



YOUR RELIABLE
PARTNER FOR
SOLAR ENERGY
SINCE 1992

POWERHOUSE OF PERFORMANCE

WITH DUAL-CORE TECHNOLOGIES!

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 sustainable living. Amidst our industrial product range, Photovoltaics and Solar Water Heating Systems are our strongest since inception in 1992.

Do you want to generate electricity from reflective light as well?

Emmvee's Bifacial PV modules have the unique ability to produce electricity from direct sunlight exposure, as well as from reflective light that has passed through the panels. When the sun shines onto the panels, light passes through the panels due to the glass surfaces. This is capable because bifacial panels allow for electricity to be produced from both sides of the panels optimizing and aligning with the time of sunrise and sunset. The higher a bifacial module is tilted, the more power it produces from its properties. This is extremely effective for high-range commercial or utility-scale application set-ups.

FEATURES



HIGHER LIFETIME
POWER YIELD



SAVING BOS
COST



IMPROVED
DURABILITY
AND RELIABILITY



LESS
MAINTENANCE
REQUIREMENT



AESTHETICALLY
SOUND DESIGN



STRENGTHENED
MECHANICAL
SUPPORT

SPECIFICATION (60 CELL BI-FACIAL) [SUNNY SIDE DATA]

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

MODEL NAME	ESBI295	ESBI300	ESBI305	ESBI310
RATED POWER AT STC ¹	295 Wp	300 Wp	305 Wp	310 Wp
MODULE EFFICIENCY AT STC ²	17.87%	18.18%	18.48%	18.78%
OPEN CIRCUIT VOLTAGE (V _{oc})	39.70 V	39.90 V	40.10 V	40.30 V
SHORT CIRCUIT CURRENT (I _{sc})	9.62 A	9.72 A	9.82 A	9.92 A
MAX POWER VOLTAGE (V _{pm})	32.70V	32.90V	33.10 V	33.30 V
MAX POWER CURRENT (I _{pm})	9.01 A	9.11 A	9.21 A	9.30 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 BI-FACIAL SOLAR CELLS (156.75mmX156.75mm)
DIMENSIONS (LENGTH X WIDTH X HEIGHT)	1673 mm X 989 mm X 6 mm
WEIGHT	25 Kg
FRONT GLASS	2.5mm HIGH TRANSMISSION, TEMPERED GLASS x 2 NOs
EMBEDDING	POE
JUNCTION BOX	IP67
NUMBER OF BYPASS DIODES	3
CABLES	4 mm ² SOLAR CABLES
CONNECTORS	MC4 COMPATIBLE

Possible operating conditions

OPERATING TEMPERATURE RANGE	-40°C TO 85°C
MAX. SYSTEM VOLTAGE	1000V DC
MAX. REVERSE CURRENT	15 A
MAX. SURFACE LOAD CAPACITY	5400 Pa
PROTECTION CLASS	II



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