

**DuSol** PV modules are proudly manufactured using state of the art machines using high quality raw-materials

www.DuSol.ae

Superior Durability, High Efficiency





# **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 Perc mono-crystalline(156.75mm) silicon. DuSol solar cells with module efficiencies of 20% or higher.

- 5 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 5 watt intervals.
- Improved temperature coefficient to reduce power losses at higher temperatures.
- High power performance even at lower irradiations.



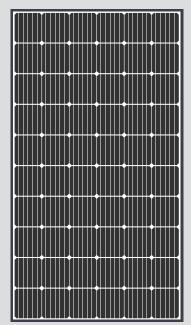
# Quality PV Modules from DuSol

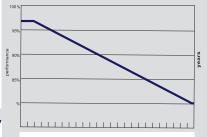
We at DuSol, manufacture modules with high precision which stands for its Quality and Performance for the years to come.

Every modules 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.











All modules are tested and certified according to:

- IEC/EN 61215 and IEC/.EN 61730, Application class A
- Protection class / CE
- ISO9001 (DAC)

#### Electrical Specifications (STC) DS560315M DS560320M DS560325M DS560330M Nominal Power Pmax 315 320 325 330 W Open-circuit Voltage Voc 40.84 41.05 41.21 41.32 V 9.88 Short Circuit Current 9.84 9.86 9.89 Isc Α Voltage at Maximum Power Vmpp 33.94 34.33 34.72 35.10 ٧ Maximum Power Current **I**mpp 9.28 9.32 9.36 9.4 Α

STC = Standard Test Conditions: Irradiance 1,000W/m2,AM 1.5, Cell Temperature 25'C. Rated Electrical Characteristics are within + % of the indicated values of Isc, Voc,and 0 to 5% of Pmax (power measurement tolerance ± 5%).

19.68

19.99

19.38

## Electrical Specifications (NOCT)

Efficiency Module

		DS560315M	DS560320M	DS560325M	DS560330M	
Nominal Power	Pmax	232.84	236.63	240.41	244.16	W
Open-circuit Voltage	Voc	37.73	37.94	38.10	38.21	V
Short Circuit Current	Isc	7.87	7.88	7.90	7.91	Α
Voltage at Maximum Power	Vmpp	30.83	31.22	31.61	32.00	V
Maximum Power Current	<b>I</b> mpp	7.55	7.57	7.60	7.62	Α
Cell Tem ('C)	T deg	47.5	47.5	47.5	47.5	С

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 Vo	oltage 1500VDC
Max Reverse Current	14A
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	19.5kg

### Temperature Co - effcient

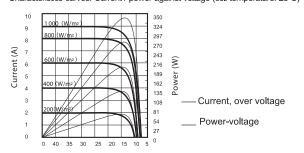
20.30

%

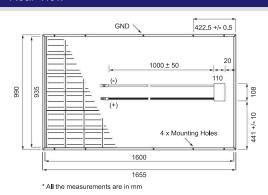
Pmax	(-0.44) %/°C
Voc	(-0.329) %/°C
Isc	(+0.038) %/°C

#### Characteristics

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



#### Rear View



## General Data

Cell Type	Perc mono-crystalline 5BBCells,156.75mmx156.75mm, 60cells in series
Front Glass	Tempered Low Iron Pattern Glass, 3.2mm
Module Frame	Anodized Aluminium, Silver
Connection Box	PPO PA, IP67, 110x108x19xmm, 3by pass diodes
Cable	4mm2, length 1000mm
Connector	SMK (MC4 Compatible), Typ CCT 9901-2361F/2451F (katalognr, P51-7H/R51-7), IP67

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 to register your modules quickly and easily at <a href="https://www.DuSol.ae">www.DuSol.ae</a>

Please only use SMK connector of said or MultiContact AG connecror (PV KST04)

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Address: Office #5,6 7-States Building, Next to Mount Royal Hotel, Baniyas square, DEIRA, Dubai P O Box: 381057 United Arab Emirates

Phone: +971-4-2231185 Fax: +971-4-2271505 Email: <u>Info@dusol.ae</u> URL: ww.Dusol.ae