



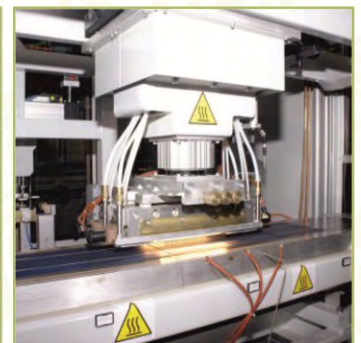
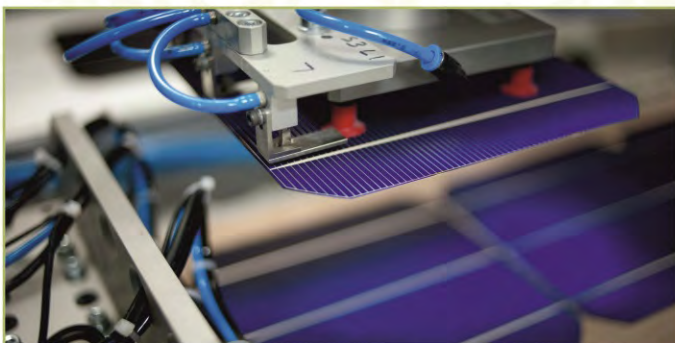
Sunneva

SOLAR PV MODULE

AN ISO 9001:2008 CERTIFIED COMPANY



Good efficiency # Excellent low light response # Positive tolerance # Anti reflection coated glass
Shock-resistant thick Iron glass # High grade solar cells # Anodized aluminium frame # 25 years Performance warranty



ALL ELECTRICAL DATA REFERS TO STC (AM 1.5 G, 1000 W/m², 25 C)

Type	EV-37	EV-40	EV-50	EV-60	EV-75	EV-80	EV-100
Rated Peak Power (Wp)	37	40	50	60	75	80	100
Nominal Voltage Vmpp (V)	18.00	18.00	18.00	18.00	18.00	18.00	18.00
Nominal Current Imp (A)	2.07	2.25	2.80	3.35	4.20	4.70	5.59
Open Circuit Voltage Voc(V)	22.50	22.50	22.50	22.50	22.50	22.50	22.50
Short Circuit Current Isc (A)	2.25	2.40	3.00	3.60	4.50	4.90	6.00
Tolerance of Electrical Parameter : All Electrical parameter ±3%							

MECHANICAL SPECIFICATION :

Length (mm)	466	539	666	776	776	1026
Width (mm)	666 mm					
Height (mm)	34 ± 1.5 mm					
Weight (Kgs)	3.65	4.85	5.6	6.0	6.5	8.5
Junction Box	IP65, 3 Terminal Insertaion type with 2 bypass diode					
Application Class	CLASS A (Safety class II)					
Front Cover	High Transmission, Low Iron, Tempered Glass					
Cells	3BB 36 no's pcs Poly - Crystallin Solar Cells					
Cell Encapsulation	EVA (Ethylene Vinyl Acetate)					
Back Cover	Composite Film					
Frame	Anodize aluminium frame with twin wall profile					

TEMPERATURE COEFFICIENTS (TC) AND PERMISSION OPERATING CONDITIONS

Tc of Open Circuit Voltage (β)	-0.35±0.01%/ °C
Tc of Short Circuit Current (α)	0.05±0.02% / °C
Tc of Power (γ)	-0.04±0.02% / °C
Maximum System Voltage	1000 V(TUV)
NOCT	45 °C ± 2 °C
Temperature Range	-40 °C to 85 °C

NOCT-800 W/M², AMBIENT TEMPERATURE 20°C, WIND SPEED (1M/SEC)

GURANTEES, CERTIFICATIONS & PACKING DETAILS :

Product Warranty	5 Years
Performance Guaranteed	Guarantee Power Output of 90% for 10 years and 80% for 25 Years
Approvals and Certificates	TUV : IEC 61215 Ed.2, IEC 61730, IEC 61701 MNRE
Packing	5 in 1 type in corrugated boxes

40W to 100W For Offgrid, Home Light System & Street Lightts

ELECTRICAL DATA - ALL DATA REFERS TO STC (AM 1.5 G, 1000 W/m², 25 C)

Type	EV-120	EV-130	EV-140	EV-150
Rated Peak Power (Wp)	120	130	140	150
Nominal Voltage Vmpp (V)	17.35	17.40	17.50	18.10
Nominal Current Impp (A)	7.09	7.40	8.00	8.34
Open Circuit Voltage Voc(V)	21.90	21.60	22.10	22.00
Short Circuit Current Isc (A)	7.48	7.85	8.35	8.50
Tolerance of Electrical Parameter : All Electrical parameter ±3%				

MECHANICAL SPECIFICATION :

Length (mm)	1256	1483
Width (mm)	666	
Height (mm)	34mm	
Weight (Kgs)	10.0 Kg	12.5 Kg
Junction Box	IP65, 3 Terminal Insertaion type with 2 bypass diode	
Cable & Connectors	4mm ² , TUV & UL Certified, 1000 mm(optional)	
Application Class	CLASS A (Safety class II)	
Front Cover	High Transmission, Low Iron, Tempered Glass	
Cells	3BB 36 no's pcs Poly - Crystallin Solar Cells	
Cell Encapsulation	EVA (Ethylene Vinyl Acetate)	
Back Cover	Composite Film	
Frame	Anodize aluminium frame with twin wall profile	
Maximum surface load capacity	According to IEC 61215, snow load 5400Pa or 550kg/m ² & Wind load 2400pa	
Mounting Holes	4 nos (9*7 mm)	
Ground Holes	2 nos (4 mmØ)	

TEMPERATURE COEFFICIENTS (TC) AND PERMISSION OPERATING CONDITIONS

Tc of Open Circuit Voltage (β)	-0.35±0.01%/ °C
Tc of Short Circuit Current (α)	0.05±0.02% / °C
Tc of Power (γ)	-0.44±0.02% / °C
Maximum System Voltage	1000 V(TUV),600V(UL)
NOCT	45 °C ± 2 °C
Temperature Range	-40 °C to 85 °C
Efficiency reduction at 200W/M ² ,25°C	<5%
Maximum Reverse Current (A)	12.5
Resistance Against Hail	Maximum diameter of 24 mm with impact speed of 83 Km/h

NOCT-800 W/M², AMBIENT TEMPERATURE 20°C, WIND SPEED (1M/SEC)**GURANTEES, CERTIFICATIONS & PACKING DETAILS :**

Product Warranty	5 Years
Performance Guaranteed	Guarantee Power Output of 90% for 10 years and 80% for 25 Years
Approvals and Certificates	TUV: IEC 61215 Ed.2, IEC 61730, IEC 61701 MNRE
Packing	4 in 1 type in corrugated boxes

ELECTRICAL DATA - ALL DATA REFERS TO STC (AM 1.5 G, 1000 W/m², 25 C)

Type	EV-200/12V	EV-200/24V	EV-210	EV-220
Rated Peak Power (Wp)	200/12V	200/24V	210	220
Nominal Voltage Vmpp (V)	17.90	30.00	26.69	27.09
Nominal Current Impp (A)	11.20	6.67	7.87	8.12
Open Circuit Voltage Voc(V)	22.39	34.50	33.62	34.07
Short Circuit Current Isc (A)	11.80	7.17	8.35	8.61
Tolerance of Electrical Parameter : All Electrical parameter $\pm 3\%$				

MECHANICAL SPECIFICATION :

Length	1429
Width	983
Height	35 mm
Weight	16.5 kg
Junction Box	IP65, 4 Terminal Insertaion type with 3 bypass diodes (15A)
Cable & Connectors	4mm ² , TUV , 1000 mm
Application Class	CLASS A (Safety class II)
Front Cover	High Transmission, Low Iron, 3.2mm Tempered Glass
Cell Encapsulation	EVA (Ethylene Vinyl Acetate)
Back Cover	Composite Film
Frame	Anodize aluminium frame with twin wall profile
Maximum Surface Load Capacity	According to IEC 61215, snow load 5400 pa or 550 kg/m & Wind load 2400 pa

TEMPERATURE COEFFICIENTS (TC) AND PERMISSION OPERATING CONDITIONS

Tc of Open Circuit Voltage (β)	$-0.35 \pm 0.01\% / ^\circ\text{C}$
Tc of Short Circuit Current (a)	$0.05 \pm 0.02\% / ^\circ\text{C}$
Tc of Power (Y)	$-0.44 \pm 0.02\% / ^\circ\text{C}$
Maximum System Voltage	1000 V(TUV), 600V(UL)
NOCT	$45 ^\circ\text{C} \pm 2 ^\circ\text{C}$
Temperature Range	$-40 ^\circ\text{C}$ to $85 ^\circ\text{C}$
Efficiency Reduction at 200W/m ² , 25°C	< 5%
Maximum Reserve Current (A)	12.5
Resistance against hail	Maximum diameter of 24 mm with impact speed 83 km/h

GURANTEES AND CERTIFICATIONS :

Product Warranty	5 Years
Performance Guaranteed	Guarantee Power Output of 90% for 10 yrs and 80% for 25 Yrs
Approvals and Certificates	TUV : IEC 61215 Ed.2, IEC 61730, IEC 61701 MNRE
Packing	2 in 1 type in corrugated boxes 20 Ft. Container - 300 Pcs.