

MONOCRYSTALLINE PERC HC Black High Performance Module



## **Key Features**

405 Wp

0 /+5 W

Power Output Range

Positive Power Tolerance



Effieciency

High performance in low irradiance conditions



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



Price Competitiveness in all project ranges



12 years product warranty & 25 years performance 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, IEC62804, IEC60068-2-68
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- OHSAS18001: 2011 Occupational health and safety managment systems



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stallation and financing.

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DCH Energy since its establishment in Germany has achieved a recognizable position as photovoltaic technology and solution provi-

der 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 in-















# DCH-X1/54 - 405(R)

#### **ELECTRICAL DATA (STC)**

Model Number	DCH-X1/54-405W(R)
Maximum Power ( Pmax/W)	405 Wp
Maximum Power Voltage (Vmp/V)	31.11 V
Maximum Power Current (Imp/A)	13.02 A
Open Circuit Voltage (Voc/V)	37.55 V
Short Circuit Current (Isc/A)	13.73 A
Module Efficiency (%)	20.74 %

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-X1/54-405W(R)
Maximum Power (Pmax/W)	303.63 Wp
Maximum Power Voltage (Vmp/V)	29.00 V
Maximum Power Current (Imp/A)	10.47 A
Open Circuit Voltage (Voc/V)	35.59 V
Short Circuit Current (Isc/A)	11.13 A

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

#### **MECHANICAL DATA**

Cells Type	Mono PERC, Half 182×91mm
Number Of Cells	108 Cells (6*9*2) pcs
Dimensions (tolerance +/- 1 mm)	1722 mm x 1134 mm x 30 mm (Black)
Weight	20.7±1kg
Glass	AR coating tempered glass
Frame	Al 6063-T5/6005-T6(Black)
Max. Wind load	Refer to installation Manual
Snow load	Refer to installation Manual
Junction Box	Protection Degree IP68

#### **TEMPERATURE & MAXIMUM RATINGS**

Nominal power tolerance	0~+3%
Temperature Coefficient Pm%/ °C	-0.341 %/°C
Temperature Coefficient Voc%/°C	-0.262 %/°C
Temperature Coefficient Isc%/°C	0.054 %/°C
Maximum System Voltage	1500 VDC
Operating temperature range	-40 ~ +85°C
Maximum series fuse rating	25 A

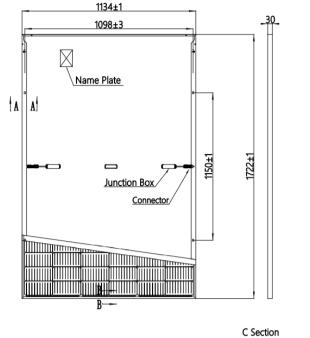
#### **WARRANTY**

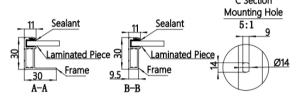
12 years Product Warranty
25 years Performance Warranty

#### **PACKAGING**

Modules per 40' container:	962 pcs
Number of modules per pallet:	37
Number of pallets per container:	26

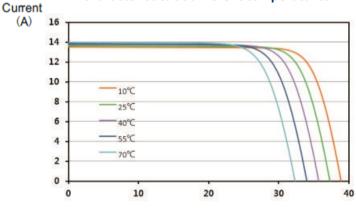
#### **DRAWINGS & DIMENSSIONS**



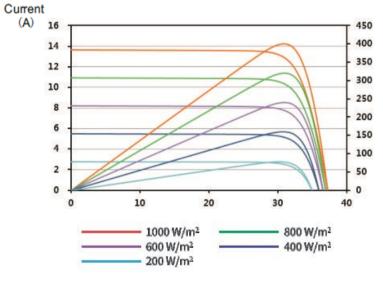


### **I-V CURVE CHARACTERISTICS**

#### I-V characteristics at different temperatures



#### I-V characteristics at different irradiations







Please read safety and installation instructions before using the product

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