



General specifications

Manufacturer	Sunage S.A.
Production site	Switzerland
Cells type	Monocrystalline silicon
Cells dimension	Pseudosquare 156x156mm 3busbars
No. of cells	60
Glass type and thickness	Texturized solar glass 4mm thick
Junction box	Aluminium junction box IP 67 Safety Class II
No. of by-pass diodes	3, Schottky type
Connections	2 cables 1m long MC4 compatible connectors

Warranty

Whole product	12 years
Power output	Linear decay $\leq 0.6\%$ /year up to 25 years, Initial decay $\leq 2\%$

Certificates

IEC 61215 Ed.2.0 - EN 61730-1 - EN 61730-2

Mechanical specifications

Height (mm)	1.650
Width (mm)	985
Thickness (mm)	5
Weight (Kg)	19.3
Maximum snow load	5.400 Pa
Maximum wind speed	130 Km/h
Hail	G5 Class; \varnothing 50 mm; 59.9 gr; 30.8 m/sec
A (mm)	5
B (mm)	34
C (mm)	985
D (mm)	1.650
E (mm)	1.000
F (mm)	15
Tolerance $\pm 2\%$	

In order to correctly and safely install the modules please refer to Sunage Installation Manual

** The electrical specifications are measured under STC conditions (1000 W/sqm, 1.5 Air Mass Spectrum, cells temperature 25°C); the reference module used to set our Sun Simulator has been calibrated by SUPSI University in calibration tolerance and of the guaranteed performances of the simulator.

Electrical specifications**

Nominal Power (Wp)	Tolerance (Wp)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)	*Current Temp. Coeff. α (%/°C)	*Voltage Temp. Coeff. β (%/°C)	*Power Temp. Coeff. γ (%/°C)	R shunt (Ohm)	R series (Ohm)
SAM 60/6 LAM 265	+4.9/-0	31.59	8.39	38.96	9.08	0.048	-0.29	-0.427	180	0.34
SAM 60/6 LAM 270	+4.9/-0	31.81	8.49	39.35	9.11	0.048	-0.29	-0.427	190	0.34
SAM 60/6 LAM 275	+4.9/-0	32.04	8.59	39.74	9.14	0.048	-0.29	-0.427	200	0.34
SAM 60/6 LAM 280 ***	+4.9/-0	32.30	8.68	40.12	9.17	0.048	-0.29	-0.427	210	0.33
SAM 60/6 LAM 285 ***	+4.9/-0	32.51	8.77	40.51	9.20	0.048	-0.29	-0.427	220	0.32

*** versions only available with white backsheet

NOCT: 45°C

Maximum system voltage: 1000 V

Operating temperature: - 40 °C + 85°C

* The thermal coefficients refer to Isc, Voc e Pn