

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\$36210M** Series (36Cells) 210wp



# **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 (182x137)mm<sup>2</sup> silicon DuSol solar cells with module efficiencies of 20.5% or higher.

- 10 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 97% 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 0.55% annual reduction of the power output for the following 25 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)



# Electrical Specification (STC)

|                          | I    | D\$36210M |
|--------------------------|------|-----------|
| Nominal Power            | Pmax | 210W      |
| Open-circuit Voltage     | Voc  | 24.84V    |
| Short Circuit Current    | Isc  | 10.19A    |
| Voltage at Maximum Power | Vmpp | 21.6V     |
| Maximum Power Current    | Impp | 9.72A     |
| Efficiency Module        | n    | 20.55%    |

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%).

# ## Electrical Specification (NOCT)

|                          | D\$36210M |        |
|--------------------------|-----------|--------|
| Nominal Power            | Pmax      | 155.4W |
| Open-circuit Voltage     | Voc       | 22.97V |
| Short Circuit Current    | Isc       | 15A    |
| Voltage at Maximum Power | Vmpp      | 19.74V |
| Maximum Power Current    | Impp      | 7.87A  |
| 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 V | oltage  | 600VDC                |
|--------------------------|---------|-----------------------|
| Max Reverse Current      |         | 30A                   |
| Operating Tem            | (-40 to | +85) deg C            |
| Max Mechanical Load      |         | 2400 N/m <sup>2</sup> |

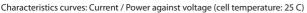
#### Mechanical Data

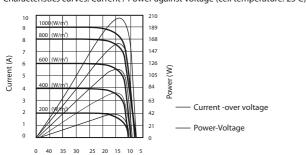
| Lenght | 1134mm(+ / -3.0 mm) |
|--------|---------------------|
| Width  | 910mm(+ / -2.0mm)   |
| Depth  | 25mm(+/-0.8mm)      |
| Weight | 10.5kg              |

## Temperature Co -effcient

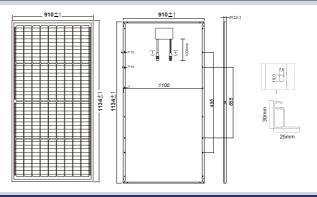
| Pmax | (-0.34) %/℃    |
|------|----------------|
| Voc  | (-0.27) % /℃   |
| Isc  | (+0.045) % /°C |
|      |                |

#### Characteristics





# Rear View



# General Data

| NIN .          |                                                                                   |
|----------------|-----------------------------------------------------------------------------------|
| Cell Type      | Mono-PERC 10BB Cells (182x137)mm²<br>72 cells in series                           |
| Front Glass    | Tempered Low Iron Pattern Glass, 3.2mm                                            |
| Module Frame   | Anodized Aluminium, Silver                                                        |
| Connection Box | PPO Plastic, IP68, 3by pass diodes                                                |
| Cable          | 4mm2, Lenght 1000mm                                                               |
| Connector      | SMK (MC4 compatible), Typ CCT 9901-2361F/2451F<br>(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 www.DuSol.ae



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