp.Range	0 to 50°C	
Working Humidity Range	5-95 % (No Condensation)	
Max.Altitude	3000m	
Dimension (W*D*H)	1000x560x1800mm	1000x710x1800mm
Weight	<1100kg	<1480Kg
Fire Protection	PACK Level Aerosol	

Model	DHJ5120-J1
Battery Type	LFP
Total Energy	5.22kWh
Usable Energy	4.96kWh
Voltage	51.2V
Cell Capacity	102Ah
Max. Parallel Connection Number	10P
Max. Charging Voltage	57.6V
Nominal Charging Current	50A(single) /110A(multiple in parallel)
Nominal Discharging Current	80A(single)/110A(multiple in parallel)
Discharge Cut-off Voltage	48V
Battery Efficiency	95%
Max. Recommended DOD	95%
Communication	RS485/CAN
IP Rating	IP20
Operating Temperature	-10~50°C
Cooling Type	Natural cooling
Altitude	≤5,000m
Humidity	5%~95%(No condensed water)
Battery Protection	Over-current/Over-voltage/Short-circuit/Under-voltage/Over temperature
Warranty	10 years
Dimension	560*390*131mm
Net Weight	45kg
Case Material	Metal
Color	Black
Installation	Ground Installation



# DH-X-HV-460V206AH

## High Voltage Stackable Energy Storage System

- Smart Control**  
Advanced BMS with real-time monitoring and remote management  
CAN 2.0 communication protocol for transparent data control
- Flexible Architecture**  
4-6 module flexible configuration (64-96kWh capacity range)  
Modular design saves installation space
- High Efficiency & Reliability**  
460V high-voltage architecture reduces transmission loss  
8,000 cycle life ensures long-term value  
Multiple protection mechanisms (overcharge/discharge/current)
- Typical Applications**  
Commercial peak shaving  
Premium residential energy independence  
PV system energy storage

### PDU HV-PDU 1000VDC103A(WIFI)

Operating Voltage	250~1000V
Rated Charge/Discharge Current	120A
Max.Charge/Discharge Current	130A
Operating Temperature Range	-10°C~55°C
Weight	≈28kg
Waterproof Rating	IP20
Dimensions (W x D x H)	558*695*235mm



### Module HV-Tower-76.8V206Ah

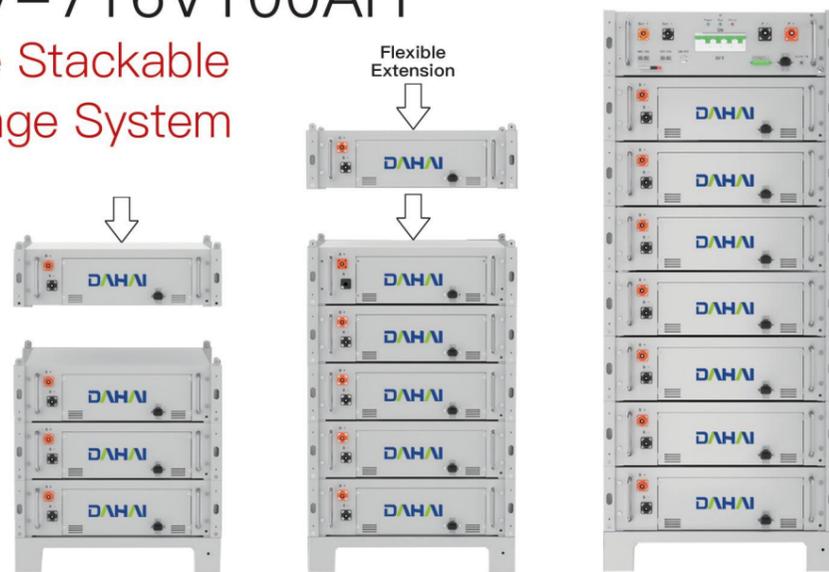
Battery Type	LiFePO4(LFP)
Rated Voltage	76.8Vdc
Rated Capacity	206Ah
Rated Energy	16kWh
Rated Charge/Discharge Current	120A
Max. Charge/Discharge Current	130A
Operating Temperature Range	-10°C~55°C
Waterproof Rating	IP20
Weight	≈125kg
Dimensions (W x D x H)	559*690*235mm



Model	DH-X-HV- 460V206Ah		
Main Parameter			
Battery Type	LiFePO4		
Module Nominal Energy(kWh)	16		
Mini. Energy of Module (kwh)	15.5		
Module Nominal Voltage (V)	76.8		
Rated Capacity(Ah)	206		
No. of System Module Series Connections (Optional)	4	5	6
Rated Voltage of the System(V)	307.2	384	460.8
System Working Voltage(V)	268.8-345.6	336-432	403.2-518.4
System Nominal Energy(kVh)	64	80	96
Mini. Discharge Energy of the System (kWh)	60.74	75.93	91.12
Charge/Discharge Current (A)	Rated Current	120	
	Max. Current	130	
	Overload Current	150(10sec,25°C)	
Status Indicator Light	Blue: Battery system start status, green: Battery system operation status, Red:Battery system fault status		
Communication Protocol	CAN2.0		
Operating Temperature Range (°C)	-10°C - 55°C		
Operating Humidity Range	≤95% (No condensation)		
Operating Altitude	≤2000m		
System Cooling Method	Fan cooling		
Waterproof Rating	IP20		
Installation Place	Indoors		
Net Weight (kg)	≈528-778		
Dimensions (mm)	676*1800*707		
Storage Temperature(°C)	0~35		
Recommended Depth of Discharge (DOD)	90%		
Fire Protection System	Aerosol (optional)		
Cycle Life	≥8000 Cycles (25°C±2°C, 0.5C, 80%DOD@65%EOL)		
Certification	5 Years(Under Warranty Terms)		
Energy Throughput <sup>[1]</sup>	133MWh	166MWh	200MWh
Certification	Cell: UL 1973/IEC62619/CEIROHS/MSDS/UN38.3		

# DH-X-HV-716V100AH

## High Voltage Stackable Energy Storage System



### Product Model HV-PDU 1000VDC100A(WIFI) (A06)

Operating Voltage	250~1000Vdc
Rated Charge/Discharge Current	50A
Max. Charge/Discharge Current	100A
Operating Temperature Range	-10°C~55°C
Waterproof Rating	IP20
Dimension(Wide*Depth*High)	517*745*155mm
Weight	~22kg
Parallel Connection	Support



### Product Model HV-Tower-32S100

Battery Type	LiFePO4(LFP)
Rated Voltage	102.4Vdc
Rated Capacity	100Ah
Rated power	10.24kW
Rated Charge/Discharge Current	50A
Max. Charge/Discharge Current	100A
Operating Temperature Range	-10°C~55°C
Waterproof Rating	IP20
Dimensions (W*D*H)	517*745*155mm
Weight	~88kg



Product Model	DH-X-HV-Series				
<b>Main Parameter</b>					
Battery Type	LiFePO4				
Module Power(kWh)	10.24				
Module Nominal Voltage(V)	102.4				
Rated Energy(Ah)	100				
No of System Module Series Connections (Optional)	3	4	5	6	7
System Rated Voltage(V)	307.2	409.6	512	614.4	716.8
System Operation Voltage(V)	268.8-345.6	358.4-460.8	448-576	537.6-691.2	672.2-806.4
System Rated Power(kWh)	30.72	40.96	51.2	61.44	71.68
System Discharge Power(kWh)	29.49	39.32	49.15	58.98	68.81
Charge/Discharge Current (A)	Rated Current		50		
	Max. Current		100		
	Overload Current		115(10sec,25°C)		
Status Indicator Light	Blue: battery system start status, green: battery system running status, red: battery system fault status				
Communication Protocol	CAN2.0				
Working Temperature Range	-10°C- 55°C				
Working Humidity Range	≤95% (No condensation)				
Working Altitude	≤2000m				
System Cooling Method	Fan cooling				
Waterproof Grade	IP20				
Installation Location	Indoor				
Net Weight (kg)	45+90*N(N is the number of modules)				
Max. Size (mm)	765*577*1380				
Storage Temperature	0~35				
Recommended Discharge Depth	90%				
Cycle Life	≤8000 Cycles (25°C+2°C,0.5C,80%DOD@65%EOL)				
Certification	Cell:UL1973/EC62619/UL9540A/TUV/CE/MSDS/UN38.3				
Warranty	5 Years(Under Warranty Terms)				
Energy Throughput	67MWh	89MWh	112MWh	134MWh	156MWh



DH-R100-211-CE



DH-ESS-135kW/282kWh-0.48kV  
 DH-ESS-135kW/289kWh-0.48kV  
 DH-ESS-75kW/289kWh-0.48kV

Model	DH-R100-211-CE
Cell Type	LFP-300Ah
Grouping Mode	1P44S*5
Charge/Discharge Rate	0.5P@25°C
Nominal Energy (kWh)	211
Voltage Range(V)	600~803
<b>AC Side</b>	
AC Voltage (V)	400 (-20%~15%)
Rated Power (kW)	100
PCS Maximum Efficiency (%)	98
Total Harmonic Distortion Ratio (%)	<3
<b>System Parameters</b>	
Work Temp Range (°C)	-20~50 (derating required at above 45°C)
Work Humidity Range (%)	5~95
Cooling Mode	Liquid-cooled
Altitude (m)	≤2000 (> 2000 Derated Use)
Maximum System Efficiency (%)	90
System Cycle Life	>8000,0.5c@25°C,90%DOD
Fire Protection System	Aerosol FSS
Ingress Protection	IP55
Communication Port	4G, RS485, Ethernet
Communication Protocol	Modbus/MQTT
Certification	GB/T36276, IEC62619, IEC62477, IEC61000, UN38.3
Dimension (W*D*H)mm	1340*1300*2260
Weight (T)	2.6

System Model	DH-ESS-135kW/282kWh-0.48kV	DH-ESS-135kW/289kWh-0.48kV	DH-ESS-75kW/289kWh-0.48kV
<b>Battery Parameters</b>			
Battery Cell Type	LFP/306Ah	LFP/314Ah	LFP/314Ah
Battery Configuration	1P288S	1P288S	1P288S
Battery Capacity at DC Side (BOL)	282kWh	289kWh	289kWh
Maximum Charging Rate / Nominal Discharge Duration	0.5C / 2 Hours	0.5C / 2 Hours	0.26C / 3.85 Hours
Battery Rated Voltage	921V		
Battery Voltage Range	806V~1,000V		
Battery Cooling Method	Liquid Cooling		
<b>AC Parameters</b>			
Rated Power	135kW	135kW	75kW
Rated Voltage	480V±10%		
Rated Frequency	60Hz		
Max. THD of Current	<3% (at nominal power)		
<b>General Parameters</b>			
Topology	Transformerless		
Size(W*H*D)	1,350*2,400*1,350mm (4.43*7.87*4.43 ft)		
Weight	3,000kg		
IP Level	IP54		
Anti-Corrosion	C4 Standard, C5 Optional		
Fire Protection System	Aerosol, Smoke, and Temperature Detector, NFPA 68-Compliant Deflagration Panel, NFPA 69-Compliant Ventilation System with Combustible Gas Detection(Optional).		
Operating Temperature	-30°C~50°C(>45°C derating) / -4°F~122°F (>113°F derating)		
Max. Operating Altitude	3,000m		
Communication Protocol	Modbus TCP/IP		
Communication Interface	RS485 / Ethernet		
Compliance Standard	IEEE1547:2018, UN38.3, FCC part15B		



- Compact and Fashionable design**
  - Latest design can compatible all EVs
  - Compact & fashionable design can match all your modern home & business building styles
  - High cost-effective & Steady performance
- Easy Use**
  - Support various payment method, such as RFID / credit card / App etc
  - With HMI easy operate the EV Charger flexibly, Or with the classic LED display all parameters
- Safety and protection**
  - Comply with the latest leakage protection standard
  - Multiple protection to ensure the users safety
  - IP55 & IK10
- Innovation**
  - Rail mounting make the installation easily
  - Intelligent error diagnosis



- High efficiency**
  - Support high power charging up to 120kW can meet the market main popular EVs charging requirement
  - Support dual charging plugs which can charging two EVs at the same time with steady performance
- Excellent adaptability**
  - Compact design takes small space
  - With high standard cabinet design can use for indoor & outdoor freely
- Intelligent control**
  - OCA listed brand, comply with the latest OCPP protocol standard
  - Intelligent payment solution can support RFID / Credit card / Apps etc
  - Intelligent communication solution including Bluetooth / Wifi / Ethernet / 4G
- Safety & Protection**
  - Comply with the latest leakage protection standard
  - Multiple protection to ensure the users safety
  - IP54 & IK10
  - EMC comply with Class B

Model		DH7/11/22kwHJL Series		DH7/11/22kwHJL Series	
For		Europe		North America	
Power Input	Input Type	1-Phase	3-Phase	1-Phase	
	Input Wiring Scheme	1P+N+PE	3P+N+PE	1P+N+PE	
	Rated Voltage	230VAC±10%	380VAC±10%	L1:100VAC±10%/ L2:230VAC±10%	
	Rated Current	16A or 32A			
	Grid Frequency	50Hz or 60Hz			
Power Output	Output Voltage	230VAC±10%	380VAC±10%	L1:100VAC±10%/ L2:230VAC±10%	
	Maximum Current	16A or 32A			
	Rated Power	7kW	11kW or 22kW	3.5KW/7kW	
User Interface	Charge Connector	Type 2/GBT		Type 1 Plug	
	Cable Length	5m or Optional			
	LED Indicator	Green/Blue/Red			
	LCD Display	4.3 Inch Touch Color Screen(Optional)			
	RFID Reader	ISO/IEC 14443 RFID Card Reader			
	Start Mode	RFIDCard/PasswordLogin(Optional)			
Communication	Backend	Bluetooth / Wi-Fi /Cellular(Optional) / Ethernet(Optional)			
	Charging protocol	OCPP-1.6J			
Safety and Certification	Energy Metering	Embedded Meter Circuit Component With 1% accuracy			
	Residual Current Device	DC 6mA+Type A AC 30mA			
	Ingress Protection	IP55			
	Impact Protection	IK10			
	Cooling Method	Natural Cooling			
	Electrical Protection	Over/Under Voltage Protection,Over Current Protection, Short Circuit protection, Over/Under Temperature Protection,Lightning Protection,Ground Protection			
	Certification	CE			
Environment	Certification and Conformity	IEC61851-1,IEC62196-1/-2,SAE J1772			
	Mounting	Wall-mount/Pole-mount			
	Storage Temperature	-40°C - +85°C			
	Operating Temperature	-30°C - +50°C			
	Max. Operating Humidity	95%, Non-condensing			
Mechanical	Product Dimension	348mm*258mm*175mm (L*W*H)			
	Package Dimension	412mm*302mm*252mm (L*W*H)			
	Weight	4kg(Net ) / 14kg(Gross)			
	Accessory	Cable Holder,Pedestal(Optional)			

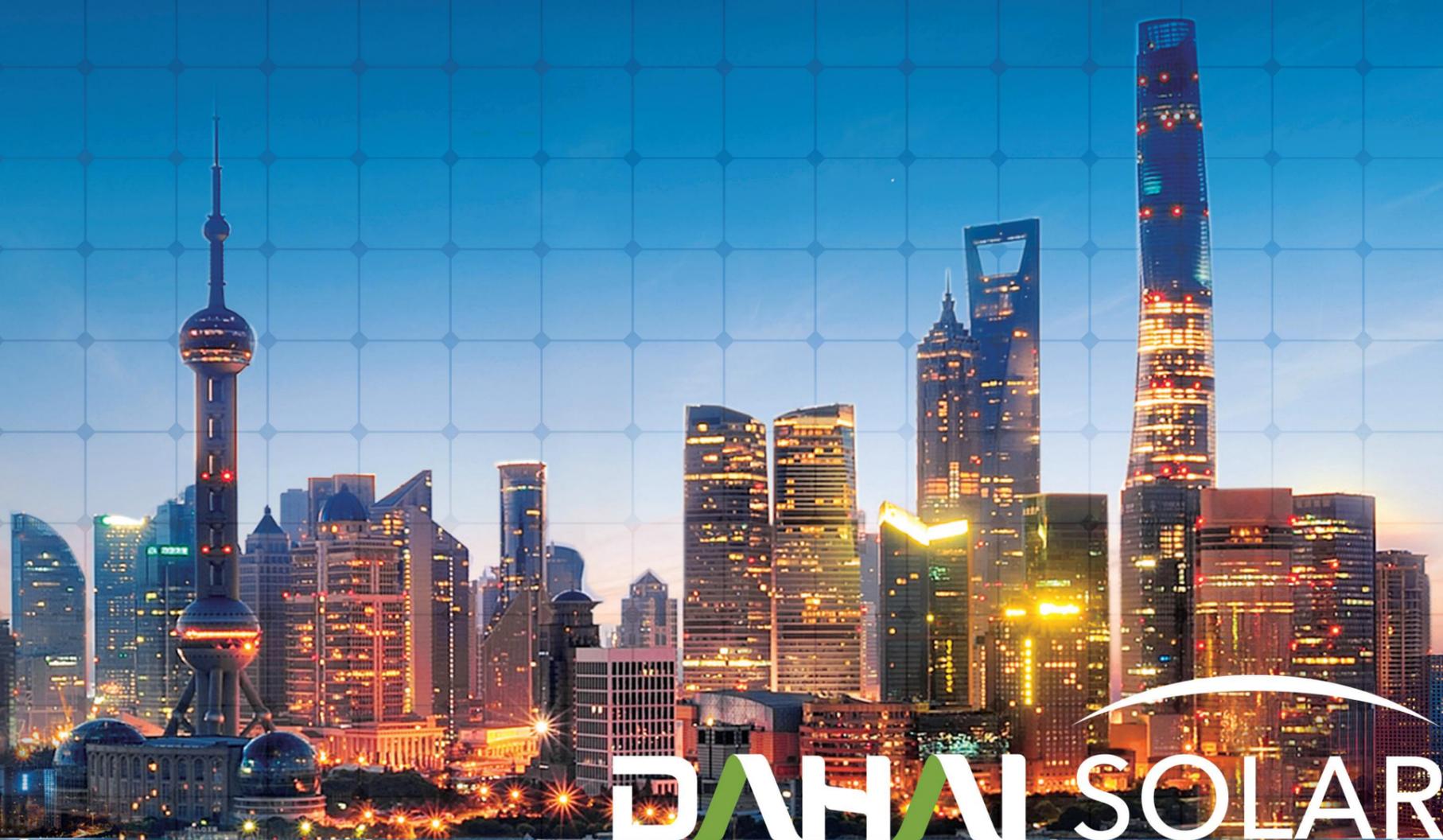
Model		DH120/240kwHJL Series		DH120/240kwHJL Series	
For		Europe		North America	
Power Input	Input Type	3-Phase			
	Input Wiring Scheme	3P+N+PE			
	Rated Voltage	380VAC±15%			
	Max. THDi	5%			
	Min. Power Factor	0.98			
Power Output	Grid Frequency	50Hz or 60Hz			
	Output Voltage	250V-1000V DC			
	Maximum Current	200A, 250A(optional)			
	Rated Power	120-240kW			
	Number of Connectors	1 or 2			
User Interface	Charge Connector	CCS2/GBT		CCS Combo 1 Plug	
	LED Indicator	Green/Blue/Red,Progress Indicator			
	LCD Display	7 Inch Touch Color Screen			
	RFID Reader	ISO/IEC 14443 RFID Card Reader			
	Start Mode	RFID Card or APP			
Communication	Backend	Ethernet/Cellular, optional: WIFI			
	Charging Protocol	OCPP-1.6J			
Safety and Certification	Energy Metering	Meter With 1% Accuracy			
	Residual Current Device	Yes			
	Internal FUSE	Yes			
	Ingress Protection	IP54			
	Impact Protection	IK10			
	Cooling Method	Fan Cooling			
	Max. Operating Noise Level	65dB			
Environment	Electrical Protection	Over/Under Voltage Protection,Over Current Protection, Short Circuit Protection, Over/Under Temperature Protection,Lightning Protection, Ground Protection			
	Certification	CE			
	Certification and Conformity	IEC62196-1/-3,IEC 61851-1/-23/-24			
	Mounting	Free-standing Cabinet			
	Storage Temperature	-40°C - +75°C			
Mechanical	Operating Temperature	-30°C - +55°C			
	Max. Operating Humidity	95%, Non-condensing			
	Max. Operating Altitude	2000m			
	Product Dimension	1680mm*700mm*450mm or 1920mm*750mm*750mm(L*W*H)			
Mechanical	Package Dimension	1850mm*1050mm*685mm or 2120mm*1220mm*1160mm(W*D*H)			
	Weight	208-480kg(Net)/323-523kg(Gross)			

# DAHAI SOLAR PROVIDES SOLUTIONS FOR LOW-CARBON GREEN LIFE

As the largest distributed photovoltaic module supplier and service provider in Shandong Province, Dahai Solar actively responds to the national call for energy conservation and emission reduction. The company always prioritizes environmental protection, advocating new ideas in environmental protection technology while continuing to innovate and develop the new energy industry. It also implements the "carbon peak" policy. The highest development goal of the enterprise is to achieve zero carbon power generation, zero carbon data centers, zero carbon networks, and zero carbon home construction, making a significant contribution to establishing a zero carbon earth.

To adapt to the new normal and demonstrate new achievements, the company will adhere to top-level design, promote pattern innovation, and implement structural adjustments. The development strategy will focus on market operations and cultural support while strengthening research and development in science and technology for independent innovation. It will closely revolve around the advantages of new energy and new material industries, upgrading technical equipment and industrial levels. Besides the development of new energy, the company will also industrialize and integrate information in new emerging industries such as composite materials and chemical sectors. This continuous enhancement of enterprise innovation and sustainable development will lead to better, faster, and more substantial progress. The ultimate goal is to build a comprehensive international competitiveness for the modern enterprise group.

Dahai Group aims to shine in the new era, capitalizing on new policies and seizing new opportunities!



DAHAI SOLAR