

# Enfinity-185M5

## Crystalline Solar Modules



### Technology

Enfinity-185M5 crystalline solar modules provide excellent value and performance for operation of both DC loads and in an inverter equipped system for AC Loads. The rated output and the efficient design of these modules, with their large surface area are ideally suited for high power applications, like Grid Interactive Systems. The Module is designed for easy interconnection to achieve voltage and current configurations for gridconnected systems as well as stand-alone systems.



### Module design

High-efficiency 5 inch (125mm) Mono crystalline solar cells form the core of the module. These 125 mm cells offer a homogeneous appearance, optimal use of the area and are known for high energy yields. Due to its construction of Glass/EVA/TPT, the module is light in weight in addition to protecting the module/cells against harsh environmental conditions. A torsion resistant module frame made of anodized aluminium guarantees high mechanical strength, making the module resistant to extreme wind, hail and snow.

### Features

- 1 Modules assembled using high quality and performance components sourced from leading International Suppliers.
- 2 State-of-the-art, automated manufacturing facilities guarantee consistent High Quality & Electrical performance.
- 3 Narrow power tolerance range of  $\pm 3\%$  ensures the module maximum rated power output.
- 4 Certified as per International Standards (IEC 61215:2005, Safety Class II for 1000VDC and IEC 61730-2) for High Performance and Safety.
- 5 Robust and lightweight anodized aluminum frames with Lock pin for better strength, quick and easy installation.

### Warranty

Manufacturing:	10 years
Power Production:	90% = 10 years
	80% = 25 years



## Enfinity-185M5 module type

### Electrical Characteristics

Max-Power	Pm(W)	185
Power Tolerance	(%)	±3
Max-Power Voltage	Vm(V)	36.50
Max-Power Current	Im(A)	5.09
Open-Circuit Voltage	Voc(V)	45.50
Short-Circuit Current	Isc(A)	5.40
Max-System Voltage	(VDC)	1000
Cell Efficiency	$\eta_c$ (%)	17.25
Module Efficiency	$\eta_m$ (%)	14.56
Number, type and arrangement of cells		72 pcs Mono-Crystalline Silicon (6x12)
Cell Size		5"(125mm) x 5"(125mm)
No. Of Bypass Diodes	(pcs.)	3
Pm Temperature Coefficient	(%/°C)	-0.50
Isc Temperature Coefficient	(%/°C)	0.06
Voc Temperature Coefficient	(%/°C)	-0.35
NOCT- Nominal Operating Cell Temperature	(°C)	46 ± 2

### Mechanical Characteristics

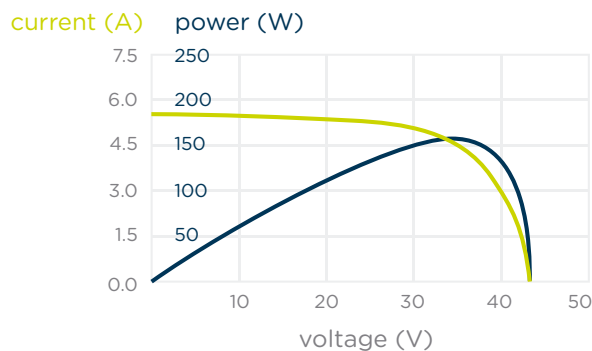
Cable type, Diameter and Length	4 mm <sup>2</sup> , TÜV certified, 900 mm
Type of Connector	Compatible MC4
Dimension LxWxH (mm)	1580x808x35
Weight	15 kg
No. Of Draining Holes In Frame	8
Glass, Type and Thickness	High Transmis., Low Iron, Tempered Glass 0.12"(3,2mm)

### Absolute ratings

Dielectric Insulation Voltage	(VDC)	3000 max.
Operating Temperature	(°C)	-40-85
Storage Temperature	(°C)	-40-85

### Strengths

- Tolerance ± 3 %
- Plug & Play Connectors
- High Transmission, Low Iron tempered glass



Current / voltage dependence on Irradiance and module temperature. This is only indicative showing effect of temperature and intensity on power.

