

MONOCRYSTALLINE MODULE 90W / 36 Cells / 5 Bus bars

SOLAR MODULE ECS-90M-36

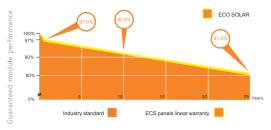






# LINEAR PERFORMANCE WARRANTY

12-Year Product Warranty · 25-Year Linear Power Warranty



Eco Solar energy's modules are only made of grade A solar cells with a very high efficiency and ensured more than 25 years lifespan.

# **KEY FEATURES**



5 bus bars cells, with efficiency up to 22.8 %



IP67 junction box for long term weather endurance



High quality aluminum frame, resisting load up to 5400 Pa and wind pressure up to 2400 Pa



High light transmission , low-iron tempered glass



High performance in low-light environment



Double EL test before and after lamination

# 25 YEARS

**OUTPUT POWER WARRANTY** 



PRODUCT WARRANTY

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#### **ELECTRICAL DATA AT STC\***

Maximum power (Pmax)     90W       Power tolerance     0 - 3%       Voltage at Pmax (Vmp)     20.0V       Current at Pmax (Imp)     4.51A       Open-circuit voltage (Voc)     24.0V       Short-circuit current (Isc)     4.87A		
Voltage at Pmax (Vmp) 20.0V   Current at Pmax (Imp) 4.51A   Open-circuit voltage (Voc) 24.0V	Maximum power (Pmax)	90W
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Short-circuit current (Isc) 4.87A	Open-circuit voltage (Voc)	24.0V
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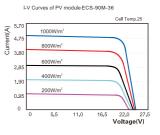
#### **TEMPERATURE CHARACTERISTICS**

NOCT (Air 20°C; Sun 0.8kW/m <sup>2</sup> wind 1m/s)	47±2°C
Temperature coefficient of Voc	-(0.40 ± 0.05)%/ °C
Temperature coefficient of Isc	(0.065 ±0.01)% /°C
Temperature coefficient of power	-(0.5±0.05)%/ °C

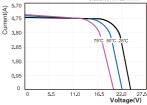
#### **MAXIUM RATINGS**

Operating temperature	-40°C to 85°C
Maximum system voltage	600V DC
Max series fuse rating	10A
Max front load (e.g.:snow)	5400 Pa
Max back load (e.g.:wind)	2400 Pa

### **I-V CURVES**



I-V Curves of PV module ECS-90M-36 at various cell temperatures Irradiance AM1.5, 1kW/m<sup>2</sup>



## **DIMENSIONS OF PV MODULES (mm)**

## **MECHANICAL CHARACTERISTICS**

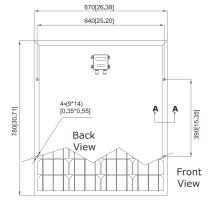
Cell type	Monocrystalline
Number of cells	36
Dimensions	780x670x30mm
Weight	5.9 kg
Glass	3.2mm Tempered Glass
Frame	Silver/Black Anodized Aluminium Alloy
Junction Box	IP67
Cable	Optional
Connector	Optional

Dimensions in brackets are in inches. Un-bracketed dimensions are in millimeters. Unit:mm[in.]



Junction Box Top View (Lidopen)







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