



# FPS-P660

60 POLYCRYSTALLINE CELLS  
STANDARD PV MODULE

17.16% MAX. EFFICIENCY

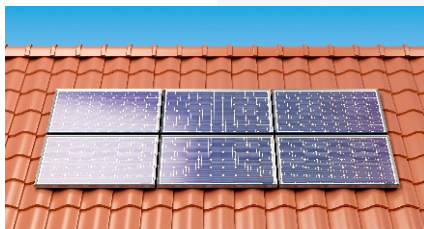
280W MAX. OUTPUT

PLUS TOLERANCE 0~+3%

## APPLICATIONS



Commercial building & factory rooftop



Residential rooftop



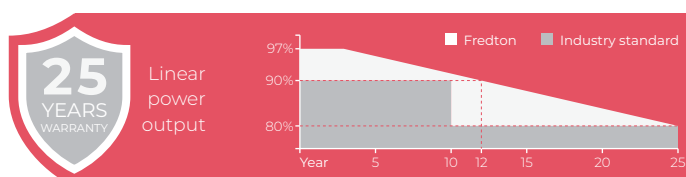
Ground-mounted photovoltaic power station

## CHOOSING FREDTON

Specialized vendor with ability to supply all the elements like PV module, inverter, mounting system, and also UPS system.

Reliable partner of distributors, installers and system integrators with local warehousing, delivery service and after sales support.

Manufacturing with international quality management standards and environment management system ISO 9001 and ISO 14001.



10 years manufacturing warranty – 12 years warranty at 90% power output

## KEY FEATURES



**Modules certified by TÜV** for Snow Zone III, anti-PID, salt mist corrosion and ammonia corrosion.



**Special PV module insurances** by world leading insurance company.

**Free module recycling** through membership in the PV Cycle Association.

**Excellent performance under low light** for better kWh/kW ratio & more electricity in cloudy days.

**Proprietary 800°C online coating technology** improves light absorption & reduces surface dust.



**Junction box and bypass diodes** guarantee the module free of overheating.



## ELECTRICAL CHARACTERISTICS

Performance at Standard Test Condition (STC: Irradiance = 1000 W/m<sup>2</sup>, Module Temperature = 25°C, Air Mass = 1.5)

Part Number		FPS-P660-265	FPS-P660-270	FPS-P660-275	FPS-P660-280
Maximum Power	P <sub>max</sub> (W)	265	270	275	280
Short Circuit Current	I <sub>sc</sub> (A)	8.99	8.90	9.00	9.38
Open Circuit Voltage	V <sub>oc</sub> (V)	37.90	38.10	38.30	38.50
Maximum Power Current	I <sub>mpp</sub> (A)	8.49	8.60	8.70	9.00
Maximum Power Voltage	V <sub>mpp</sub> (V)	31.20	31.40	31.60	31.20
Encapsulated Cell Efficiency		18.16%	18.60%	18.84%	19.18%
Module Efficiency		16.24%	16.60%	16.86%	17.16%
Power Tolerance		0/+3%	0/+3%	0/+3%	0/+3%

Performance at Normal Operating Cell Temperature (NOCT: Irradiance = 800 W/m<sup>2</sup>, Air Temperature = 20°C, Wind Velocity = 1 m/s)

Maximum Power	P <sub>max</sub> (W)	192.07	195.70	199.30	202.90
Short Circuit Current	I <sub>sc</sub> (A)	7.34	7.26	7.34	7.65
Open Circuit Voltage	V <sub>oc</sub> (V)	35.02	35.20	35.39	35.57
Maximum Power Current	I <sub>mpp</sub> (A)	6.66	6.74	6.83	7.06
Maximum Power Voltage	V <sub>mpp</sub> (V)	28.83	29.01	29.20	28.74

The typical relative change in module efficiency at an irradiance of 200 W/m<sup>2</sup> in relation to 1000 W/m<sup>2</sup> (both at 25°C and Air Mass 1.5 spectrum) is less than 6%.

## MECHANICAL SPECIFICATIONS

<b>Cell Type</b>	Monocrystalline 156.75 x 156.75 mm (6-inch)
<b>Number of Cells</b>	60 (6 x 10 cells)
<b>Dimensions (L x W x H)</b>	1648 x 990 x 35 mm
<b>Weight</b>	17.5 Kg
<b>Front Glass</b>	3.2 mm low iron tempered glass
<b>Frame</b>	Anodized aluminum
<b>Junction Box</b>	IP67 rated, with bypass diodes
<b>Connector</b>	MC4 compatible
<b>Output Cables</b>	TÜV, 4.0 mm <sup>2</sup> , 900 mm length

## TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature	NOCT	44 ± 2°C
Temperature Coefficient of P <sub>max</sub>	γ	-0.4 %/K
Temperature Coefficient of V <sub>oc</sub>	β	-0.37 %/K
Temperature Coefficient of I <sub>sc</sub>	α	-0.05 %/K

## SYSTEM INTEGRATION PARAMETERS

Maximum System Voltage	DC 1000 V/1500 V
Maximum Series Fuse	15 A
Maximum Reverse Current	21.5 A
Increased Snowload acc. to IEC 61215	5400 Pa
Operating Temperature	-40 ~ +85°C
Number of Bypass Diodes	3

## PACKAGING CONFIGURATION

Modules per Box	30		
	20' GP	40' GP	40' HQ
Modules per Container	360	840	896

Specifications subject to change without prior notice.

