



DS72 Series (117mm Cells) 220wp | 225wp | 230wp | 235wp



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 photovoltaic modules in the DS series are designed for applications with high power requirements.

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

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



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 irradianations.

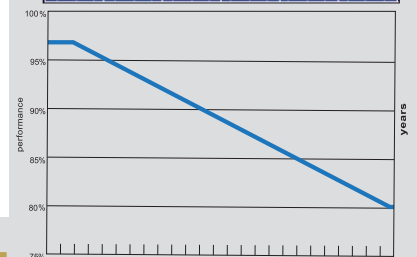
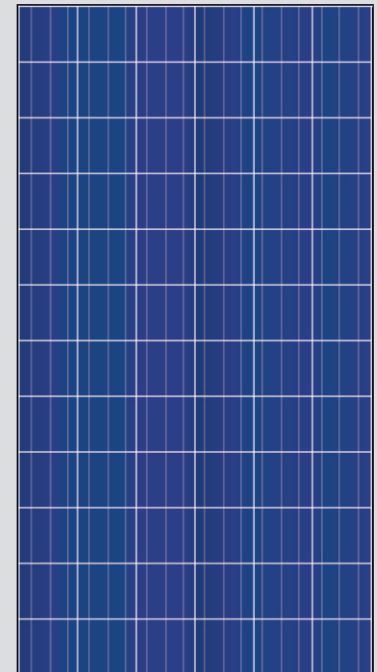


Quality PV Modules from DuSol

Continual checks guarantee a consistently high level of quality. Every modules undergoes visual, mechanical and electrical inspection.

This is recognisable by means of the original DuSol label, the serial number and the DuSol guarantee:

- 10 years product guarantee.
- 25 years linear performance guarantee.
- Minimum 96% of the specified minimum power output during the first year.
- 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)

| | | DS72220 | DS72225 | DS72230 | DS72235 | |
|--------------------------|------|----------|---------|----------|----------|----|
| Nominal Power | Pmax | 220 | 225 | 230 | 235 | Wp |
| Open-circuit Voltage | Voc | 45 | 45.3 | 45.7 | 46.2 | V |
| Short Circuit Current | Isc | 6.604628 | 6.71 | 6.799075 | 6.871698 | A |
| Voltage at Maximum Power | Vmpp | 36.3 | 36.5 | 36.8 | 36.2 | V |
| Maximum Power Current | Impp | 6.06 | 6.16 | 6.25 | 6.49 | A |
| Efficiency Module | m | 15.14 | 15.48 | 15.83 | 16.17 | % |

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 Isc, Voc,= and 0 to 5% of Pmax (power measurement tolerance + %3).



Electrical Specifications (NOCT)

| | | DS72220 | DS72225 | DS72230 | DS72235 | |
|--------------------------|------|---------|---------|---------|---------|----|
| Nominal Power | Pmax | 161.42 | 165.19 | 168.99 | 172.83 | Wp |
| Open-circuit Voltage | Voc | 41.27 | 41.57 | 41.97 | 42.47 | V |
| Short Circuit Current | Isc | 5.28 | 5.36 | 5.43 | 5.496 | A |
| Voltage at Maximum Power | Vmpp | 32.57 | 32.77 | 33.07 | 32.474 | V |
| Maximum Power Current | Impp | 4.95 | 5.04 | 5.10 | 5.32 | A |

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 | 1000VDC |
| Max Reverse Current | 15A |
| Operating Tem | (-40 to +85) deg C |
| Max Mechanical Load | 2400 N/m ² |



Mechanical Data

| | |
|--------|-----------------|
| Length | 1480(+/-3.0mm) |
| Width | 990mm(+/-2.0mm) |
| Depth | 42mm(+/-0.8mm) |
| Weight | 17.8kg |



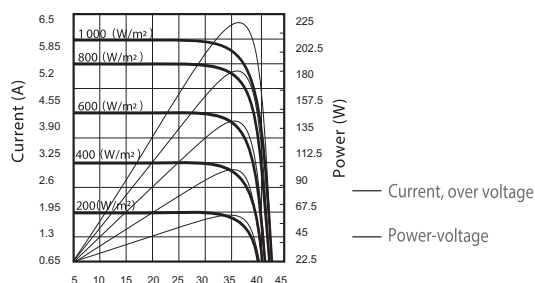
Temperature Co - efficient

| | |
|------|----------------|
| Pmax | (-0.44)%/degC |
| Voc | (-0.329)%/degC |
| Isc | (+0.038)%/degC |

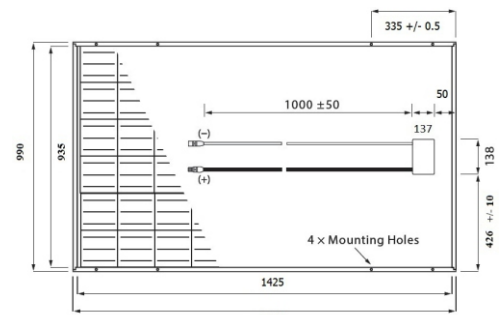


Characteristics

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



Rear View



* All the measurements are in mm



General Data

| | |
|----------------|--|
| Cell Type | Polycrystalline 3BB Cells, 117mmx156mm, 72 cells in series |
| Front Glass | Tempered Low Iron Pattern Glass, 3.2mm |
| Module Frame | Anodized Aluminium, Silver |
| Connection Box | PPO Plastic, IP65, (137X138)mm, 3by pass diodes |
| Cable | 4mm ² , 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

www.DuSol.ae
Superior Durability , High Efficiency

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