

ESPSC

Monocrystalline Solar Module

Q High-quality
With 60 cells and 3 bypass diodes in power classes from 250 to 310 Wp for grid connected systems.

\$ Reliable
The high quality level of ERA SOLAR guarantees long life-time and high earnings.

kg Solid
An Aluminium hollow-chamber frame on each side combined with low-iron and tempered solar glass ensures high load capacity resistance.

Wp Performance guarantee
ERA SOLAR grants a power guarantee of 90% of nominal power output up to 10 years and 80% up to 25 years.

+ WATTS POSITIVE TOLERANCE

10 YEARS PRODUCT WARRANTY

10 YEARS PERFORMANCE GUARANTEE 90%

25 YEARS PERFORMANCE GUARANTEE 80%



ESPSC

Monocrystalline Solar Module

SPECIFICATIONS

Dimensions	1640 x 992 x 35 mm(A) 1650 x 990 x 35 mm(B)
Weight	17.75 kg
Frame	Aluminium hollow-chamber frame on each side
Glass	Low-iron and tempered glass 3.2 mm
Cells	60 pcs monocrystalline Si-cells (156 x 156 mm)
Cell Embedding	EVA
Back-Foil	FEVE / PET / FEVE
Junction Box	TÜV certified
Cable	4 mm ² solar cable 2 x 900 mm
Temperature Range	-40°C ... +85°C
Load Capacity	2400 Pa(IEC 61215), 35mm 5400 Pa(IEC 61215), 45mm
Application class	Class A
Electrical protection class	Class II
Fire safety class	Class C
Product warranty	10 years
Power Guarantee	10 years 90% 25 years 80%

CHARACTERISTICS

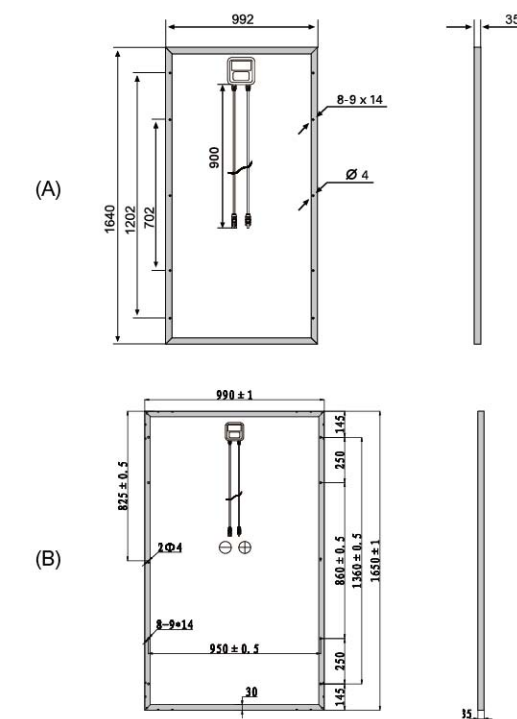
Max. System Voltage	1000V/DC
Temperature-Coefficient I _{sc}	+0.02973%/°K
Temperature-Coefficient V _{oc}	-0.38038%/°K
Temperature-Coefficient P _{mpp}	-0.57402%/°K
NOCT***	45°C

CERTIFICATES

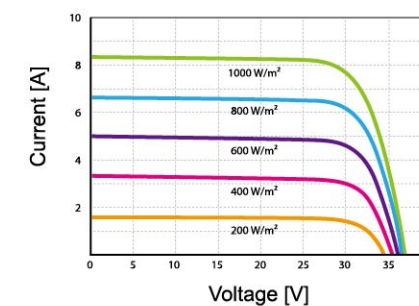
IEC 61215 edition 2 (TÜV Nord)
(TÜV Rheinland)
IEC 61730 MCS INMETRO
CE CEC SALT-MIST
UL1703 CSA
PID Resistant

INSURANCE

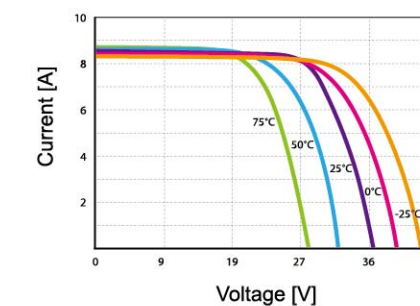
Chubb



CURRENT-VOLTAGE CURVES



Module characteristics at constant module temperatures of 25°C and variable levels of irradiance



Module characteristics at variable module temperatures and constant module irradiance of 1.000 W/m²

ESPSC TYPE	250	270	280	290	300	310
Power Class	250W	270W	280W	290W	300W	310W
Max. Power Voltage (V _{mpp})* at STC**	30.9V	31.8V	32.2V	32.6V	33V	33.5V
Max. Power Current (I _{mpp}) at STC	8.1A	8.5A	8.7A	8.9A	9.1A	9.25A
Open Circuit Voltage (V _{oc}) at STC	36.8V	37.4V	37.8V	38.3V	38.7V	39.2V
Short Circuit Current (I _{sc}) at STC	8.75A	9.14A	9.36A	9.58A	9.8A	9.95A
Module Efficiency	15.4 %	16.5%	17.2%	17.8%	18.4%	19%

* MPP: Maximum Power Point
** STC (Standard Test Conditions): 1000W/m², 25°C, AM 1.5
*** Normal Operating Cell Temperature

