



Desiba Energy

Desiba Enerji İnşaat Gayrimenkul Sanayi ve Ticaret Anonim Şirketi established in Istanbul , 2016 by partnership of Sipahioglu family which is one of the well-known families of Turkey, is the **biggest domestic panel producer of the Turkey with a solar panel production facility of annual 400 MW capacity.**

Desiba Enerji produces Jurawatt trademark panels famous for its quality and quite well-known in the international market together with its partner JVG Thoma GmbH, in Mersin factory with a 6000 m2 closed area, 43000 m2 open area, annual **400 MW production capacity**, compliance with international safety, quality and environment standards, innovative staff, speciality knowledge, experience of JVG Thoma over 20 years, full automatic production line.

Our panels have special "Desert Technology" which does not lose productivity in regions where the temperature decreases in winter and increases in summer such as Turkey. In comparison to traditional panels which endure 85-90 grade and not working over that grade, our panels with desert technology with high German technology, are heat resistant up to 125 grade in module temperature and providing more than 30 % achievement and lifetime in hot regions. In this regard, our Jurawatt panels with Desert Technology are the leader and pioneer in Turkey.

We as Desiba Enerji are proud of being one of the leader and promoter foundations of our country with our high technology production, our 30 million Euro investment in the solar energy sector described as energy source of the future.





German Partner **J.v.G. Thoma GmbH**

Establishment Year: 1997

2016 income is 85 million Euro

Head Office: Freystadt/Almanya

Production Centre: Hilpolstein/Almanya

J.v.G. Thoma is founder of JURAWATT which is a global solar panel production trademark.

Jurawatt global partners: Bangladesh, Brazil, Korea, Kosovo, Poland, India

7 million Euro investment for Desert type panel production technologies

More than 15 patents in PV panel machineries field.

Owner of desert type technologies

Owner of tropic type panel technologies

Cooperation with German and international institutions: Fraunhofer CSP (desert type glass, cell cutting Technologies etc.), TUV NORD (certification), XERON AG Swiss, IRESEN Morocco (desert type testing stations, flashers etc.), PI Berlin Institution and others.

J.v.G. Thoma GmbH 

JWM 270

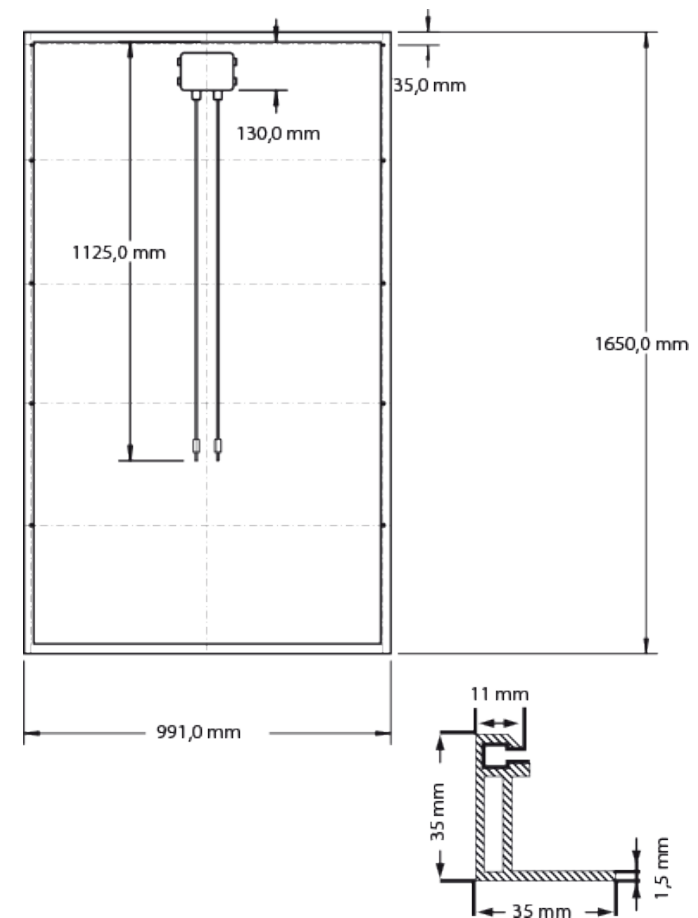
Jurawatt JWM Series of Monocrystalline Solar Modules

Most advanced know-how combined with precision, innovation and solid workman- ship.

Jurawatt has established itself as a leading supplier of high-performance solar modules. State-of-the-art manufacturing facilities and strict quality management across the entire process chain are key to the high level quality of our modules. Our customers benefit from 100% assurance and reliability in all areas and on all aspects of our solar modules.

The Highlights

- Maximum (sustained) Temperature: 125 ° C.
- 100 % PID free
- Proven German quality of products and manufacturing facilities
- Maximum energy yield and high annual power output
- Products made in TR



Backsheet: White
Frame: Silver

Basic Data

Dimensions: (L) 1650 mm x (B) 991 mm x (T) 35 mm;

Weight: 20,5 KG

Number of cells: 60

Cell size: 156 mm x 156 mm

Cell material: monocrystalline

Front cover: solar glass

Backside film: polimer

Frame material: aluminum

Cable length: 1000 mm

Connector type: MC4 compatible

Bypass diodes: 3

TUV-Nord approved.

Certified according to current SGS, TUV Saarland IEC 61215 and DIN 61730 standards.

Electric Data JWM 70 270

Rated output P_{mpp} 270 W

Rated current I_{mpp} 8,81 A

Rated voltage U_{mpp} 30,9 V

Short circuit current I_{sc} 9,44 A

Open circuit voltage U_{oc} 39,2 V

Efficiency 16,51 %

Sorting +4,99 / 0 W

Maximum voltage 1000 V

Temperature coefficient Percent Absolute

P_{mpp} -0,38 %/K -1,002 W/K

V_{mpp} -0,32 %/K -0,121 V/K

I_{mpp} -0,001 %/K -0,001 A/K

V_{oc} -0,318 %/K -0,118 V/K

I_{sc} 0,077 %/K -0,006 A/K

Load

Mechanically 5.400 Pa

Reverse current IR 15 A

12 Years
Product Warranty Term

First 15 Years
%90 Output of Energy

First 35 Years
%80 Output of Energy

5 Watt
Positive Tolerance

%3

Accuracy P_{mpp}

%10

Accuracy of other
el. data



JWP 260

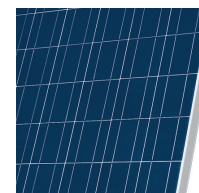
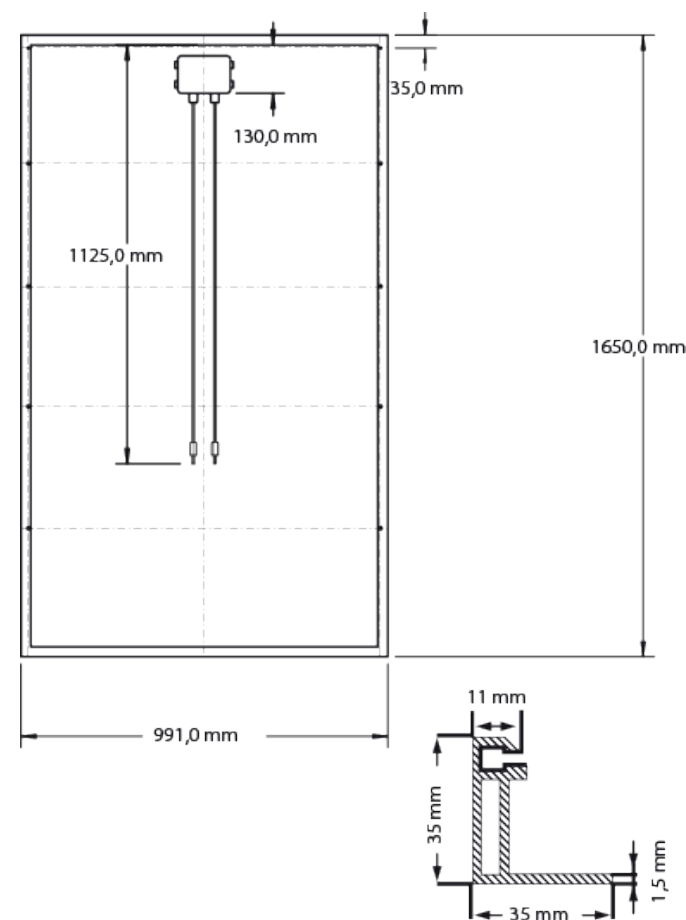
Jurawatt JWP Series of Polycrystalline Solar Modules

Most advanced know-how combined with precision, innovation and solid workman- ship.

Jurawatt has established itself as a leading supplier of high-performance solar modules. State-of-the-art manufacturing facilities and strict quality management across the entire process chain are key to the high level quality of our modules. Our customers benefit from 100% assurance and reliability in all areas and on all aspects of our solar modules.

The Highlights

- Maximum (sustained) Temperature: 125 ° C.
- 100 % PID free
- Proven German quality of products and manufacturing facilities
- Maximum energy yield and high annual power output
- Products made in TR



Backsheet: White
Frame: Silver

Basic Data

Dimensions: (L) 1650 mm x (B) 991 mm x (T) 35 mm;

Weight: 20,5 KG

Number of cells: 60

Cell size: 156 mm x 156 mm

Cell material: polycrystalline

Front cover: solar glass

Backside film: polimer

Frame material: aluminum

Cable length: 1000 mm

Connector type: MC4 compatible

Bypass diodes: 3

TUV-Nord approved.

Certified according to current SGS, TUV Saarland IEC 61215 and DIN 61730 standards.

Electric Data JWP 60 260

Rated output P _{mpp}	260 W
Rated current I _{mp}	8,40 A
Rated voltage U _{mpp}	30,95 V
Short circuit current I _{sc}	9,08 A
Open circuit voltage U _{oc}	38,4 V
Efficiency	15,91 %
Sorting	+4,99 / 0 W
Maximum voltage	1000 V

Temperature coefficient Percent Absolute

P _{mpp}	-0,38 %/K	-1,002 W/K
V _{mpp}	-0,32 %/K	-0,121 V/K
I _{mp}	-0,001 %/K	-0,001 A/K
V _{oc}	-0,318 %/K	-0,118 V/K
I _{sc}	0,077 %/K	-0,006 A/K

Load

Mechanically	5.400 Pa
Reverse current	IR 15 A

12 Years
Product Warranty Term

First 15 Years
%90 Output of Energy

First 35 Years
%80 Output of Energy

5 Watt
Positive Tolerance

%3

Accuracy P_{mpp}

%10

Accuracy of other
el. data



More Electricity Production and Long Life

**FULL
AUTOMATIC
PRODUCTION
LINE**

**SUSTAINED
TEMPERATURE:
125 °C**

**400MW of
ANNUAL
PRODUCTION
CAPACITY**

**HIGH GERMAN
TECHNOLOGY**

**MORE THAN 20
YEARS EXPERIENCE
and TECHNICAL
KNOW-HOW**



Powered by Desiba

DESERT Technology

Standard panels are made for regions with a moderate climate. All promises for performance and durability are based on moderate weather conditions; such as those found in temperate.

Many research companies (e. g. IRESEN in Morocco) have conducted extensive tests with standard panels in desert regions or in regions with temperature higher than those found in central Europe: Most panels lose much of their nominal power after 10 years and only some of panels continue to work for more than 15 years at 80% capacity.

Our partner J. v. G. Thoma GmbH has been working on a special technology for very rough climates for more than 7 years.

Jurawatt now produces and sells these special DESERT panels all over the world. Facts about the new DESERT panels from Jurawatt can be found [here](#).

Better Performance & More Power when it's hot

The hotter the cell is, the less power comes from the panel. Because we know that every watt counts, we have developed a combination module and cell that will generate more wattage at the same nominal power.

Normal PV panels have a temperature coefficient of about -0.45% per degree. Our specially optimized cells improve this coefficient by roughly 15%, which leads to improved power generation. The power benefit will increase with each degree of heat.

More Earnings & Long Life even in Hot Areas

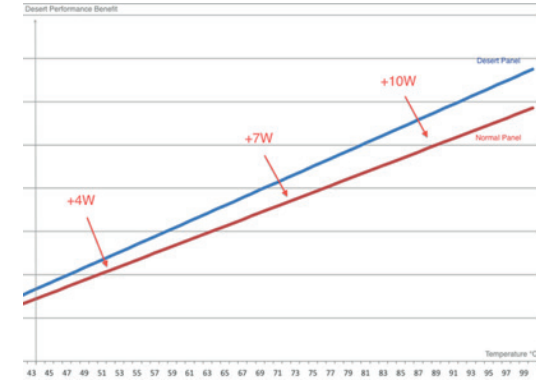
A damp heat test is part of simulating how a panel ages. This damp heat test increases the temperature to 85°C in combination with a humidity of 85%. Doing this will age panels faster and simulate 20 years time when the test is performed over 1,000 hours.

If the normal temperature of the cell in hot areas will be 50-70 degree then such tests will not simulate 20 years, but rather 10-15 years maybe, because panels in hot areas will age much faster than in temperate.

Our panel can easily survive 2,000 hours in a damp heat test without any problems. This means that, even in desert regions, we can guarantee lifetimes of 20 years or more.

For example, if the panel will work 30% longer than a normally processed panel, a huge financial advantage will be created, one that is much greater than the few cents per watt, which the technology might cost the end consumer.





Works where other Panels fail

Not only is the power benefit and the longer lifetime a major advantage of Desert Technology, but also the fact that these panels can be used in regions where other panels simply will not work.

The data sheets for most panels available on the market indicate a maximum temperature of 85°C - 90°C. This means that if the panel will be operating in temperatures greater than 90°C, it will be out of spec and using it in areas where such temperatures can be expected will not be possible, OR the performance warranty will immediately be invalidated.

Even in temperate climate on hot days, cells can achieve temperatures over 80°C. These desert panels can take temperatures up to 125°C.



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