



# 135-140Watt 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.

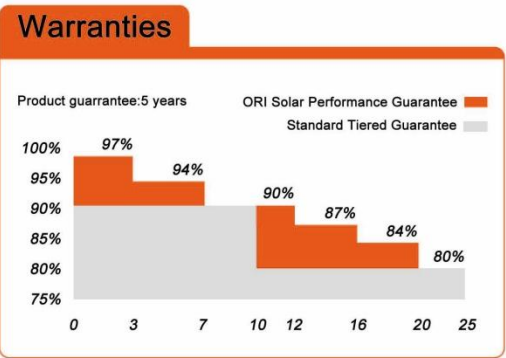
Outstanding performance in low-light irradiance environments.

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

Model	ORI-135D-12/TEA	ORI-140D-12/TEA
Optimum Operating Voltage (Vmp)	17.5V	17.6V
Optimum Operating Current (Imp)	7.71A	7.95A
Open-Circuit Voltage (Voc)	22.3V	22.4V
Short-Circuit Current (Isc)	8.20A	8.33A
Maximum Power at STC (Pmax)	135Wp	140Wp
Nominal Voltage	12V	
Operating Temperature	-40°C to +85°C	
Maximum System Voltage	1000V(IEC)/600V(UL)	
Maximum Series Fuse Rating	20A	
Power Tolerance	±5%	

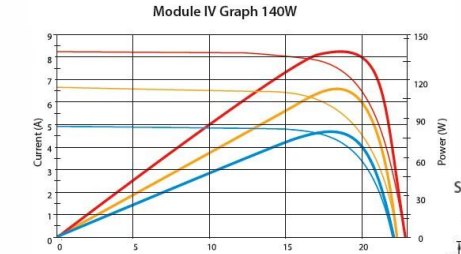
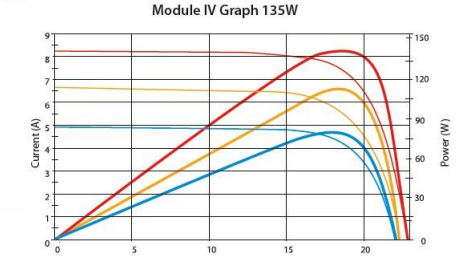
## General Characteristics

Solar Cell	Polycrystalline
Number of Cells	36 (4x9)
Dimension	1482x676x35mm (58.3x26.6x1.4 inches)
Weight	12 Kgs (26.5 lbs)
Front Glass	3.2mm tempered glass
Frame	Anodized aluminum alloy
Mechanical load	5400 pa
Classification	Application class A; IP65; H4 connector Output Cables Symmetrical length (±)750mm/29.5 inches

## Temperature Coefficients

NOCT (°C)	45±2
Temperature Coefficient of Pmax (%/°C)	-0.47
Temperature Coefficient of Voc (%/°C)	-0.34
Temperature Coefficient of Isc (%/°C)	0.045

## IV Curves



Legend for IV Curves:  
 — STC IV data (Red)  
 — 800 W/m² IV data (Yellow)  
 — 600 W/m² IV data (Blue)  
 — STC PV data (Dark Red)  
 — 800 W/m² PV data (Dark Yellow)  
 — 600 W/m² PV data (Dark Blue)

