

# HNM85M-12

## Features:

The module is made with high efficiency mono crystalline , with a silicon nitride anti-reflective coating

20 Years Output Warranty ( 80% ) \*

10 Years Output Warranty ( 90% ) \*

3 Years Product Guarantee\*

• Bypass diode minimizes the power drop caused by shade .

• Anodized aluminium frame and junction box ( IP 65) for extended outdoor use .

\* According to general warranty condition

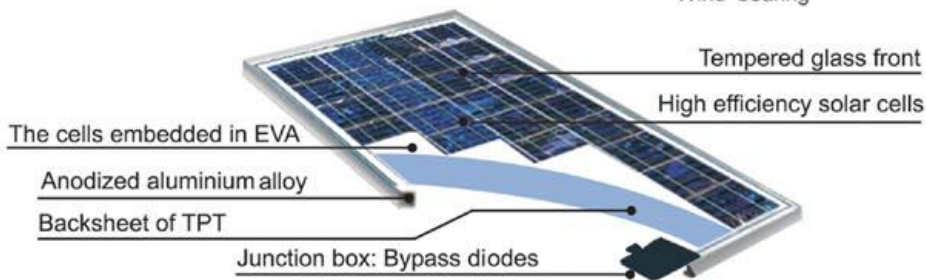
## Mechanical Specifications :

## Application :

- Telecommunication
- Hospitals , clinics
- Community lighting
- Traffic and building signals
- Water pumping
- Use in ocean , petrol , meteorological
- PV station
- Grid connection
- Solar home systems
- Battery charging
- Street and camp lights

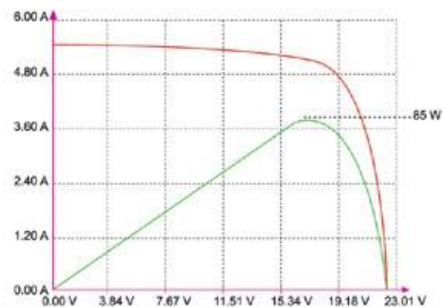
## Qualification Test:

Operating temperature range    -40 °C to + 80 °C  
 Wind bearing                                160 Km/h



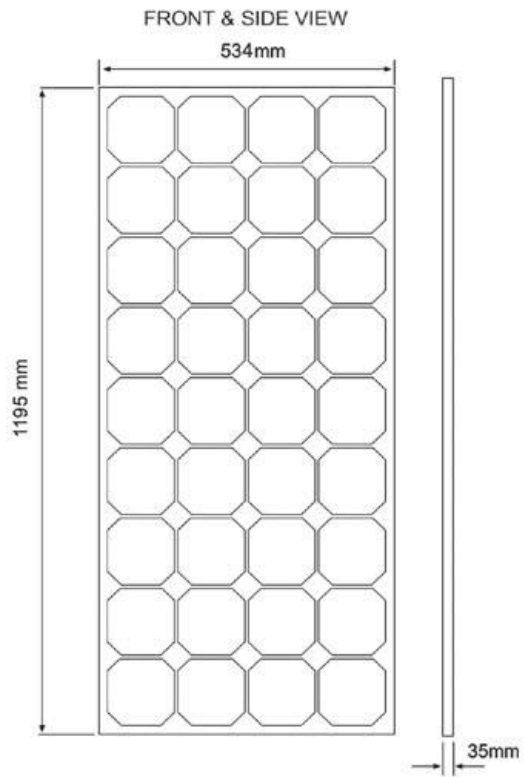
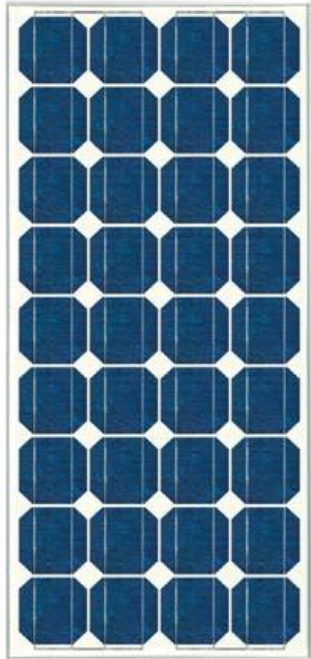
Electrical Characteristics			
Peak Power	Pmax	[ Wp ]	85
Max.Power Current	Imp	[ A ]	5.0
Max.Powe Voltage	Vmp	[ V ]	17
Short Circuit current	Isc	[ A ]	5.5
Open Circuit Voltage	Voc	[ V ]	21
Maximum System Voltage	DC	[ V ]	1000
Power tolerance		[ % ]	±5
Temp. Co eff. of Isc ( TK Isc ) Temp.		[ % / °C ]	0.04
Co eff. of Voc ( TK Voc ) Temp.		[ % / °C ]	-0.33
Co eff. of Pmax ( TK Pmax )		[ % / °C ]	-0.47
Normal operation cell temperature		[ °C ]	45 ± 2
Standard test conditions (STC)	Spectrum AM 1.5 , 1000 W/m <sup>2</sup> , Module temperature 25°C		

## Curve Characteristics:



Mechanical Characteristics	
Dimension	1195 × 534 × 35 mm
Weight	7.5 Kg
Solar cells	36 cells (Mono Crystalline Silicon , 125 mm × 125 mm ) configured geometrically for a 4×9 Matrix connected in series
Output cables length	2 × 900 mm ( Optinal )
Construction	Front : High transmission 3.2 mm tempered glass
	Rear : White backsheet (TPT) ; Encapsulant : EVA

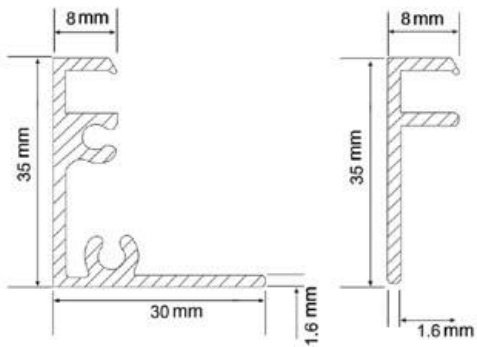
# Physical Characteristics



Frame view



Jbox view



Frame detail

