# Green life is beautiful



## FDS050-12M



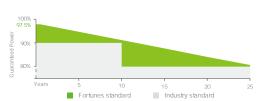
Our company was established in 2002. We have been specializing in manufacturing solar panels, portable PV application products and solar lights for over one decade. Panels are from 1W to 300W. Both mono and poly types are available.

We owns IEC, TUV, CE certificates linked with mono and poly solar panels. Our products are sold to clients in the USA, Germany, UK, Netherlands, Australia, New Zealand, Africa and Southeast Asia. We have a good reputation among our clients.

We offer high quality products at competitive prices and excellent after-sale service to our clients. We are willing to set up long-term, mutual benefit relationship with people all over the world.

#### LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty · 25 Year Linear Power Warranty



#### **Key Features**



Improved module reliability and conversion effciency



High power output and conversion efficiency



Designed for DC IEC 1000V application



Self-cleaning reduce power loss from dirt and dust



Outstanding performance in low-light irradiance environments



Certified to withstand high wind loads(2400Pa) and snow loads(5400Pa)



Certified by TÜV NORD

#### **Reliable Quality**

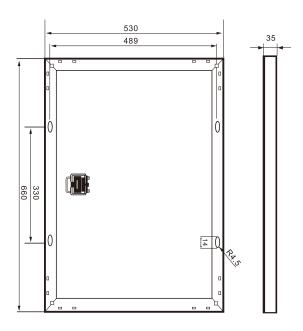
- Positive power tolerance:0~+5W
- Modules binned by current to improve system performance
- Improved material to allow modules to operate reliable in multiple mounting configuration

#### **Comprehensive Certificates**

- IEC 61215, IEC 61730 and CE
- ISO 9001:2008:Quality management systems
- ISO14001:2004:Environmental management systems

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# **Temperature Coefficients**

NOCT	45 +/-2℃
Voltage temperature coefficient(Voc)	-0.36%/℃
Current temperature coefficient(Isc) +0.033%/°C	
Power temperature coefficient(Pmpp)	-0.44%/℃
Minimum power tolerance	+/-10%

NOCT:Nominal Operating cell Temperature

### **Mechanical Data**

Solar Cell	36(4 imes9) Mono-crystalline $156 imes52$ mm
Front Glass	3.2mm high transmission tempered glass
Frame	Anodized aluminium
Backsheet	White / Black
J-Box	IP65

### **Electrical Data**

Module type	FDS050-12M
Nominal peak power(Wp)	50W
Nominal voltage(Vmp)	17.8V
Nominal current(Imp)	2.81A
Open-circuit voltage(Voc)	22.5V
Short-circuit current(Isc)	3.17A
Cell efficiency	19.0%
Operating temperature	-40°C to +85°C
Maximum system voltage	1000V DC
Weight	4.0kg
Dimension	660×530×35mm