



## DS72 Series (72 Cells) 290wp | 300wp | 310wp | 320wp



### General Description

As a solar specialist with more than 30 years of experience in photovoltaic (PV), DuSol makes significant contributions to groundbreaking progress in solar technology. DuSol PV modules in the DS Series are designed for applications with high power requirements.

All DuSol DS series modules offer system integration which is optimal both technically and economically which are suitable for installations in on & off grid PV Systems.

These Quality modules produce a continuous, reliable yield, even under demanding operational conditions.



### Future

High-performance photovoltaic modules made of polycrystalline (156.5 mm) 2 silicon DuSol solar cells with module efficiencies of 15.2% or higher.

- 3 busbar technology for enhancing the power output..
- Anti-reflex coating to increase light absorption.
- Production controlled positive power tolerance from 0 to +5%.

Only modules will be delivered that have the specific power or more for high energy yield.

- Delivery of modules in 3 watt intervals.
- Improved temperature coefficient to reduce power losses at higher temperatures.
- High power performance even at lower irradiances.



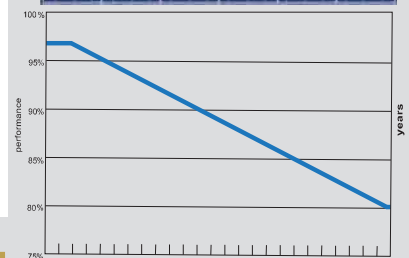
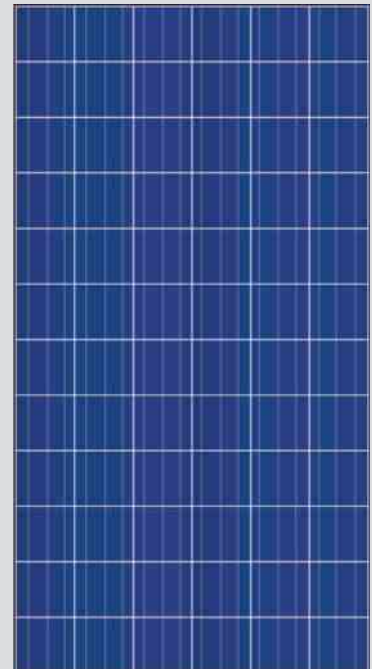
### Quality PV Modules from DuSol

We at DuSol, manufacture modules with high precision which stands for its Quality and Performance for the years to come.

Every module undergoes tough visual, mechanical and electrical inspection.

This is recognizable through the original DuSol label, serial number and the DuSol Guarantee:

- 10 years Product Guarantee
- 25 years Linear Performance Guarantee
- Maximum 0.667% annual reduction of the power output for following 24 years.



Desert sand storm  
test passed  
(Albarubens Lab)



Salt spray test  
passed  
(IEC61701)



### Certificates and approvals

All modules are tested and certified according to:

- IEC/EN 61215 and IEC/EN 61730, Application class A
- Protection class / CE



## Electrical Specifications (STC)

		DS72290	DS72300	DS72310	DS72320	
Nominal Power	P <sub>max</sub>	290	300	310	320	Wp
Open-circuit Voltage	V <sub>oc</sub>	45	45.3	45.7	45.2	V
Short Circuit Current	I <sub>sc</sub>	8.57	8.94	8.79	8.9	A
Voltage at Maximum Power	V <sub>mpp</sub>	36.3	36.5	36.8	36.2	V
Maximum Power Current	I <sub>mp</sub>	8.00	8.22	8.42	8.60	A
Efficiency Module	m	14.68	15.19	15.70	16.20	%

STC = Standard Test Conditions: Irradiance 1,000/m,AM 1.5, Cell Temperature 25°C Rated Electrical Characteristics are within + % of the indicated values of I<sub>sc</sub>, V<sub>oc</sub>,= and 0 to 5% of P<sub>max</sub> (power measurement tolerance + %3).



## Electrical Specifications (NOCT)

		DS72290	DS72300	DS72310	DS72320	
Nominal Power	P <sub>max</sub>	212.790	220.259	227.78	235.353	Wp
Open-circuit Voltage	V <sub>oc</sub>	41.274	41.574	41.974	42.474	V
Short Circuit Current	I <sub>sc</sub>	6.856	7.152	7.032	7.12	A
Voltage at Maximum Power	V <sub>mpp</sub>	32.574	32.774	33.074	32.474	V
Maximum Power Current	I <sub>mp</sub>	6.532	6.720	6.886	7.247	A

NOCT (47.5°C): Module operating temperature at 800 W/m<sup>2</sup> irradiance, air temperature of 20°C, wind speed of 1 m/s



## Limits

Max Permissible System Voltage	1000VDC
Max Reverse Current	15A
Operating Tem	(-40 to +85) deg C
Max Mechanical Load	2400 N/m <sup>2</sup>



## Mechanical Data

Length	1955(+/-3.0mm)
Width	990mm(+/-2.0mm)
Depth	42mm(+/-0.8mm)
Weight	26.7kg



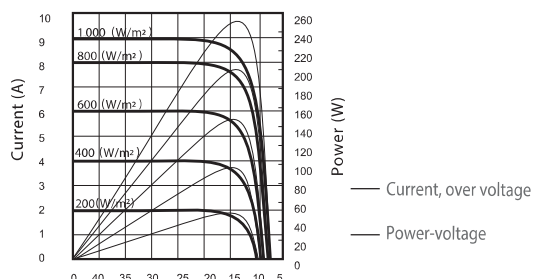
## Temperature Co - efficient

P <sub>max</sub>	(-0.44)%/degC
V <sub>oc</sub>	(-0.329)%/degC
I <sub>sc</sub>	(+0.038)%/degC

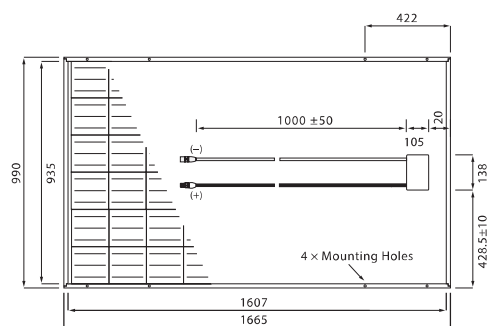


## Characteristics

Characteristic curves: Current / power against voltage (cell temperature: 25 °C)



## Rear View



## General Data

Cell Type	Polycrystalline 3BB Cells, 156.5mmx156.5mm, 72 cells in series
Front Glass	Tempered Low Iron Pattern Glass, 3.2mm
Module Frame	Anodized Aluminium, Silver
Connection Box	PPO Plastic, IP65, 137x138x126xmm, 3by pass diodes
Cable	4mm <sup>2</sup> , length 1000mm
Connector	SMK (MC4 kompatibel), Typ CCT 9901-2361F/2451F (katalognr. P51-7H/R51-7), IP67

Please only use SMK connector of said series or MultiContact AG connector (PV KST04 / PV KBT04)



## Registration

DuSol Solar guarantees the safety, quality and value of your product over many years the only thing we ask you to do is to register your modules with the

Serial number, so that we can send you the guarantee certificate register your modules quickly and easily at [www.Dusol.ae](http://www.Dusol.ae)

**www.DuSol.ae**  
Superior Durability , High Efficiency

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