







#### DCH Energy GmbH

DCH Energy since its establishment in Germany has achieved a recognizable position as photovoltaic technology and solution provider through a number of investments in Germany. Both the components and engineering used by DCH Energy are recognized worldwide. In the development of the projects, not only the construction management and operation are performed according to international standards. The DKB bank, the largest financing institute in Germany has also financially approved DCH Energy Products and technology for a number of projects. DCH Energy also owns solar assets in Europe, Asia and Africa. We have a global presence with more than 400 MWp of fully operational PV projects, including both ground mounted and rooftop solar projects. Our capabilities span the full PV supply chain, from ingot-wafer-cell-module production to turnkey installation and financing.

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# DCH - HM6HBM1

MONOCRYSTALLINE PERC HALF-CELL MODULE

## DCH-HM6HBM1 - 445/450

144 CELL

445/450 Wp

Mono PERC HC Module 9BB

Power Output Range

20.47/20.70%

0 /+5 W

Effieciency

Positive Power Tolerance

## **Key Features**



High performance in low irradiance conditions



Innovative World-Class quality products and high reliability due to stringent quality control and following international standards



Price Competitiveness in all project ranges



12 years product warranty



Suitable for harsh environments, such as coasts, deserts and lakes



PID resistant and free of snails trails

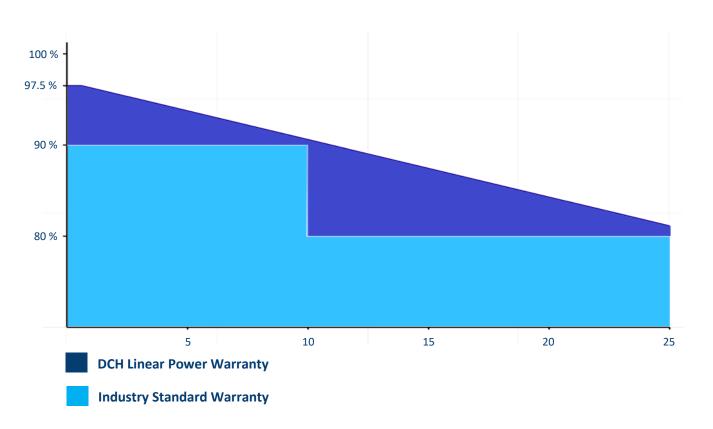


**Comprehensive Certificates** 

- IEC61215, IEC61730-1/2, IEC61701, IEC62716, IEC60068-2-68
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- OHSAS18001: 2011 Occupational health and safety managment systems

### LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty / 25 Year Linear Performance Warranty



ELECTRICAL DATA (STC)			
Model Number	DCH-HM6HBM1 - 445	DCH-HM6HBM1 - 450	
Nominal Power	445 Wp	445 Wp	
Voltage at max. power Vmpp	41.32 V	41.56 V	
Current at max. power Impp	10.77 A	10.83 A	
Open circuit voltage Voc	49.04 V	49.35 V	
Short circuit current Isc	11.55 A	11.61 A	
Efficiency	20.47 %	20.70 %	

Data applies to Standard Test Conditions (STC): Irradiance 1000W/m² with an AM of 1,5 and a cell temperaure of 25°C

ELECTRICAL DATA (NMOT)			
Model Number	DCH-HM6HBM1 - 445	DCH-HM6HBM1 - 450	
Nominal Power	333.96 Wp	337.42 Wp	
Voltage at max. power Vmpp	38.52 V	38.74 V	
Current at max. power Impp	8.67 A	8.71 A	
Open circuit voltage Voc	46.48 V	46.77 V	
Short circuit current Isc	9.37 A	9.41 A	

NMOT: Irradiance 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s.

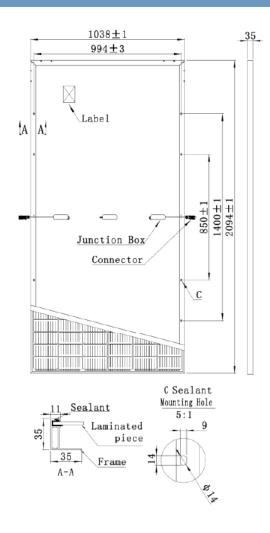
MECHANICAL DATA		
Solar Cells	Mono PERC, Half 166 x 83 mm	
Cells per module	144 Cells (6*12*2 matrix)	
Dimensions (tolerance +/- 1 mm)	2094 mm x 1038 mm x 35 mm	
Weight	24.5 kg	
Laminat/Glas	3,2 mm Tempered Coated	
Frame	35 mm, silver anodized Al alloy	
Back side colouring	White	
Max. Wind load	2400 Pa	
Snow load	5400 Pa	
Junction Box	Protection type: IP67 with spring-cage term	

TEMPERATURE &MAXIMUM RATINGS		
Nominal power tolerance	0~+5%	
Temperature Coefficient Pm%/ °C	-0.347 %/°C	
Temperature Coefficient Voc%/°C	-0.263 %/°C	
Temperature Coefficient Isc%/°C	0.057 %/°C	
Maximum System Voltage	1500 VDC	
Operating temperature range	-40 ~ +85°C	
Maximum series fuse rating	20 A	

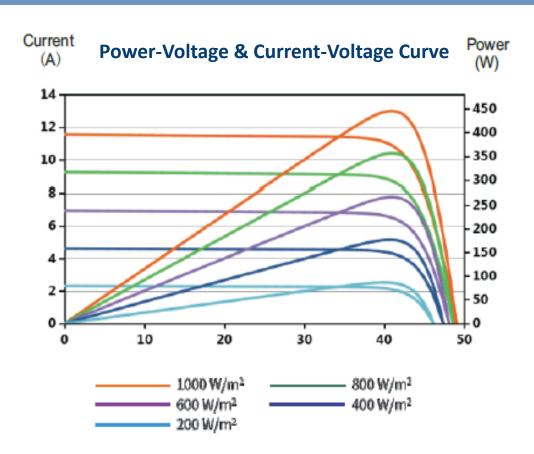
WARRANTY		
12 years Product Warranty		
25 years Performance Warranty		

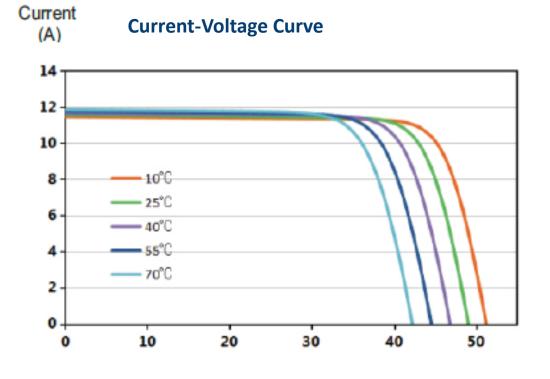
PACKAGING	
31pcs/pallet	682pcs/ 40'HQ

### **DRAWINGS & DIMENSSIONS**



### **I-V CURVE CHARACTERISTICS**









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