Photovoltaic modules

TE 1300, TE 1700

115 à 180 Watts Peak - 12/24 Volts
Multicrystalline, Glass/Tedlar

Tenesol manufactures its own photovoltaic modules.

Tenesol's modules use the **high-output technology of the multicrystalline cell.** Each cell is individually measured and sorted before the encapsulation stage.

The combination of **Tempered Glass / EVA / Tedlar** ensures weight minimisation, guaranties a perfect watertightness as well as durable protection of the cells.

The aluminium frame allows an effortless handling and an easy and fast assembly.

Each module is submitted to an **individual quality control** and is referenced by an assessment sheet of its performance tests.

The Tenesol modules' quality is certified : CE

Manufactured in ISO 9001:2000 certified facilities

APPLICATIONS :

- Telecommunication
- Professional Applications
- Pumping
- Beaconing
- Rural Electrification
- Grid connected systems

16 Staal Street; Kya Sand; Randburg - South Africa
Phone: (011) 462-4243; Fax: (011) 462-4310
Web: http://www.rectifier.co.za; E-mail: ca@switches.co.za

Current Automation
POWER SOLUTION PROVIDERS

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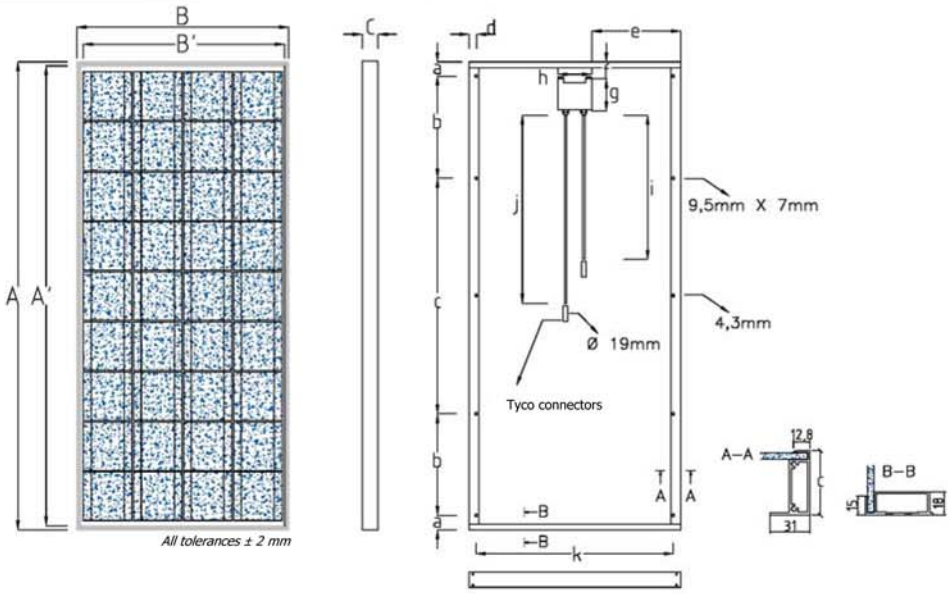
TE 1300, TE 1700

Dimensions



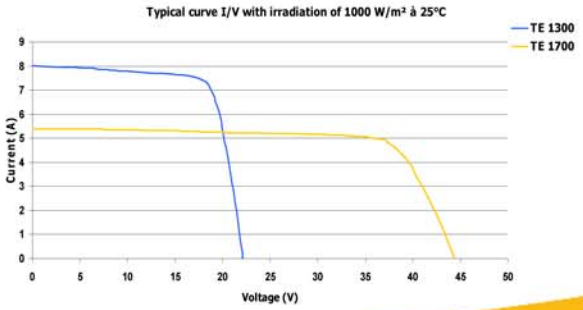
All tolerances ± 2 mm

	TE1300	TE1700
A	**1510**	**1240**
A'	1480	1212
B	**676**	**1086**
B'	650	1062
C	**50**	38
a	48	25
b	327,5	215,5
c	759	759
d	23	19
e	284,5	489,5
f	51,5	50
g	99	99
h	107	107
i	840	840
j	1030	1030
k	630	1048

Characteristics

Electrical characteristics		**TE1300**						**TE1700**				
Nominal voltage		**12 V**						**24 V**				
Typical power		**115**	**120**	**125**	**130**	**135**	**140**	**140**	**150**	**160**	**170**	**180**
Minimum power		112,5	117,5	122,5	127,5	132,5	137,5	135	145	155	165	175
Maximum power		117,5	122,5	127,5	132,5	137,5	142,5	145	155	165	175	185
Sorting limits	Wp	± 2,5 Wp						± 5 Wp				
Sorting limits	%	±2,17%	±2,08%	±2,00%	±1,92%	±1,85%	±1,79%	±3,57%	±3,33%	±3,13%	±2,94%	±2,78%
Voltage at max. power	Vpm (V)	17,5	17,6	17,7	17,8	17,9	18	33,2	33,9	34,7	35,5	36,2
Current at max. power	Ipm (A)	6,7	6,9	7,2	7,4	7,6	7,8	4,2	4,4	4,6	4,8	5
Open circuit voltage	Voc (V)	21,7	21,8	21,9	22	22,1	22,2	42	42,6	43,2	43,8	44,4
Short circuit current	Isc (A)	7,7	7,8	7,9	8	8,1	8,2	4,5	4,7	5	5,2	5,4
Temperature coefficients												
Coefficient Temperature of Voltage		- 77,4 mV/°C						- 152,64 mV/°C				
Coefficient Temperature of Current		+ 4,4 mA/°C						+ 1,53 mA/°C				
Coefficient Temperature of Power		- 0,46 %/°C						- 0,43 %/°C				
NOCT (°C)		45						45				
Cells												
Layout		156 x 156 mm						125 x 125 mm				
Layout		36 cells / 4 x 9						72 cells / 8 x 9				
Type		Multicrystalline						Multicrystalline				
General informations												
Maximum system volatge (V)		715 V						715 V				
Diodes		2 by-pass						4 by-pass				
Type of connection		Tyco (Grid J/box)						Tyco (Grid J/box)				
Weight (kg)		12						16				
Certifications												
		IEC61215 + TUV class II										
Warranty												
Product warranty		2 years										
Warranty on power output		**25 years - 80 % of minimal power / 10 years in marine environment**										

(According to specifications @ STC: Irradiation 1000 W/m²; AM 1.5; Cell at ambient Temperature T: 25°C)



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