

Ihr Solar und LED Experte!
Your solar und LED expert!

DCH190M



ENERGY

- ◆ Use of pre-selected cells only
- ◆ Narrow output tolerance
- ◆ Plus-sorted modules delivered!
- ◆ Optimal utilization of low insolation
- ◆ Wide temperature range
- ◆ High resistance to mechanical loads
- ◆ UV—and ozone-resistant
- ◆ Flash data for each module provided
- ◆ Self-supporting aluminium frame
- ◆ System voltage up to 1000 V

from the
Raw material
to the finished
Module
www.dch-group.de



10 Year Product Warranty
10 Year Limited Performance Warranty
for 90% of nominal power
25 Year Limited Performance Warranty
for 80% of nominal power

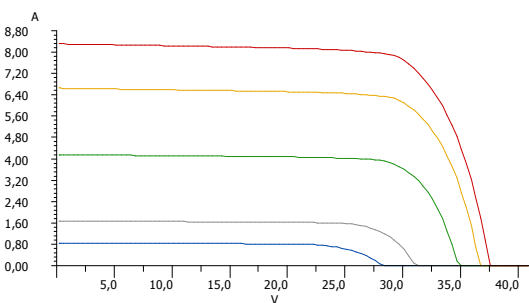


DCH 185M 185 Wp
DCH 190M 190 Wp
DCH 195M 195 Wp



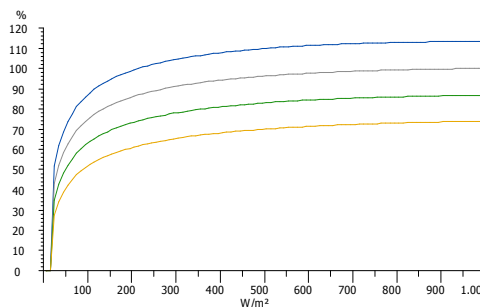
Technical data subject to change. Last update 12/2011

U-I-Kennlinien bei 25 °C



— U-I-Kennlinie 100 W/m² — U-I-Kennlinie 200 W/m²
— U-I-Kennlinie 500 W/m² — U-I-Kennlinie 800 W/m²
— U-I-Kennlinie 1.000 W/m²

Leistungskennlinie



— rel. Wirkungsgrad 0 °C — rel. Wirkungsgrad 25 °C
— rel. Wirkungsgrad 50 °C — rel. Wirkungsgrad 75 °C

Presented by:

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Electrical data:

Nominal power	185 Wp	190 Wp	195 Wp
Voltage at max. power Umpp	35,78 V	36,44 V	36,92 V
Current at max. power Impp	5,17 A	5,24 A	5,28 A
Open circuit voltage Uoc	44,87 V	45,15 V	45,40 V
Short circuit current Isc	5,57 A	5,66 A	5,74 A
Nominal power tolerance	-0/+3%	-0/+3%	-0/+3%
Temperature coefficient Isc	5,6 mA/K	5,6 mA/K	5,6 mA/K
Temperature coefficient Usc	-142,9 mV/K	-142,9 mV/K	-142,9 mV/K
Module efficiency	14,6%	15,0%	15,3%
Number of bypass-diodes	3 pcs	3 pcs	3 pcs

Junction box Protection type: IP65 with spring-cage term.

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

Characteristic data:

Solar cells per module	72
Solar cell type	Mono-crystalline high-efficiency cells 125 x 125 mm ² (quadratic)
Connection	Junction box with 3 bypass-diodes
Cable/connector	4 mm ² PV wire with MC4®-connectors
Cable length	Ca. 900 mm each

Boundary values:

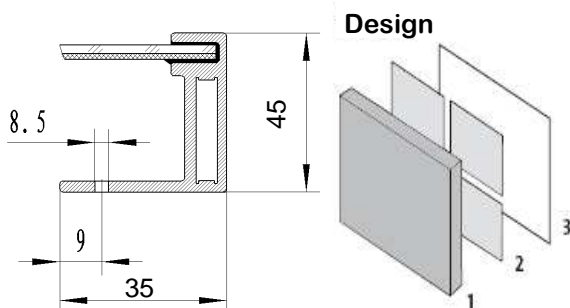
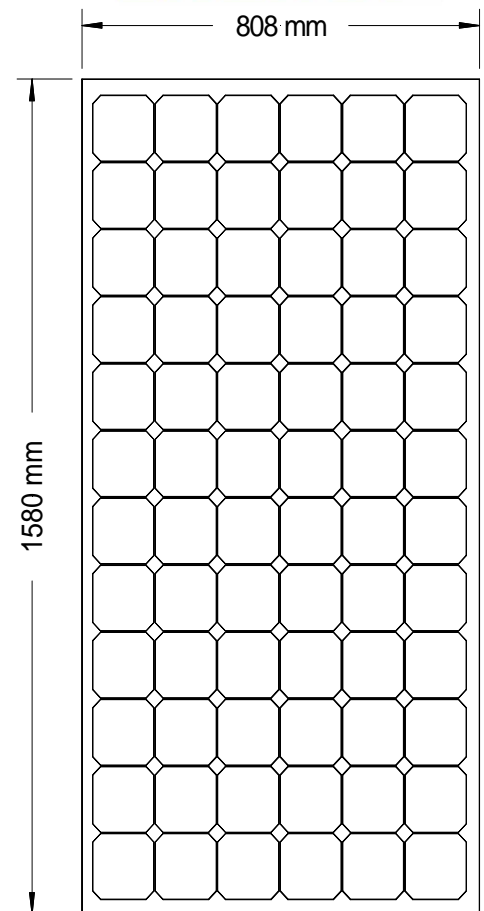
Maximum system voltage	1000 VDC
Operating temperature range	-40 + 85°C

Mechanical data:

Dimensions (tolerance +/- 1 mm)	1580 mm x 808 mm
Frame height (tolerance +/- 1 mm)	45 mm
Weight	ca. 14,7 kg
Laminate/Glass	3,2 mm ESG extra-white impact resistance acc. to DIN 5237
Colouring	Back side: white
Hail test	Maximum diameter of 25mm with an impact speed of 23 m/s
Max. pressure allowed:	Max. 5400 N/m ²



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- 1] Front: hardened safety glass
- 2] 72 mono-crystalline solar cells
125 mm x 125 mm in EVA
(Ethylene-vinyl-acetate)
- 3] Back side: Tedlar foil