



## 20Watt 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.

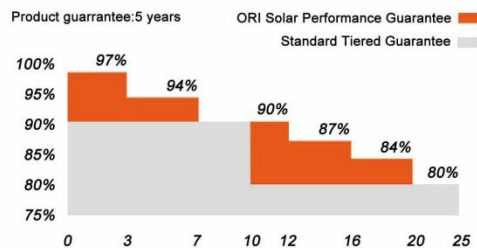
High salt mist and ammonia resistance certified by TUV Rheinland.

**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.



### Warranties



### Electrical Characteristics

| Model                           | ORI-20D-12/CEA   |
|---------------------------------|------------------|
| Optimum Operating Voltage (Vmp) | 17.6V            |
| Optimum Operating Current (Imp) | 1.14A            |
| Open-Circuit Voltage (Voc)      | 21.7V            |
| Short-Circuit Current (Isc)     | 1.26A            |
| Maximum Power at STC (Pmax)     | 20Wp             |
| Nominal Voltage                 | 12V              |
| Operating Temperature           | -40°C to +85°C   |
| Maximum System Voltage          | 50V(IEC)/30V(UL) |
| Maximum Series Fuse Rating      | 5A               |
| Power Tolerance                 | ±10%             |

### General Characteristics

|                 |                                    |
|-----------------|------------------------------------|
| Solar Cell      | Polycrystalline                    |
| Number of Cells | 36 (6x6,2x18)                      |
| Dimension       | 496x368x18mm (19.5x14.5x0.7inches) |
| Weight          | 2.3 Kgs (5.1 lbs)                  |
| Front Glass     | 3.2mm tempered glass               |
| Frame           | Anodized aluminum alloy            |
| Mechanical load | 5400 pa                            |
| Classification  | Application class A; IP65          |

### 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

