

# 285~295 WATT MONOCRYSTALLINE SOLAR MODULE



## 285-295W

POWER OUTPUT RANGE

## 0/+5%

POWER TOLERANCE

### Model No.:

FY285S-20/Wd

FY290S-20/Wd

FY295S-20/Wd

## FEATURES



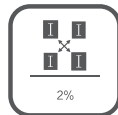
Excellent Module Efficiency Up To 18.5%



Positive Tolerance Of Up To 5% Delivers Higher Outputs Reliality



Excellent weak light performance  
Excellent performance under low light conditions



Current sorting process system output maximized by reducing mismatch losses up to 2% with modules sorted & packaged amperage



IP67 junction box available long-term weather endurance

## GLOBAL LEADING QUALITY

Based on the core of creating value for society, customers and enterprises. we strive for becoming the leading supplier of photovoltaic products.

## PRODUCT & MANAGEMENT SYSTEM CERTIFICATES

CERTIFICATIONS&STANDARD

IEC 61215 /IEC61730: CEC/CE/TUV/JET

ISO9001: 2008 | QUALITY MANAGEMENT SYSTEM

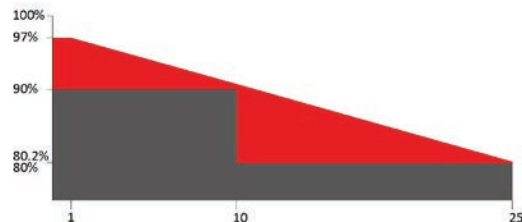
ISO14001: 2004 | STANDARD FOR ENVIRONMENTAL MANAGEMENT SYSTEM

BS OHSAS 18001: 2007



## LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty    25 Year Linear Power Warranty



Not less than 97% of nominal power in the first year. Annual power attenuation does not exceed 0.7% of nominal power from the 2nd year to the 25th year.

10- year material and workmanship warranty

## Electrical Characteristics

STC	FY285S-20/Wd	FY290S-20/Wd	SMD295M-4X12
Maximum Power (P <sub>max</sub> )	285	290	295
Maximum Power Voltage (V <sub>mp</sub> )	33.8	34.2	34.5
Maximum Power Current (I <sub>mp</sub> )	8.43	8.45	8.47
Open-circuit Voltage (V <sub>oc</sub> )	40.6	41.0	41.3
Short-circuit Current (I <sub>sc</sub> )	8.95	8.98	9.01
Module Efficiency (%)	17.5	17.8	18.2
Operating Temperature (°C)	-40°C to 85°C		
Maximum System Voltage	1000 V DC (IEC)		
Maximum Series Fuse Rating	20A		
Power Tolerance	0/+5%		

STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, AM=1.5.  
Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/-3%

NOCT	FY285S-20/Wd	FY290S-20/Wd	SMD295M-4X12
Maximum Power (P <sub>max</sub> )	208	212	215
Maximum Power Voltage (V <sub>mp</sub> )	28.9	29.2	29.5
Maximum Power Current (I <sub>mp</sub> )	7.18	7.26	7.28
Open-circuit Voltage (V <sub>oc</sub> )	35.9	36.1	36.3
Short-circuit Current (I <sub>sc</sub> )	7.62	7.68	7.72

NOCT: Irradiance 800W/m<sup>2</sup>, Cell temperature 20°C, AM=1.5.  
Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/-3%

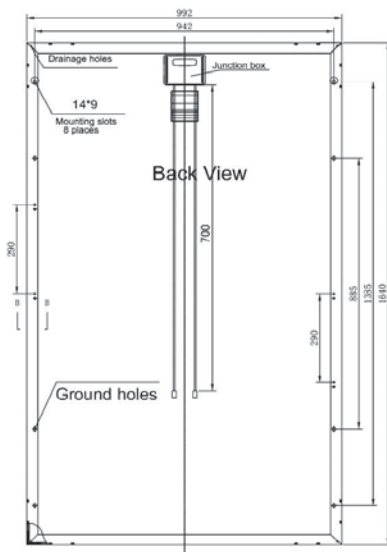
## Mechanical Characteristics

Solar Cell	Monocrystalline silicon 156.75 x 156.75mm
No. of Cells	60 (6x10)
Module Dimensions	1640x992x35mm
Weight	18.2kg
Front Glass	3.2mm tempered glass
Frame	Anodized Aluminium Alloy
J-box	IP 67 rated (3 bypass diodes)
Output Cables	TUV(2 PFG 1169/08.07) 4.0 mm <sup>2</sup> , symmetrical lengths (+)700mm and (-)700 mm
Connector	TL connectors

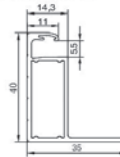
## Packaging Configuration

	20' GP	40' HC
Pieces per pallet	30/27	30/27
Pallets per container	12/12	28/28
Pieces per container	360/324	840/756

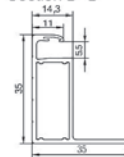
## Dimensions



Section A-B

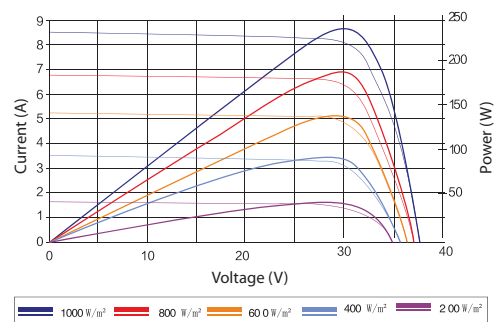


Section B-B



Note:mm

## Current-Voltage & Power-Voltage Curve (280S-20)



Excellent performance under weak light conditions: at an irradiance intensity of 200<sup>2</sup>W/m<sup>2</sup>(AM 1.5, 25°C), 95.5% or higher of the STC efficiency(1000 W/m<sup>2</sup>) is achieved

## Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of P <sub>max</sub>	-0.43 %/°C
Temperature Coefficient of V <sub>oc</sub>	-0.33 %/°C
Temperature Coefficient of I <sub>sc</sub>	0.067 %/°C

CAUTION: Read installation manual before using the product.

© 2018 J.WASSER PTY LTD. All rights reserved. Specifications included in this datasheet are subject to change without notice.