

# ZYTECH SOLAR MODULES

High quality, top performance and reliability.



Spanish Quality. Best Prices.



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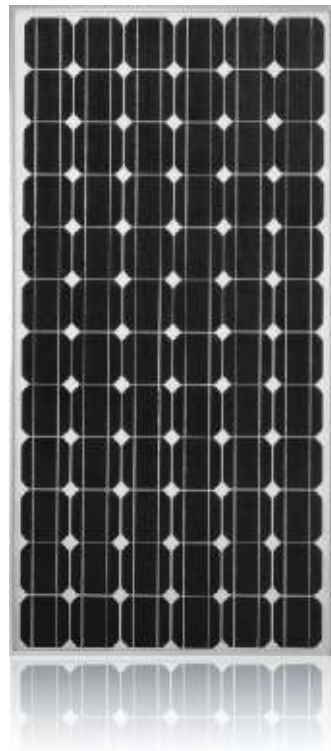
## High quality, top performance and reliability.

Zytech Solar modules are manufactured at our own automatic assembly plant in compliance with the most stringent quality standards.

Our modules (from 40W to 270W) are made to the highest manufacturing standards with full quality control, using state-of-the-art machinery imported from Japan and the United States. Every module is subject to final factory review, inspection and testing to assure compliance with electrical, mechanical and visual criteria. The models maintain the highest level of efficiency, reliability and stability, as accords with use of quality poly- and monocrystalline silicon goods.

### Features

- Zytech modules have been tested in laboratories in accordance with IEC 61215 applying increased loads of up to 5.4kN/m<sup>2</sup>, and the results of the tests confirm the suitability of Zytech Solar modules for use in areas with heavy snow and ice accumulation.
- One of the special features of the Zytech modules is that we can also manufacture very efficient modules according to our clients' particular needs.
- The Zytech Solar module frame is made of anodized aluminium for lightness with strength, so important for carrying, handling and installation ease. Zytech Solar modules can be wired together in series or parallel to meet required power needs.
- The front of the modules is made of hard glass that provides the highest transparency together with protection against water and dampness.
- The junction box comes as a standard fitting, with bypass diodes that eliminate the risk of hot spots effects. The installed diodes are unsealed which allows easy replacement.
- The cables and lockable connecting system are extremely robust and offer formidable weather protection (TÜV, IP65).
- Zytech solar power modules are covered by a 25-year limited warranty on power output and by a 2-year limited warranty on fabrication and material faults.



#### Application options

- Grid connected home systems
- Isolated and grid-connected building-integrated systems
- Solarparks
- Industrial or isolated home installations
- Lighting equipment
- Traffic signs
- Topographic systems
- Telecommunication systems



ISO 9001: 2008

[www.zytech.es](http://www.zytech.es)

< PV Modules Manufacturing Company >



Comprehensive Table: Zytech monocrystalline Photovoltaic Modules.

Wp (W)	Model	Voc (V)	Isc (A)	Vmp (V)	Imp (A)	Dimensions LxWxH (mm)	Weight (kg)	Number of cells	Cell size LxW (mm)
20	ZT20S	21.96	1.22	17.64	1.13	445x426x30	3.5	6x6	62.5x62.5
40	ZT40S	21.96	2.45	17.64	2.27	646x553x30	4.0	4x9	125x62.5
50	ZT50S	21.68	3.80	17.37	2.88	902x545x35	6.0	4x9	125x94
60	ZT60S	21.86	3.85	17.60	3.41	902x545x35	6.0	4x9	125x94
70	ZT70S	21.88	4.10	18.00	3.89	758x670x30	6.5	4x9	156x78
75	ZT75S	21.96	4.74	17.46	4.30	1201x545x35	7.0	4x9	125x125
80	ZT80S	21.96	4.90	17.64	4.54	1201x545x35	7.0	4x9	125x125
85	ZT85S	21.78	5.40	17.71	4.80	1201x545x35	7.0	4x9	125x125
90	ZT90S	22.14	5.60	17.83	5.05	1201x545x35	7.0	4x9	125x125
95	ZT95S	26.84	4.90	21.56	4.41	1457x545x40	10.5	4x11	125x125
100	ZT100S	29.28	4.74	23.28	4.30	1076x808x40	10.5	6x8	125x125
105	ZT105S	29.28	4.90	23.52	4.46	1076x808x40	10.5	6x8	125x125
110	ZT110S	29.28	5.08	23.76	4.63	1076x808x40	10.5	6x8	125x125
115	ZT115S	32.94	4.74	26.19	4.39	1203x808x40	13.0	6x9	125x125
120	ZT120S	32.94	4.90	26.46	4.54	1203x808x40	13.0	6x9	125x125
125	ZT125S	36.60	4.74	29.10	4.30	1330x808x40	13.0	6x10	125x125
130	ZT130S	36.60	4.90	29.40	4.42	1330x808x40	13.0	6x10	125x125
135	ZT135S	36.60	5.08	29.70	4.55	1330x808x40	13.0	6x10	125x125
140	ZT140S	40.26	4.74	32.01	4.37	1457x808x40	14.5	6x11	125x125
145	ZT145S	40.26	4.90	32.34	4.48	1457x808x40	14.5	6x11	125x125
150	ZT150S	42.48	5.20	33.33	4.50	1580x808x40	16.0	6x12	125x125
155	ZT155S	42.48	5.30	33.70	4.60	1580x808x40	16.0	6x12	125x125
160	ZT160S	42.48	5.40	34.04	4.70	1580x808x40	16.0	6x12	125x125
165	ZT165S	42.84	5.40	34.74	4.75	1580x808x40	16.0	6x12	125x125
170	ZT170S	43.28	5.40	35.41	4.80	1580x808x40	16.0	6x12	125x125
175	ZT175S	43.60	5.50	35.71	4.90	1580x808x40	16.0	6x12	125x125
180	ZT180S	44.28	5.60	35.65	5.05	1580x808x40	16.0	6x12	125x125
185	ZT185S	44.28	5.60	35.90	5.15	1580x808x40	16.0	6x12	125x125
200	ZT200S	47.81	5.43	39.86	5.02	1707x808x40	17.0	6x13	125x125
210	ZT210S	59.00	5.15	46.00	4.57	1590x1064x50	21.0	8x12	125x125
220	ZT220S	59.20	5.25	46.52	4.73	1590x1064x50	21.0	8x12	125x125
230	ZT230S	59.30	5.35	46.70	4.93	1590x1064x50	21.0	8x12	125x125
240	ZT240S	59.50	5.45	48.29	4.97	1590x1064x50	21.0	8x12	125x125

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Comprehensive Table: Zytech polycrystalline Photovoltaic Modules.

Wp (W)	Model	Voc (V)	Isc (A)	Vmp (V)	Imp (A)	Dimensions L×W×H (mm)	Weight (kg)	Number of cells	Cell size L×W (mm)
75	ZT75P	21.96	4.74	17.46	4.30	1201×545×35	7.0	4×9	125×125
85	ZT85P	14.45	7.72	11.90	7.14	1006×671×30	7.5	4×6	156×156
85	ZT85P <sub>2</sub>	21.96	4.85	17.60	4.83	1201×545×35	7.0	4×9	125×125
100	ZT100P	17.97	7.56	14.64	6.83	850×992×40	10.5	6×5	156×156
105	ZT105P	18.06	7.72	14.88	7.06	850×992×40	10.5	6×5	156×156
110	ZT110P	19.20	7.63	15.81	6.96	1324×671×40	11.0	4×8	156×156
115	ZT115P	19.33	7.77	15.97	7.20	1324×671×40	11.0	4×8	156×156
120	ZT120P	21.56	7.56	17.57	6.83	1482×671×40	12.5	4×9	156×156
130	ZT130P	21.74	7.77	17.96	7.24	1482×671×40	12.5	4×9	156×156
140	ZT140P	20.04	7.67	19.76	7.09	1640×671×40	14.0	4×10	156×156
145	ZT145P	25.24	7.67	20.75	6.99	1166×992×40	14.0	6×7	156×156
155	ZT155P	25.45	7.86	21.17	7.32	1166×992×40	14.0	6×7	156×156
165	ZT165P	28.80	7.63	23.71	6.96	1324×992×40	15.5	6×8	156×156
170	ZT170P	28.90	7.72	23.81	7.14	1324×992×40	15.5	6×8	156×156
170	ZT170P <sub>2</sub>	43.20	5.03	35.20	4.83	1580×808×40	16.0	6×12	125×125
180	ZT180P	29.09	7.90	24.29	7.41	1324×992×40	15.5	6×8	156×156
185	ZT185P	32.40	7.63	26.68	6.93	1486×992×50	18.0	6×9	156×156
195	ZT195P	32.62	7.77	26.95	7.24	1486×992×50	18.0	6×9	156×156
205	ZT205P	32.72	7.90	27.32	7.50	1486×992×50	18.0	6×9	156×156
210	ZT210P	36.12	7.72	29.76	7.06	1652×992×50	20.0	6×10	156×156
215	ZT215P	36.24	7.77	29.94	7.18	1652×992×50	20.0	6×10	156×156
220	ZT220P	36.30	7.82	30.12	7.30	1652×992×50	21.0	6×10	156×156
225	ZT225P	36.36	7.90	30.36	7.41	1652×992×50	21.0	6×10	156×156
230	ZT230P	36.48	7.94	30.48	7.55	1652×992×50	21.0	6×10	156×156
235	ZT235P	36.48	7.98	30.60	7.68	1652×992×50	21.0	6×10	156×156
280	ZT280P	44.64	8.70	35.21	7.95	1966×992×50	22.0	8×9	156×156



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# ZT 175S/180S/185S mono

## ZYTECH MODULES



### Cells

Cell Technology	Monocrystalline silicon
Number of cells per module	72
Cell dimensions	125 × 125 mm

### Mechanical Data

Dimension of the module L × W × H	1580 × 808 × 40 mm
Weight	16 kg

### Electrical data

		ZT 175S	ZT 180S	ZT 185S
Maximum power	$P_{max}$	175 W	180 W	185 W
Open Circuit Voltage	$V_{oc}$	43.60 V	44.28 V	44.28 V
Maximum power point voltage	$V_{mpp}$	35.71 V	35.65 V	35.90 V
Short circuit current	$I_{sc}$	5.50 A	5.60 A	5.60 A
Maximum power point current	$I_{mpp}$	4.90 A	5.05 A	5.15 A

\* At Standard Conditions (STC) Irradiance 1000 watt/m<sup>2</sup>, spectrum AM 1,5 at a cell temperature of 25°C.

### Thermal data

NOCT	47°C ± 2°C
Temperature Coefficient of $V_{oc}$	- (160 ± 10) mV / °C
Temperature Coefficient of $I_{sc}$	+ (0.065 ± 0.015) % / °C
Temperature Coefficient of Power	- (0.5 ± 0.05) % / °C

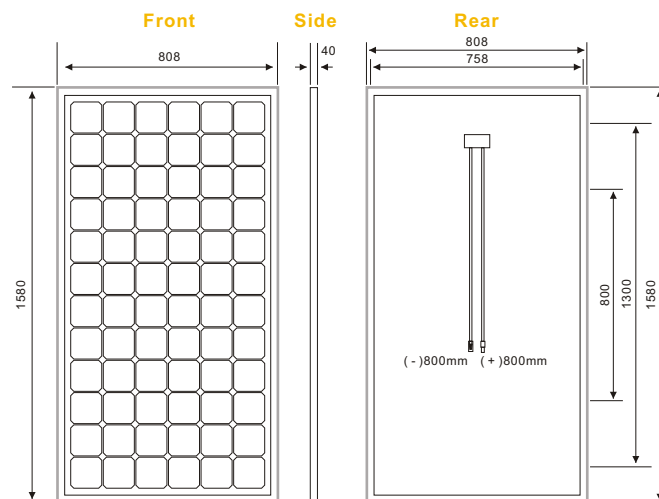
\*NOCT: Normal Operational Temperature in Celsius

### System integrated parameters

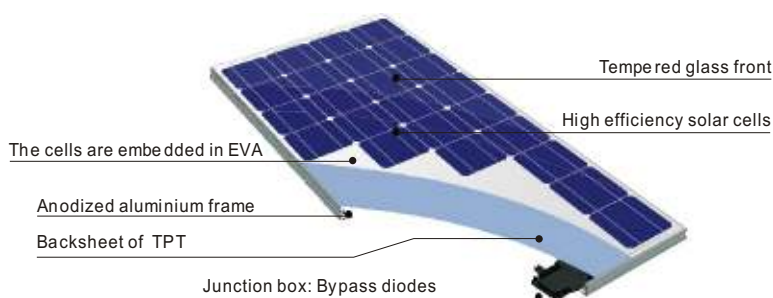
Maximum system voltage SCII	1000 VDC
Maximum reverse current	Do not apply external voltages larger than $V_{oc}$ to the module

### Additional data

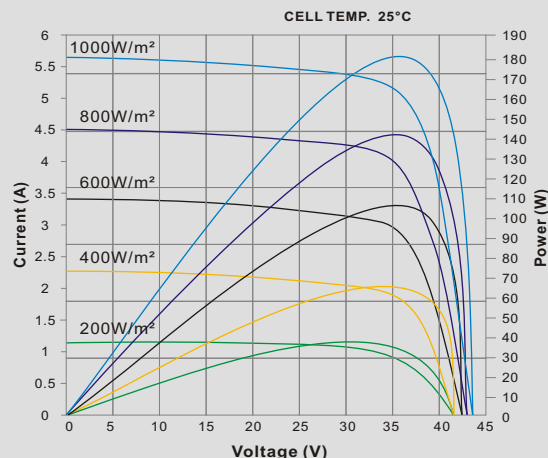
Junction box	1000 VDC
Connector	Plug type 4
Power tolerance	± 5%
Cable	4 mm <sup>2</sup>
Cable lengths	800 mm
Bypass diodes	3 pieces



### Module Construction



### Characteristics Curve



Zytech Solar reserves the right to change specifications without notice.

Warranty for power output 10 years 90%, 25 years 80%.

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# ZT 220P/230P poly

## ZYTECH MODULES

### Cells

Cell Technology	Polycrystalline silicon
Number per module	60
Cells dimensions	156 × 156 mm

### Mechanical Data

Dimension of the module L × W × H	1652 × 992 × 50 mm
Weight	21.0 kg

### Electrical data

		ZT 220P	ZT 230P
Maximum power	$P_{max}$	220 W	230 W
Open Circuit Voltage	$V_{oc}$	36.30 V	36.48 V
Maximum power point voltage	$V_{mpp}$	30.12 V	30.48 V
Short circuit current	$I_{sc}$	7.82 A	7.94 A
Maximum power point current	$I_{mpp}$	7.30 A	7.55 A

\* At Standard Conditions (STC) Irradiance 1000 watt/m<sup>2</sup>, spectrum AM 1,5 at a cell temperature of 25°C.

### Thermal data

NOCT	47°C ± 2°C
Temperature Coefficient of $V_{oc}$	- (115 ± 5) mV / °C
Temperature Coefficient of $I_{sc}$	+ (0.08 ± 0.015) % / °C
Temperature Coefficient of Power	- (0.4 ± 0.05) % / °C

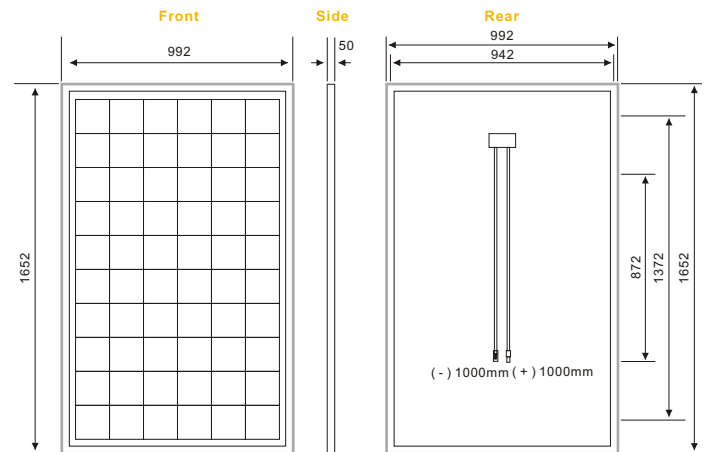
\*NOCT: Normal Operational Temperature in Celsius

### System integrated parameters

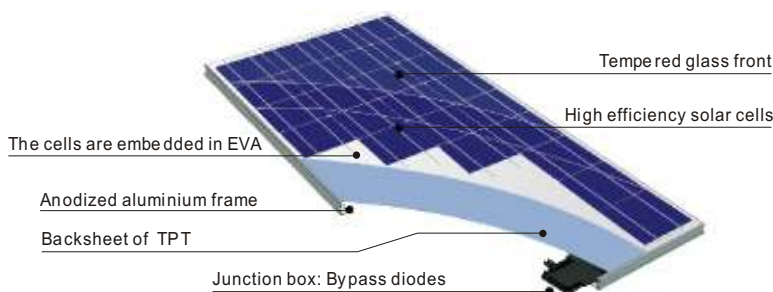
Maximum system voltage SCII	1000 VDC
Maximum reverse current	Do not apply external voltages larger than $V_{oc}$ to the module

### Additional data

Junction box	1000 VDC
Connector	Plug type 4
Power tolerance	± 5%
Cable	4 mm <sup>2</sup>
Cable lengths	1000 mm
Bypass diodes	3 pieces

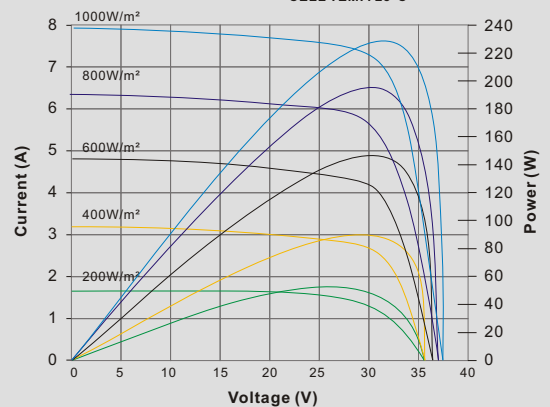


### Module Construction



### Characteristics Curve

CELL TEMP. 25°C



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