



# Saturn Series

Backsheet Monocrystalline Solar Module

## YC650~665M-210M10

PERC+ / Multi-busbar / Half-cut

Non-destructive cutting

PID resistance

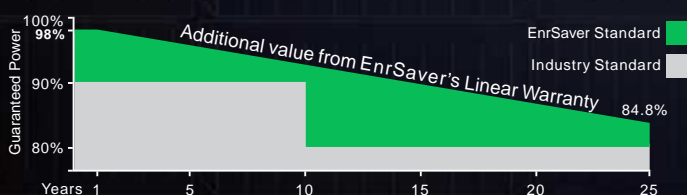
Lower BOS cost & LCOE

Reduced hot Spot Loss

Low-Light Performance



### LINEAR PERFORMANCE WARRANTY



12-year Product Warranty

25-year Linear Power Warranty



## Electrical Specifications

**STC:** Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25° C, AM=1.5

Rated output (Pmpp / Wp)	650	655	660	665
Rated voltage (Vmpp / V)	37.45	37.65	37.85	38.05
Rated current (Impp / A)	17.36	17.41	17.45	17.50
Open circuit voltage (Voc / V)	45.28	45.48	45.68	45.88
Short circuit current (Isc / A)	18.43	18.48	18.53	18.58
Module efficiency	20.9%	21.1%	21.2%	21.4%

**NMOT:** Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20° C, AM=1.5, Wind Speed 1m/s

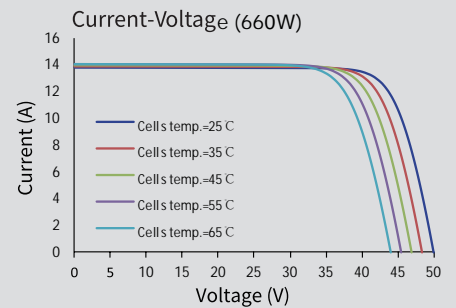
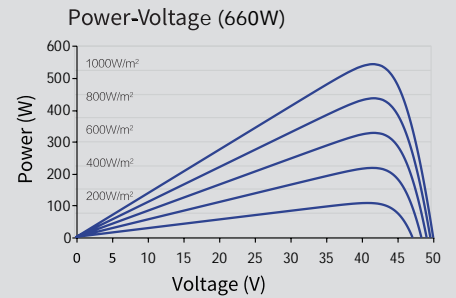
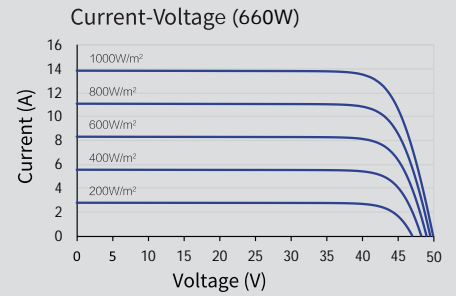
Rated output (Pmpp / Wp)	489.5	493.2	497.0	500.7
Rated voltage (Vmpp / V)	35.09	35.28	35.46	35.63
Rated current (Impp / A)	13.96	13.99	14.03	14.06
Open circuit voltage (Voc / V)	42.55	42.75	42.95	43.15
Short circuit current (Isc / A)	14.82	14.87	14.92	14.97

## Temperature Ratings (STC)

Temperature coefficient (Pmpp)	-0.35%/°C	No. of diodes	3
Temperature coefficient (Isc)	+0.045%/°C	Junction box IP rating	IP 68
Temperature coefficient (Voc)	-0.27%/°C	Max. series fuse rating	30A
Nominal module operating temperature (NMOT)	41±2°C	Max. system voltage (IEC/UL)	1500V <sub>DC</sub>

## Operating Parameters

## Curve



**650~665W~+5W**

POWER RANGE

POWER TOLERANCE

**21.4%**

MAX MODULE EFFICIENCY

**≤ 2.0%**

FIRST YEAR POWER DEGRADATION

**≤ 0.55%**

YEAR 2-25 POWER DEGRADATION

## Mechanical Specifications

Outer dimensions (L x W x H)	2384X1303X35 mm
Cell Type	P type Mono-crystalline
No. of cells	120(6*20)
Frame technology	Aluminum, silver anodized
Front glass thickness	3.2 mm
Cable length (IEC/UL)	Portrait: 300 mm; Landscape: 1400 mm
Cable diameter (IEC/UL)	4 mm <sup>2</sup> / 12 AWG
Maximum mechanical test load	5400 Pa (front) / 2400 Pa (back)
Connector type (IEC/UL)	HCB40 / MC4-EVO2 (optional)
Module weight	134.8 kg
Packing unit	31 pcs / box (Subject to sales contract)
Weight of packing unit (for 40' HQ container)	1125kg
Modules per 40' HQ container	527 pcs

