

Over **%18,8** Cell Efficiency



60 CELL
POLYCRYSTALLINE MODULE

275W - 290W
OUTPUT POWER RANGE

OVER %17,8
PANEL EFFICIENCY

0~+5Wp
POSITIVE OUTPUT TOLERANCE

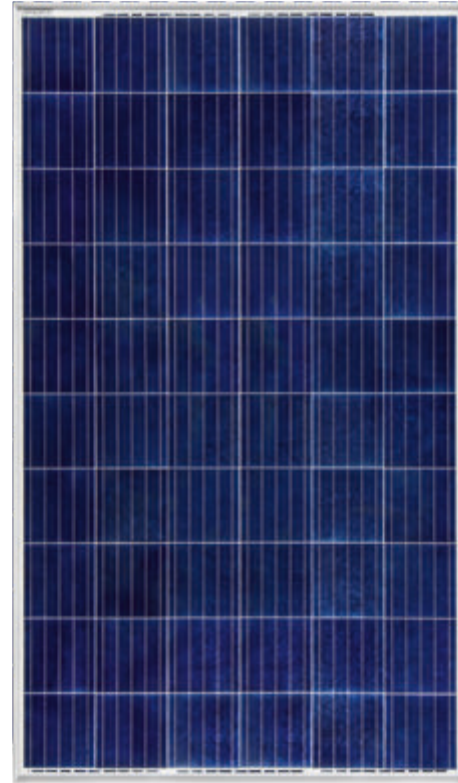
► **ODUL SUN RELIANCE** has been established to produce high-performance solar power products that convert sunlight into electricity for residents, commercial and utility-scale power in domestic market, and moreover make a strategic role in international market.

ODUL SUN RELIANCE guarantees 10 years product durability, 10 years 90% efficiency and 25 years 80% linear efficiency to the panels it produces.

ODUL SUN RELIANCE, with 235 MW yearly capacity, serve to contribute to the solar sector by moving towards a single direction together with our partners and clients with closely following the improvements in the field, offering new solutions to the market with keeping the customer satisfaction top priority without compromising on the quality. We specialize in distributing our top-of-the-line supplies to businesses all over the world, while also maintaining great options for your personal needs. We invite you to explore our Solar World to find out why we are the best Solar Energy Solutions Supplier in the industry.

QUALITY SYSTEMS AND CERTIFICATION

IEC61215: Crystalline Silicon Terrestrial Photovoltaic (PV) Modules- Design Qualification and Type Approval
IEC61730: Photovoltaic Module Safety Qualification - Requirements for Construction
ISO 9001: Quality management system
ISO 14001: Environmental Management System Certificate
OHSAS 18001: Occupational Health and Safety Management System



Positive Output Tolerance



Compatible with International Standards



1500V Maximum System Voltage



**5400 Pa Snow Load
2400 Pa Wind Load Resistance**



10 Years Producer Warranty



Over %17,8 Panel Efficiency



100% Double EL Control



High Quality Junction Box and Plugging System

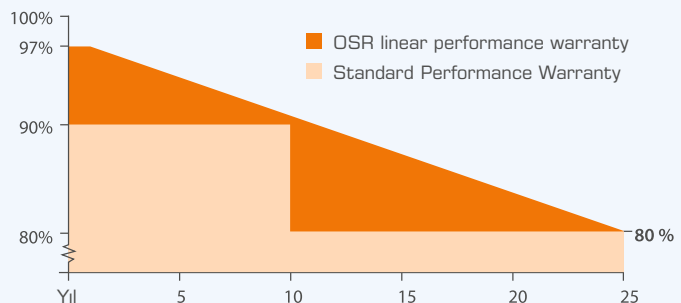


**Type 1, Type 2
A Class Fire Protection**



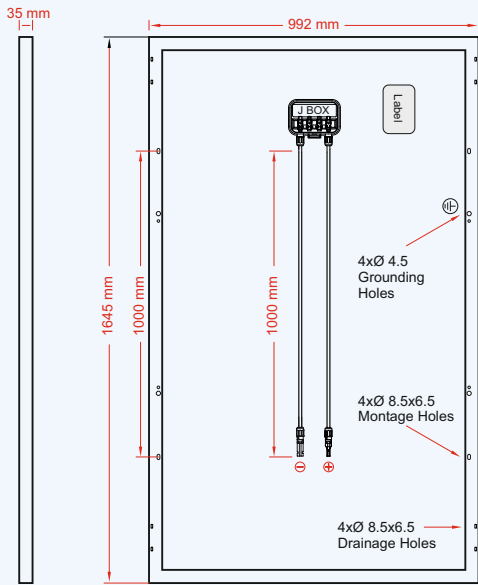
25 Years Linear Performance Warranty

LINEAR PERFORMANCE WARRANTY

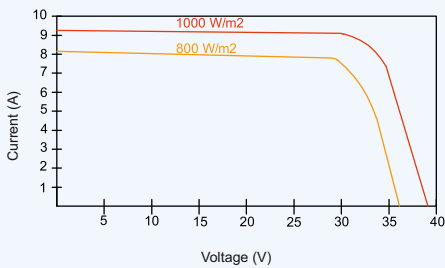


The data were measured under standard test conditions. It may vary depending on the ambient conditions.

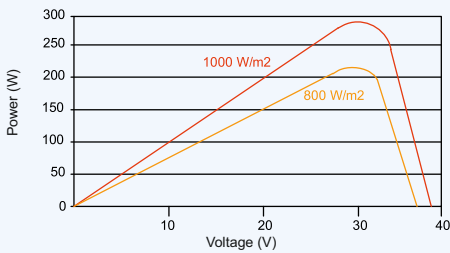
MODULE DIMENSIONS (mm)



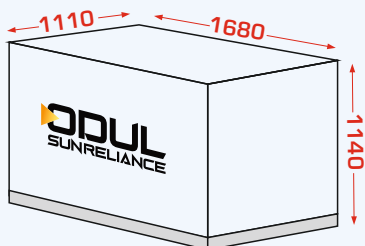
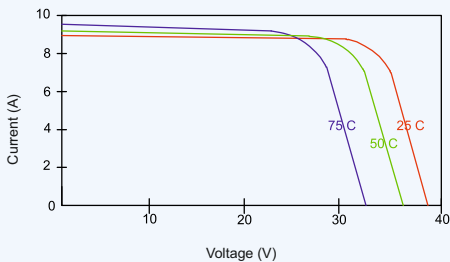
CURRENT VOLTAGE CURVE



POWER VOLTAGE CURVE



CURRENT VOLTAGE CURVE



ELECTRICAL PARAMETERS (STC)

	Unit	OSP60-275W	OSPp60-280W	OSPp60-285W	OSPp60-290W
Maximum Power	Pmaks (Wp)	275	280	285	290
Positive Output Tolerance		0 ~ +5W			
Max. Power Voltage	Vmpp (V)	31,46	31,21	31,39	31,54
Max. Power Current	Impp (A)	8,85	8,99	9,10	9,21
Open Circuit Voltage	Voc (V)	38,33	38,7	38,92	39,21
Short Circuit Voltage	Isc (A)	9,235	9,57	9,65	9,73
Module Efficiency	η_m (%)	16,9	17,2	17,5	17,85

STC: 1000W/m² Irradiation / 25°C Cell Temperature / AM=1,5 / Measurement Accuracy ±%3 / 1m/s Wind Speed

ELECTRICAL PARAMETERS (NOTC)

	Unit	OSP60-275W	OSPp60-280W	OSPp60-285W	OSPp60-290W
Maximum Power	Pmaks (Wp)	208	211	213,4	217,4
Max. Power Voltage	Vmpp (V)	29,8	28,25	28,42	28,54
Max. Power Current	Impp (A)	6,97	7,45	7,51	7,62
Open Circuit Voltage	Voc (V)	36,3	35,33	35,51	35,73
Short Circuit Voltage	Isc (A)	7,5	8,09	8,17	8,2

NOTC: 800W/m² Irradiation / 20°C Cell Temperature / AM=1,5 / Measurement Accuracy ±%3 / 1m/s Wind Speed

MECHANICAL COMPONENTS

Cell Type	Polycrystalline Perc Cell / 156.75 mm x 156.75 mm
Cell Amount	60 Cell (6x10)
Panel Size	992 x 1645 x 35 mm
Weight	19 Kg
Glass	3.2 mm (0,125")Low Ironed High-Pass Tempered Glass
Back Surface	Multi Layered White Polimer Film
Frame	White Anodized Aluminium
Junction Box	IP 67 or IP 68 - 1500 VDC / 15A
Output Cables	IEC, UL approved (4 mm ² , 12 AWG) (PV Cable Type) , 1000mm
Connector	Compatible MC4 (IP67, IEC and UL approved)
Fire Resistance	Type 1, Type 2 - A Class
Impact Resistance	Decreased from "51,19 / 1300 mm, (1.18 lbs / 535g) Steel Ball Test

TEMPERATURE COEFFICIENTS

NOTC (Nominal Cell Working Temperature)	45°C (± 2°C)
Temperaure Coefficient (Pmax)	-0,40 %/°C
Temperaure Coefficient (Voc)	-0,3409 %/°C
Temperaure Coefficient (Isc)	+0,0447 %/°C

WORKING CONDITIONS

Working Temperature	-40~+85°C
Max. System Voltage	1500V DC (UL / IEC)
Max. Reverse Current	15A / 20A
Maximum Load	75 lbs ft (UL Standard) 5400 Pa (IEC Standard)

PACKAGING

Pallet Size: 1110x1680x1140 mm
Modules per Pallet: 30 Pieces
Total Weight: 565 Kg
Modules per 40 HC Container: 840 Pieces
Modules per 20 DC Container: 360 Pieces

WARRANTY

10 Years OSR Mechanical Warranty
25 Years Linear Performance Warranty

