



## DS10 144-MONO Series (144Cells) 415wp

### General Description

As a solar specialist with more than 30 years of experience in photovoltaic (PV), DuSol has made and continues to make significant contribution to undertaking groundbreaking progress in solar technology. DuSol photovoltaic modules are designed 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

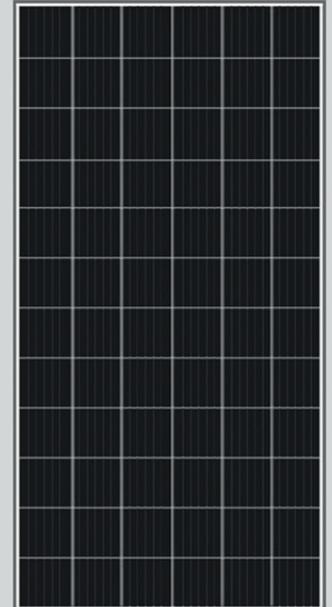
High-performance photovoltaic modules made of MONO-PERC (182x136.5)mm<sup>2</sup> silicon DuSol solar cells with module efficiencies of 20.5% or higher.

- 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.

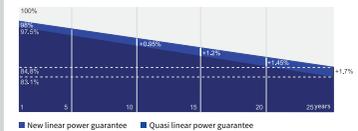
### Quality PV Modules from DuSol

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.



Linear attenuation of 0.55% per year for 25 years



Desert sand storm test passed  
 (MITC INTERCERT)



Salt spray test passed



### 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)

**DSI0144415M**

Nominal Power	Pmax	415W
Open-circuit Voltage	Voc	49.43V
Short Circuit Current	Isc	10.3A
Voltage at Maximum Power	Vmpp	42.87V
Maximum Power Current	Impp	9.68A
Efficiency Module	n	21.4%

STC Standard Test Conditions: Irradiance 1,000W/m<sup>2</sup>, 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%).

**DSI0144415M**

Nominal Power	Pmax	306.97W
Open-circuit Voltage	Voc	45.7V
Short Circuit Current	Isc	8.24A
Voltage at Maximum Power	Vmpp	39.14V
Maximum Power Current	Impp	7.84A
Cell Tem (°C)	T deg	47.50°C

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	1500VDC
Max Reverse Current	30A
Operating Tem	(-40 to +85) deg C
Max Mechanical Load	2400 N/m <sup>2</sup>

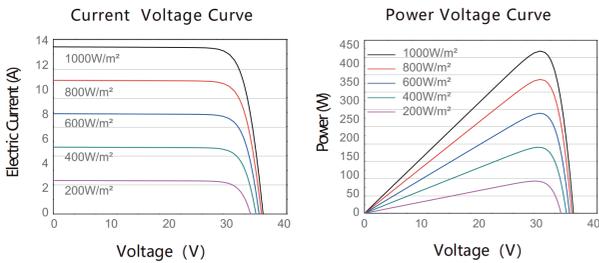
**Mechanical Data**

Length	1722mm(+ / -3.0 mm)
Width	1134mm(+ / -2.0mm)
Depth	30mm(+/-0.8mm)
Weight	22kg

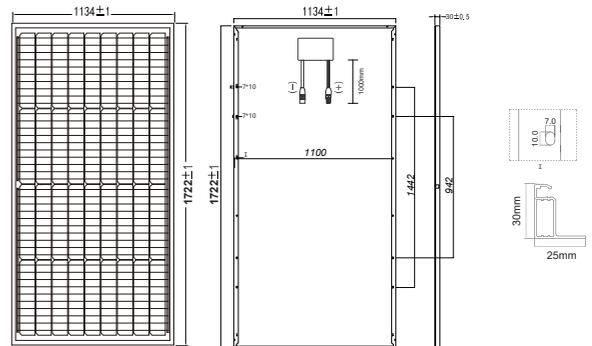
**Temperature Co-efficient**

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

**Characteristics**



**Rear View**



**General Data**

Cell Type	Mono-PERC 10BB Cells (182x136.5)mm <sup>2</sup> 72 cells only
Front Glass	Tempered Low Iron Pattern Glass, 3.2mm
Module Frame	Anodized Aluminium, Silver
Connection Box	PPO Plastic, IP68, 3by pass diodes
Cable	4mm <sup>2</sup> , 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 [www.DuSol.ae](http://www.DuSol.ae)

SCAN HERE

