



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/m², 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 _{oc})	49.32	49.68
SHORT CIRCUIT CURRENT (I _{sc})	10.32	10.48
MAX POWER VOLTAGE (V _{pm})	40.68	41.04
MAX POWER CURRENT (I _{pm})	9.83	9.99

Thermal data

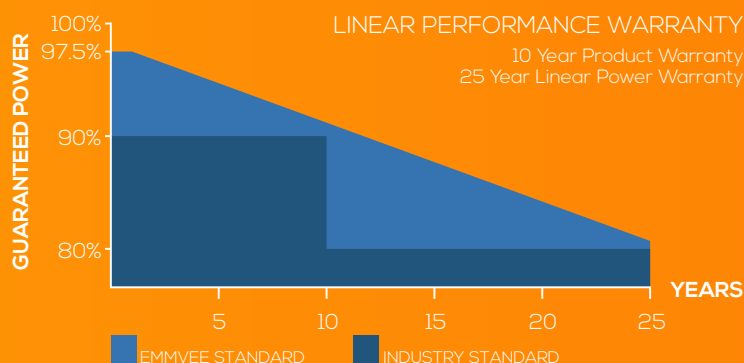
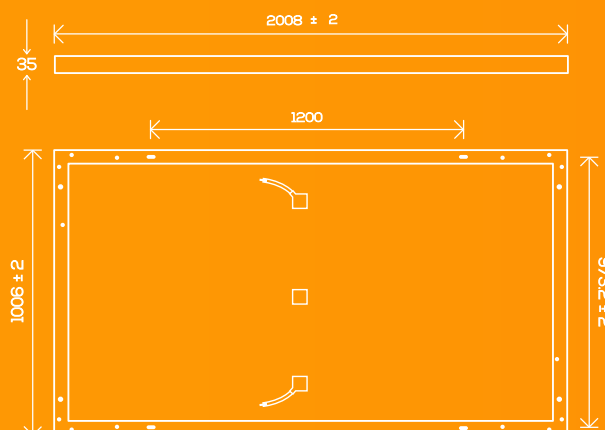
TEMPERATURE COEFFICIENT OPEN CIRCUIT VOLTAGE	-0.29% / °K
TEMPERATURE COEFFICIENT SHORT CIRCUIT CURRENT	+0.05% / °K
TEMPERATURE COEFFICIENT RATED POWER	-0.39% / °K
NOCT (NORMAL OPERATING CELL TEMPERATURE)	44°C ± 2°C

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 ² 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



SPECIFICATION 72 CELL MONO PERC

Electrical data at 1000 W/m², 25°C and A.M. 1.5 (STC in accordance with IEC 60904-3)

MODEL NAME	E385M72	E390M72	E395M72
RATED POWER AT STC	385 W _p	390 W _p	395 W _p
MODULE EFFICIENCY AT STC	19.20%	19.45%	19.70%
OPEN CIRCUIT VOLTAGE (V _{oc})	48.90	49.00	49.10
SHORT CIRCUIT CURRENT (I _{sc})	10.06	10.12	10.21
MAX POWER VOLTAGE (V _{pm})	40.32	40.37	40.45
MAX POWER CURRENT (I _{pm})	9.55	9.66	9.75

Thermal data

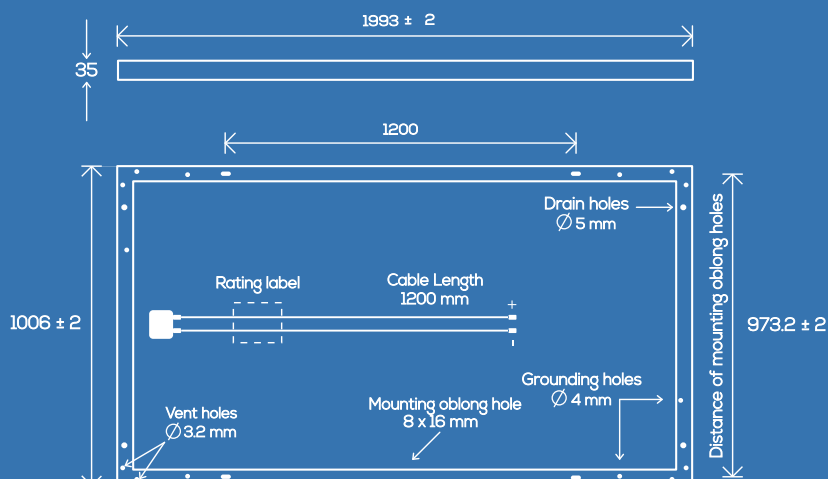
TEMPERATURE COEFFICIENT OPEN CIRCUIT VOLTAGE	-0.29% / °K
TEMPERATURE COEFFICIENT SHORT CIRCUIT CURRENT	+0.05% / °K
TEMPERATURE COEFFICIENT RATED POWER	-0.39% / °K
NOCT (NORMAL OPERATING CELL TEMPERATURE)	44°C ± 2°C

Mechanical data

NUMBER OF CELLS & CELL TYPE	72 MONOPERC SOLAR CELLS (158.75 mm x 158.75 mm)
DIMENSIONS (L X W X H)	1993 mm x 1006 mm x 35 mm
WEIGHT	23 Kg
FRONT GLASS	3.2 mm HIGH TRANSMISSION, TEMPERED GLASS
EMBEDDING	EVA
BACK SHEET	COMPOSITE FILM, WHITE
JUNCTION BOX	IP67
NUMBER OF BYPASS DIODES	3
CABLES	4 mm ² SOLAR CABLES, LENGTH 1200 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



TECHNICAL DRAWING
All Dimensions in mm

SPECIFICATION 72 CELL MULTICRYSTALLINE

Electrical data at 1000 W/m², 25°C and A.M. 1.5 (STC in accordance with IEC 60904-3)

MODEL NAME	E320P72	E325P72	E330P72	E335P72
RATED POWER AT STC	320 Wp	325 Wp	330 Wp	335 Wp
MODULE EFFICIENCY AT STC	16.41%	16.66%	16.92%	17.18%
OPEN CIRCUIT VOLTAGE (V _{oc})	45.7 V	45.8 V	45.9 V	46 V
SHORT CIRCUIT CURRENT (I _{sc})	9.06 A	9.11 A	9.2 A	9.31 A
MAX POWER VOLTAGE (V _{pm})	37.1 V	37.4 V	37.7 V	37.8 V
MAX POWER CURRENT (I _{pm})	8.63 A	8.68 A	8.76 A	8.86 A

Thermal data

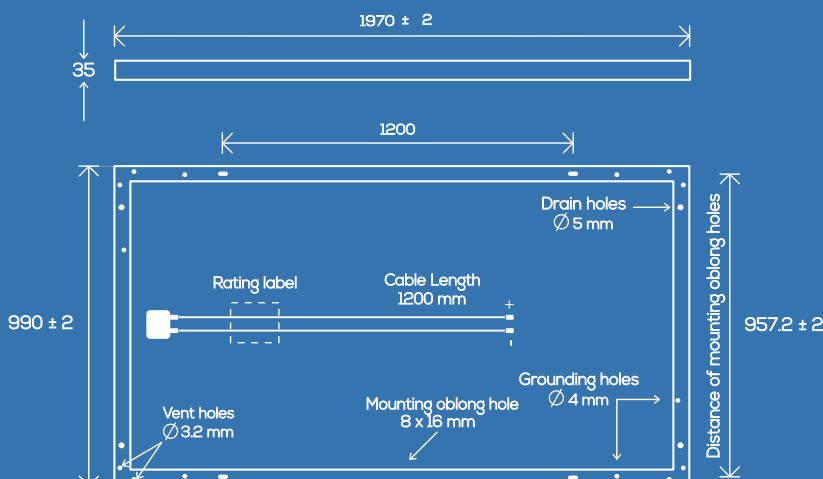
TEMPERATURE COEFFICIENT OPEN CIRCUIT VOLTAGE	-0.34% / °K
TEMPERATURE COEFFICIENT SHORT CIRCUIT CURRENT	+0.05% / °K
TEMPERATURE COEFFICIENT RATED POWER	-0.4% / °K
NOCT (NORMAL OPERATING CELL TEMPERATURE)	46°C ± 2°C

Mechanical data

NUMBER OF CELLS & CELL TYPE	72 MULTICRYSTALLINE SOLAR CELLS (157 mm X 157 mm)
DIMENSIONS (L X W X H)	1970 mm X 990 mm X 35 mm
WEIGHT	22 Kg
FRONT GLASS	3.2 mm HIGH TRANSMISSION, TEMPERED GLASS
EMBEDDING	EVA
BACK SHEET	COMPOSITE FILM, WHITE
JUNCTION BOX	IP67
NUMBER OF BYPASS DIODES	3
CABLES	4 mm ² SOLAR CABLES, LENGTH 1200 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



TECHNICAL DRAWING
All Dimensions in mm

LINEAR PERFORMANCE
WARRANTY

10 Year Product Warranty
25 Year Linear Power Warranty

SPECIFICATION 60 CELL MONO PERC

Electrical data at 1000 W/m², 25°C and A.M. 1.5 (STC in accordance with IEC 60904-3)

MODEL NAME	E315M60	E320M60
RATED POWER AT STC	315 Wp	320 Wp
MODULE EFFICIENCY AT STC	18.74%	19.04%
OPEN CIRCUIT VOLTAGE (V _{oc})	40.70 V	40.90 V
SHORT CIRCUIT CURRENT (I _{sc})	10.04 A	10.15 A
MAX POWER VOLTAGE (V _{pm})	33.20 V	33.40 V
MAX POWER CURRENT (I _{pm})	9.49 A	9.59 A

Thermal data

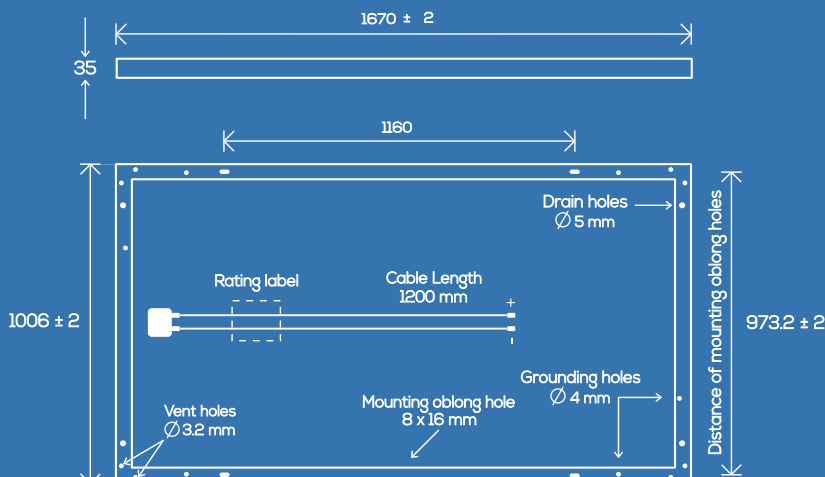
TEMPERATURE COEFFICIENT OPEN CIRCUIT VOLTAGE	-0.29% / °K
TEMPERATURE COEFFICIENT SHORT CIRCUIT CURRENT	+0.05% / °K
TEMPERATURE COEFFICIENT RATED POWER	-0.39% / °K
NOCT (NORMAL OPERATING CELL TEMPERATURE)	44°C ± 2°C

Mechanical data

NUMBER OF CELLS & CELL TYPE	60 MONO PERC SOLAR CELLS (158.75 mm x 158.75 mm)
DIMENSIONS (L X W X H)	1670 mm x 1006 mm x 35 mm
WEIGHT	19 Kg
FRONT GLASS	3.2 mm HIGH TRANSMISSION, TEMPERED GLASS
EMBEDDING	EVA
BACK SHEET	COMPOSITE FILM, WHITE
JUNCTION BOX	IP67
NUMBER OF BYPASS DIODES	3
CABLES	4 mm ² SOLAR CABLES, LENGTH 1200 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



TECHNICAL DRAWING
All Dimensions in mm

SPECIFICATION 60 CELL MULTICRYSTALLINE

Electrical data at 1000 W/m², 25°C and A.M. 1.5 (STC in accordance with IEC 60904-3)

MODEL NAME	E265P60	E270P60	E275P60	E280P60
RATED POWER AT STC	265 Wp	270 Wp	275 Wp	280 Wp
MODULE EFFICIENCY AT STC	16.32%	16.63%	16.94%	17.15%
OPEN CIRCUIT VOLTAGE (V _{oc})	38.30 V	38.60 V	38.90 V	39.20 V
SHORT CIRCUIT CURRENT (I _{sc})	9.04 A	9.17 A	9.29 A	9.32 A
MAX POWER VOLTAGE (V _{pm})	30.80 V	30.90 V	31.10 V	31.20 V
MAX POWER CURRENT (I _{pm})- IPM	8.61 A	8.74 A	8.85 A	8.97 A

Thermal data

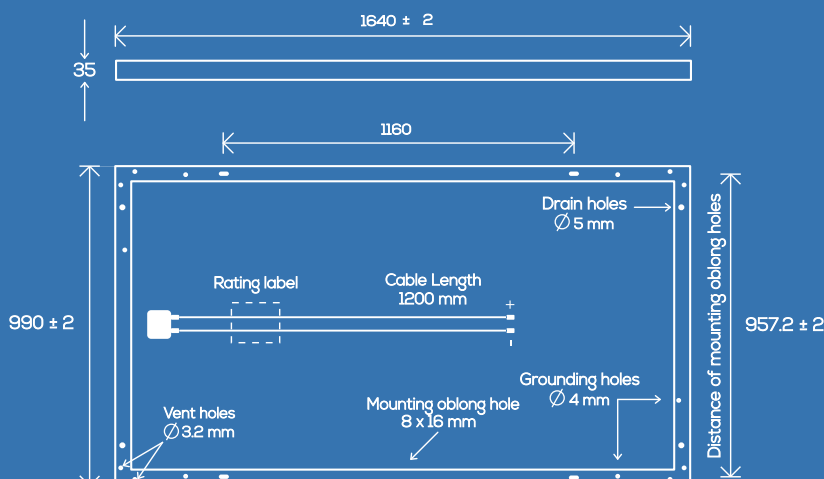
TEMPERATURE COEFFICIENT OPEN CIRCUIT VOLTAGE	-0.34% / °K
TEMPERATURE COEFFICIENT SHORT CIRCUIT CURRENT	+0.05% / °K
TEMPERATURE COEFFICIENT RATED POWER	-0.4% / °K
NOCT (NORMAL OPERATING CELL TEMPERATURE)	46°C ± 2°C

Mechanical data

NUMBER OF CELLS & CELL TYPE	60 MULTICRYSTALLINE SOLAR CELLS (157 mm X 157 mm)
DIMENSIONS (L X W X H)	1640 mm X 990 mm X 35 mm
WEIGHT	18 Kg
FRONT GLASS	3.2 mm HIGH TRANSMISSION, TEMPERED GLASS
EMBEDDING	EVA
BACK SHEET	COMPOSITE FILM, WHITE
JUNCTION BOX	IP67
NUMBER OF BYPASS DIODES	3
CABLES	4 mm ² SOLAR CABLES, LENGTH 1200 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



TECHNICAL DRAWING
All Dimensions in mm

LINEAR PERFORMANCE
WARRANTY

10 Year Product Warranty
25 Year Linear Power Warranty



MONO PERC

60 & 72 CELL

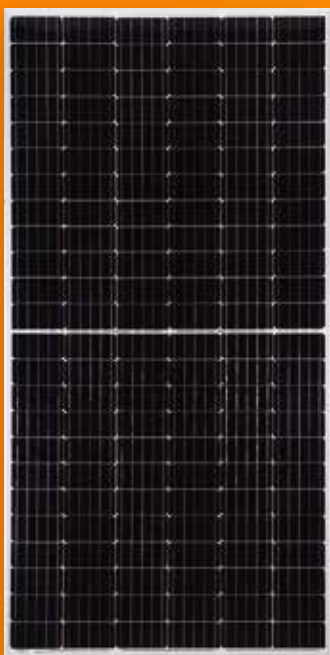
- Positive tolerance offer
- Excellent performance under weak light conditions



MULTI CRYSTALLINE

60 & 72 CELL

- 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

- 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

Corporate Office: No. 13/1, International Airport Road, Bettahalasur Post, Bengaluru - 562 157, India

Phone: +91 80 2217 4328, +91 80 2217 4333 | info@emmvee.in | www.emmvee.com

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