

40-45Watt **Polycrystalline Solar Module**

25-YEAR WARRANTY

Features High power output module conversion efficiency with stable cell production technology.

Anti-reflective and anti-soiling surface reduces power loss from dirt and dust.

Outstanding performance in low-light irradiance environments.

Certified to withstand: wind load and snow load.

High salt mist and ammonia resistance certified by TUV Rheinland.

Quality and Safety

Designed according to and complying with all requirements in IEC 61730, IEC 61215, UL1703, CEC Listed, MCS and CE.

ISO 9001:2008:Quality management systems. ISO 14001:2004:Environmental management systems. BS OHSAS 18001:2007:Occupational health and safety management systems.











Electrical Characteristics

	ORI-40D-12/REA	ORI-45D-12/REA	
Model	500 12/NEA	5111 102 12, NEA	
Optimum Operating Voltage (Vmp)	17.4V	17.6V	
Optimum Operating Current (Imp)	2.30A	2.56A	
Open-Circuit Voltage (Voc)	21.8V	22.0V	
Short-Circuit Current (Isc)	2.58A	2.79A	
Maximum Power at STC (Pmax)	40Wp	45Wp	
Nominal Voltage	12V		
Operating Temperature	-40℃ to +85℃		
Maximum System Voltage	1000V(IEC)/600V(UL)		
Maximum Series Fuse Rating	10A		
Power Tolerance	±5%		

General Characteristics

→ IV Curves

Solar Cell	Polycrystalline
Number of Cells	36 (4x9)
Dimension	537×665×30mm (21.1×26.2×1.2 inches)
Weight	4.5 Kgs (9.9 lbs)
Front Glass	3.2mm tempered glass
Frame	Anodized aluminum alloy
Mechanical load	5400 pa
Classification	Application class A; IP65

Module IV Graph 40W

▲ Temperature Coefficients

NOCT (°C)	45±2
Temperature Coefficient of Pmax (%/ ${\mathbb C}$)	-0.47
Temperature Coefficient of Voc (%/℃)	-0.34
Temperature Coefficient of Isc (%/ ${}^{\circ}\!\!\!\!{}^{\circ}$)	0.045
,,,	0.0-15

632 [24.9]





