



YOUR RELIABLE  
PARTNER FOR  
SOLAR ENERGY  
SINCE 1992

# A MULTI-FACETED SOLAR SOLUTION

COMBATS HARSH WEATHER CONDITIONS LIKE A PRO!

## EMMVEE 1500 DC PV MODULE

Emmvee is an intelligent solar solutions producer born from an idea to implement green energy to better use. We aim at providing universally designed products to support all kinds of contemporary and lavish living. Amidst our industrial product range, Photovoltaics and Solar Water Heating Systems have been our strongest since inception in 1992.

### Worried about the sustainability of your solar modules in the extreme harsh weather conditions?

Emmvee Solar Photovoltaic Modules are the best for On-Grid solar power plants. Our modules are built to withstand extreme harsh weather conditions and sustain for more than 25 years. The rigid performance and safety measures adopted by our products are one of its kind. These modules are carved into perfection with our state-of-the-art machinery and premium materials sourced from across the world.

## FEATURES



AR COATED HIGH  
TRANSMISSION GLASS



ANODISED  
ALUMINIUM FRAME



PID FREE



MECHANICAL  
LOAD OF 5400 Pa



MC4 COMPATIBLE  
CONNECTORS

## BENEFITS



CAPABLE OF BEARING  
HIGH SNOW LOAD AND  
WIND



EXCELLENT CURRENT  
DISTRIBUTION  
PERFORMANCE



FLEXIBILITY IN  
INVERTER SELECTION



RESISTS CORROSION  
OF THE FRAME  
ENSURING LONG LIFE



NO DEGRADATION OF  
ELECTRICAL POWER,  
HENCE SAFER

# SPECIFICATION 144 HALF CUT CELL MONO PERC

Electrical data at 1000 W/m<sup>2</sup>, 25°C and A.M. 1.5 (STC in accordance with IEC 60904-3)

MODEL NAME	E400HCM144	E410HCM144
RATED POWER AT STC (W)	400 Wp	410 Wp
MODULE EFFICIENCY AT STC	19.80%	20.29%
OPEN CIRCUIT VOLTAGE (V <sub>oc</sub> )	49.32	49.68
SHORT CIRCUIT CURRENT (I <sub>sc</sub> )	10.32	10.48
MAX POWER VOLTAGE (V <sub>pm</sub> )	40.68	41.04
MAX POWER CURRENT (I <sub>pm</sub> )	9.83	9.99

## Thermal data

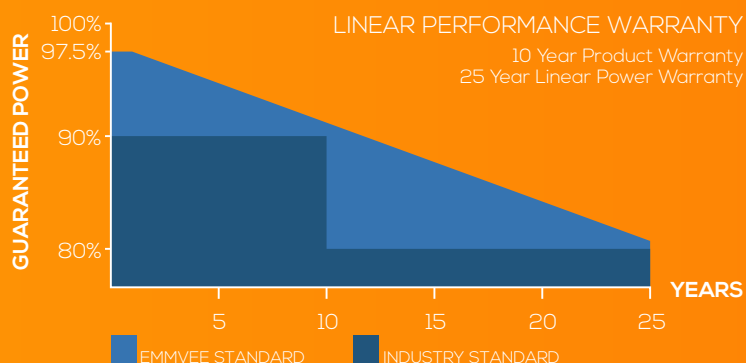
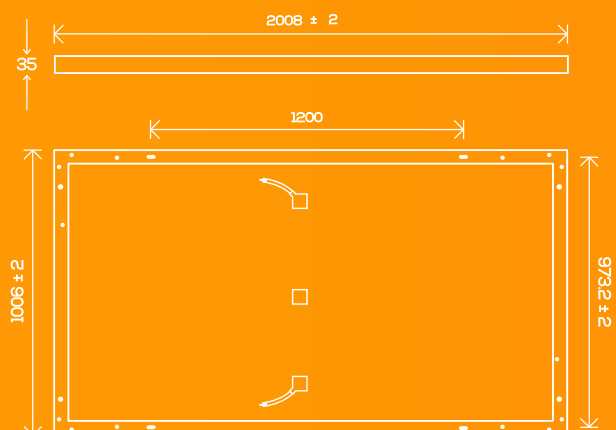
TEMPERATURE COEFFICIENT OPEN CIRCUIT VOLTAGE	-0.29% / °K
TEMPERATURE COEFFICIENT SHORT CIRCUIT CURRENT	+0.05% / °K
TEMPERATURE COEFFICIENT RATED POWER	-0.39% / °K
NOCT (NORMAL OPERATING CELL TEMPERATURE)	44°C ± 2°C

## Mechanical data

NUMBER OF CELLS & CELL TYPE	144 MONO PERC SOLAR CUT CELLS 158.75 x 79.375 mm(5BB)
DIMENSIONS (L X W X H)	2008 mm x 1006 mm x 35 mm
WEIGHT	23 Kg
FRONT GLASS	3.2 mm HIGH TRANSMISSION, TEMPERED GLASS
ENCAPSULATION	EVA
BACK SHEET	COMPOSITE FILM, WHITE
JUNCTION BOX	3 SPLIT JUNCTION BOX, IP68
NUMBER OF BYPASS DIODES	3
CABLES	4 mm <sup>2</sup> SOLAR CABLES, LENGTH 500 mm
CONNECTORS	MC4 COMPATIBLE

## Permissible operating conditions

OPERATING TEMPERATURE RANGE	-40°C TO 85°C
MAX. SYSTEM VOLTAGE	1500 V DC
MAX. REVERSE CURRENT	20 A
MAX. SURFACE LOAD CAPACITY	5400 Pa
PROTECTION CLASS	II





## MONO PERC

60 & 72 CELL

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- Positive tolerance offer
- Excellent performance under weak light conditions

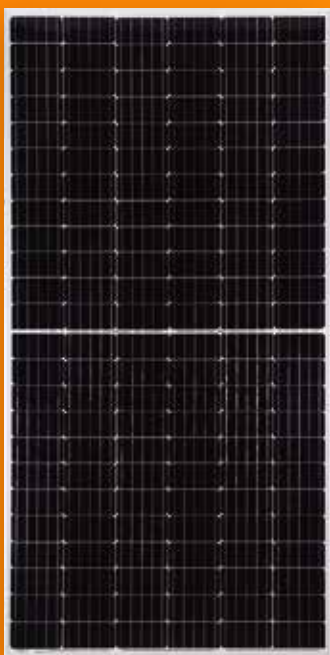


## MULTI CRYSTALLINE

60 & 72 CELL

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- Highly resistant to salt mist, ammonia, dust and hail
- Good temperature efficiency enables better output in high temperature regions



## HALF CUT CELL MONO PERC

144 CELL

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- Generates only half of the current with lowered heat production thereby increasing module reliability
- Excellent current distribution with reduced power loss





## EMMVEE PHOTOVOLTAIC POWER PRIVATE LIMITED

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(An ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007 Certified Company)