

DUSOL's Standard range of solar panels are made using standard cells without making any alteration to the cell's physical and/or electrical characteristics. The standard range of DUSOL modules consists of either 36, 60 or 72 cells interconnect- ed to elevate the voltage and keep the current equal to the cells' current. Careful consideration in matching the characteris- tics of the cells is undertaken to maximize the power output by reducing cell-to-module losses.

www.DuSol.ae

Superior Durability, High Efficiency



# **D\$548150M** Series (48 Cells) 150w



# **General Description**

As a solar specialist with more than 30 years of experience in photovoltaic (PV), DuSol has made and continues to makes significant contribution to undertaking groundbreaking progress in solar technology. Dusol photovoltaic modules are de signed for applications with high power requirements. These quality MONO-PERC modules produce a continuous, reliable yield, even under demanding operational conditions. All DuSol DS series modules offer system integration configurations which are optimal both technically and economically and are suitable for installations in on and off-grid PV systems.



# **Future**

High-performance photovoltaic modules made of MONO-PERC (158.75mm)<sup>2</sup> 2 silicon DuSol solar cells with module efficiencies of 20.5% 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 specific power or more for high energy yield.
- Delivery of modules in 5watt intervals.
- Improved temperature coefficient to reduce power losses at higher temperatures.
- High power performance even at lower irradiation.



# **Quality PV Modules from DuSol**

Continual checks guarantee a consistently high level of quality. Every module undergoes visual, mechanical, and electrical inspection. This is recognizable by

- 10 years product guarantee.
- 25 years linear performance guarantee.
- Minimum 96% of the specified minimum power output during the first year.
- Modular design gives the end customers the power of choice of capacity
- Compatible with most of the available Hybrid inverters
- Maximum 0.667% annual reduction of the power output for the following 24 years.











Certificates and approvals

All modules are tested and Certified according to

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



#### 

Isc

Vmpp

Impp

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%).

5.25

30.24

4.96

21.8

# ## Electrical Specification (NOCT)

**Short Circuit Current** 

Efficiency Module

Voltage at Maximum Power

Maximum Power Current

DS548150M				
Nominal Power	Pmax	110.99	W	
Open-circuit Voltage	Voc	30.61	V	
Short Circuit Current	Isc	4.2	Α	
Voltage at Maximum Power	Vmpp	27.75	V	
Maximum Power Current	Impp	3.99	Α	
Cell Tem ('C)	T deg	47.5	°C	

NOCT (47.5°C): Module operating temperature at 800 W/m² irradiance, air temperature of 20°C, wind speed of 1 m/s

### Limits

# Max Permissible System Voltage 600VDC Max Reverse Current 14A Operating Tem (-40 to +85) deg C Max Mechanical Load 2400 N/m²

### 🗰 Mechanical Data

Lenght	1035(+ / -3.0 mm)
Width	670mm (+ / -2.0mm)
Depth	35mm(+/-0.8mm)
Weight	8Kg

## Temperature Co -effcient

W

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Α

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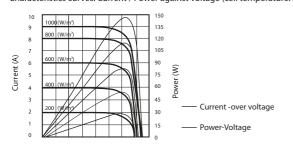
Α

%

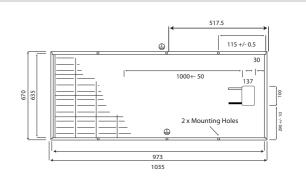
Pmax	(0.44) %/°C
Voc	(-0.329) % /°C
Isc	(+0.038) % /°C

### Characteristics

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



### Rear View



### General Data

Cell Type	Perc mono-crystalline 5BBCells, 79.37mmx158.75mm 48cells in series
Front Glass	Tempered Low Iron Pattern Glass, 3.2mm
Module Frame	Anodized Aluminium, Silver
Connection Box	PPO PA, IP67, (100x125x19mm), 2by pass diodes
Cable	Without Cable
Connector	Set of Pogo Pin

### 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 www.DuSol.ae

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