

Over **%22,2** Cell Efficiency



**60 CELL**  
MONOCRYSTALLINE MODULE

**325W - 335W**  
OUTPUT POWER RANGE

**OVER %20**  
PANEL EFFICIENCY

**0~+5Wp**  
POSITIVE OUTPUT TOLERANCE

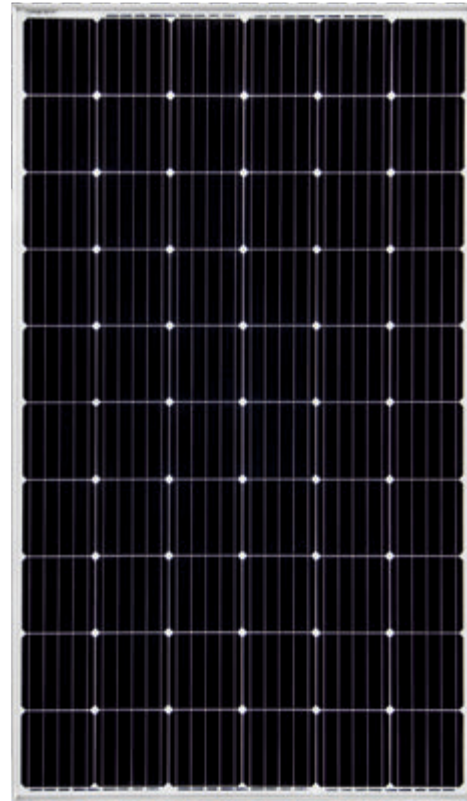
▶ **ODUL SUN RELIANCE** has been established to produce high-performance solar power products that convert sunlight into electricity for residents, commercial and utility-scale power in domestic market, and moreover make a strategic role in international market.

**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 %20 Panel Efficiency**



**100% Double EL Control**



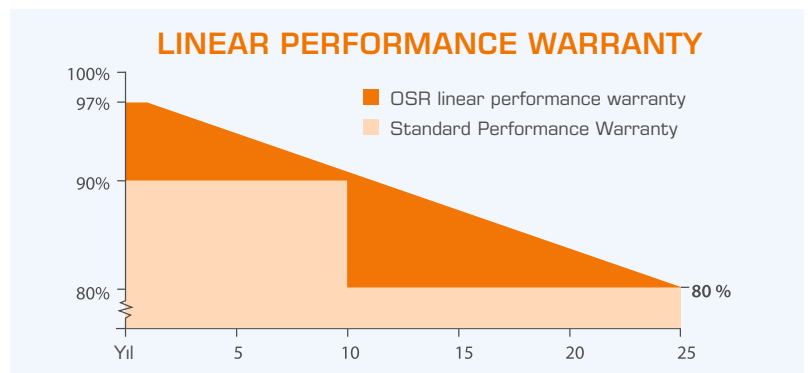
**High Quality Junction Box and Plugging System**



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

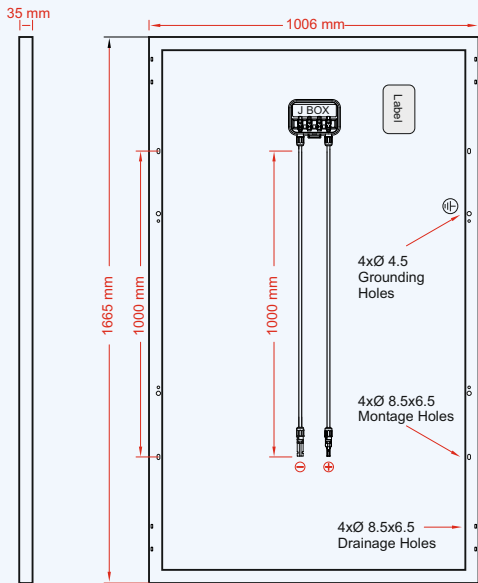


**25 Years Linear Performance Warranty**

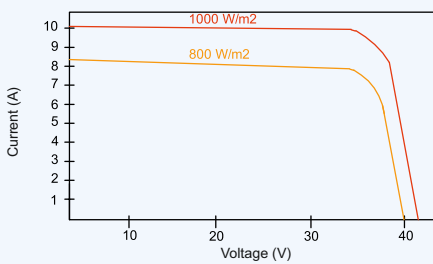


The data were measured under standard test conditions. It may vary depending on the ambient conditions.

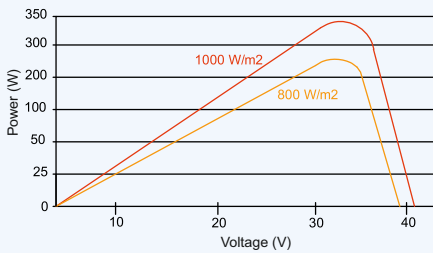
### MODULE DIMENSIONS (mm)



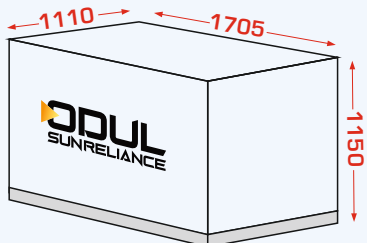
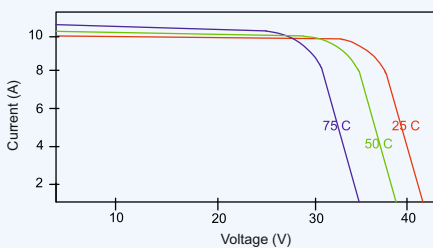
### CURRENT VOLTAGE CURVE



### POWER VOLTAGE CURVE



### CURRENT VOLTAGE CURVE



### ELECTRICAL PARAMETERS (STC)

	Unit	OSMp60-325W	OSMp60-330W	OSMp60-335W
Maximum Power	Pmaks (Wp)	325	330	335
Positive Output Tolerance		0 ~ +5W		
Max. Power Voltage	Vmpp (V)	33,60	33,78	33,90
Max. Power Current	Impp (A)	9,68	9,77	9,9
Open Circuit Voltage	Voc (V)	41,1	41,31	41,5
Short Circuit Voltage	Isc (A)	10,2	10,31	10,52
Module Efficiency	$\eta_m$ (%)	19,41	19,7	20,03

STC: 1000W/m<sup>2</sup> Irradiation / 25°C Cell Temperature / AM=1,5 / Measurement Accuracy  $\pm$ 0,3 / 1m/s Wind Speed

### ELECTRICAL PARAMETERS (NOTC)

	Unit	OSMp60-325W	OSMp60-330W	OSMp60-335W
Maximum Power	Pmaks (Wp)	243	245	248
Max. Power Voltage	Vmpp (V)	31,8	31,97	32,05
Max. Power Current	Impp (A)	7,66	7,69	7,74
Open Circuit Voltage	Voc (V)	38,1	39,17	39,3
Short Circuit Voltage	Isc (A)	8,53	8,56	8,59

NOTC: 800W/m<sup>2</sup> Irradiation / 20°C Cell Temperature / AM=1,5 / Measurement Accuracy  $\pm$ 0,3 / 1m/s Wind Speed

### MECHANICAL COMPONENTS

Cell Type	Monocrystalline Perc Cell / 156.75 mm x 156.75 mm
Cell Amount	60 Cell (6x10)
Panel Size	1006 x 1665 x 35 mm
Weight	18,5 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 <sup>2</sup> ,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 ( $\pm$ 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: 1110x1705x1150 mm
Modules per Pallet: 30 Pieces
Total Weight: 580 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

