

PR-665-GG 640-665W

MonoPERC-132cell-G12 Dual Glass
Maximum Efficiency 21.4%
Positive Power Tolerance 0~+5W

High Conversion Efficiency

High panel efficiency to guarantee high power output

Lower LCOE

Up to 25% more power generation in bifacial type (depending on Albedo)

Better Weak Light Performance

Higher power output even under low-light environment like on cloudy or foggy days

Lower Temperature Coefficient

Better performance of the solar panel in higher temperature environment or hot days

More Weather Resistance

Resistant to harsh environment such as salt, ammonia, sand, high temperature and high humidity area

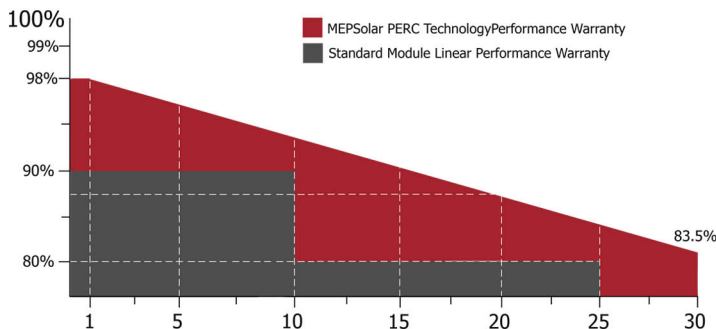


Product & System Certificates

IEC61215/IEC61730

ISO9001 : Quality Management System

ISO14001 : Environment Management System



Mana Energy Pak

Address: Unit 5, No.4, Jamishidi st, Saadat Abad Blvd, Tehran, IRAN

TEL: +98 - 21 79157000 WEB: www.manaenergypak.com EMAIL: info@manaenergypak.com

Electrical Specification (STC) - Front Side

STC: AM1.5 1000W/m² 25°C [Test Uncertainty: ±3%]

Model	PR-665-GG 640	PR-665GG 645	PR-665-GG 650	PR-665-GG 655	PR-665-GG 660	PR-665-GG 665
Max Power P _{mp} [W]	640	645	650	655	660	665
Max Power Voltage V _{mp} [V]	37.57	37.83	38.09	38.16	38.35	38.55
Max Power Current I _{mp} [A]	17.05	17.06	17.07	17.17	17.21	17.25
Open Circuit Voltage V _{oc} [V]	44.49	44.69	44.89	45.09	45.29	45.49
Short Circuit Current I _{sc} [A]	18.20	18.23	18.27	18.31	18.36	18.41
Efficiency [%]	20.6	20.8	20.9	21.1	21.2	21.4

*Positive Power Tolerance 0~+5W

Electrical Specification (NMOT) - Front Side

NMOT: 800W/m² 20°C 1m/s [Test Uncertainty: ±3%]

Model	PR-665-GG 640	PR-665GG 645	PR-665-GG 650	PR-665-GG 655	PR-665-GG 660	PR-665-GG 665
Max Power P _{mp} [W]	480	483	487	491	496	499
Max Power Voltage V _{mp} [V]	35.20	35.31	35.55	35.72	35.97	36.11
Max Power Current I _{mp} [A]	13.64	13.69	13.71	13.75	13.79	13.82
Open Circuit Voltage V _{oc} [V]	42.19	42.28	42.45	42.71	42.93	43.09
Short Circuit Current I _{sc} [A]	14.70	14.74	14.78	14.83	14.87	14.91

Bifaciality Power Generation Gain (Regarding 650W as an example)

Power Gain [%]	0	5	10	15	20	25
Max Power P _{mp} [W]	650	683	715	748	780	813
Max Power Voltage V _{mp} [V]	38.09	38.10	38.10	38.10	38.20	38.20
Max Power Current I _{mp} [A]	17.07	17.91	18.77	19.62	20.42	21.27
Open Circuit Voltage V _{oc} [V]	44.89	44.90	44.90	44.90	45.00	45.00
Short Circuit Current I _{sc} [A]	18.27	19.12	20.05	20.98	21.80	22.74

Mechanical Data

Solar Cell	P-Type 210mm x 105mm - [12x11]
Module Dimension	2384x1302x30 mm
Weight	38kg
Front Cover	Glass - 2mm Semi Tempered AR Coated
Back Cover	Glass - 2mm Semi Tempered
Frame	Silver - Anodized Aluminium Alloy
Junction Box	IP68 Rated - 3 Bypass Diodes
Cable	4.0m ² - 300mm

Temperature Ratings

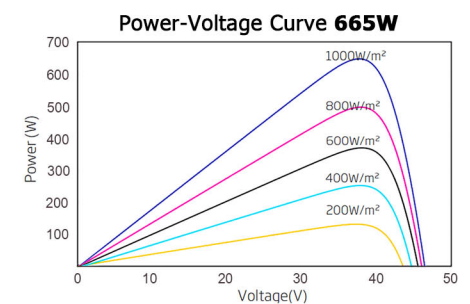
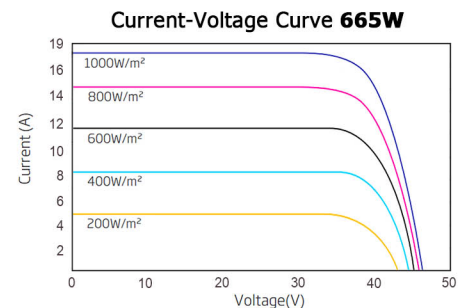
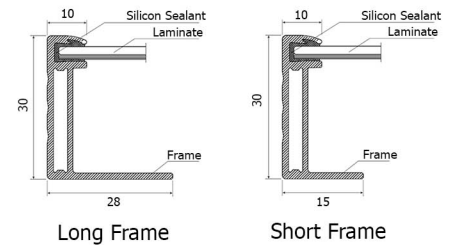
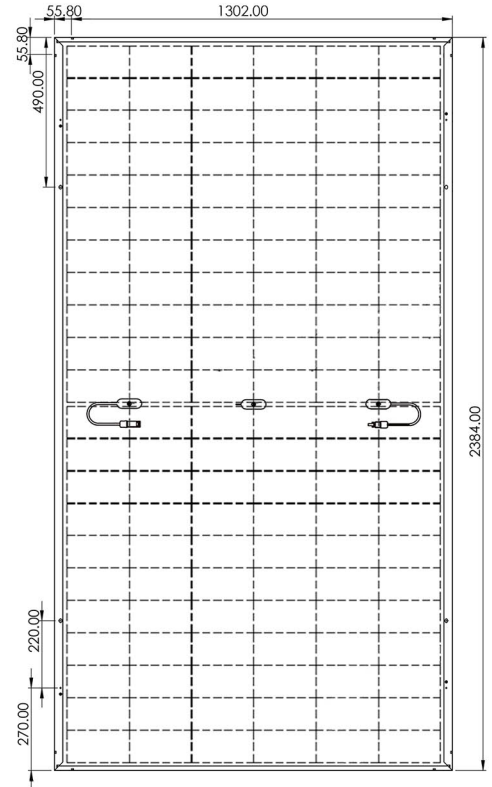
Temperature Coefficient	I _{sc}	α	[%/°C]	+0.05
Temperature Coefficient	V _{oc}	β	[%/°C]	-0.27
Temperature Coefficient	P _{max}	γ	[%/°C]	-0.35
Nominal Module Operating Temperature	NMOT		[°C]	44 ± 2

Operating Properties

Max System Voltage	1500V
Max System Fuse Rating	30 A
Operational Temperature	-40 to 85 °C
Bifaciality Tolerance	±5%
Bifaciality = P _{maxrear} (STC)/P _{maxfront} (STC)	70%

Packaging Information

# Module per Pallet	35
# Pallet per 45'HC Container	12
# Pallet per 40'HC Container	10
# PCs per Container 40'HC	350
Pallet Weight (kg)	1335



Caution:

To operate, install and manage MEPSOLAR's modules, read the installation manual and use carefully.

Observations:

This Datasheet is subject to change without notice due to continuous improvement of our products. You can find all records of the updates on our website www.manaenergypak.com or by contacting one of our sales staff. All rights reserved ©Mana Energy Pak



Mana Energy Pak

TEL: +98 - 21 79157000

EMAIL: info@manaenergypak.com

Address: Unit 5, No.4, Jamshidi st, Saadat Abad Blvd, Tehran, IRAN