

# BECQUER SHINGLED SOLAR MODULE



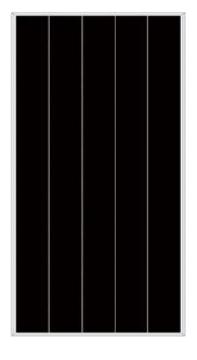
G12 PERC Shingled

SH-535W SH-540W SH-545W SH-545W SH-555W

23% Module Efficiency
Most Advanced Cell Interconnection Technology

Aesthetic | Light Weight

# **Industrial | Commercial | Residential**





## **G12 PERC Shingled**

G12 PERC Shingled Technology provides ultra-high efficiency with better performance in low irradiation. Maximizes installation capacity in limited space.



Tempered glass and reinforced frame design withstand rigorous weather conditions such as heavy snow and strong wind.



Global Brand with powerful financial strength provide reliable 25-year warranty.



## 9001:2015 ISO Certified

Becquer Manufacturing Facility and R&D center are ISO 9001:2015 | 14001:2015 Certified

# **Becquer's Warranty Provisions**



- 25-Year Product Warranty
- On material and workmanship



- 25-Year Performance Warranty
- Initial year: 98.0%
- Linear warranty after second year: with 0.55% annual degradation, 84.8% is guaranteed up to 25 years

#### About Becquer Malaysia Sdn. Bhd.,

Foundation of Brand Becquer. Becquer Malaysia is a manufacturing and R&D Facility and Becquer Energy India is a private sector solar roofs developer company, founded in Singapore after its founders was invited to the United Nations Youth Assembly on Sustainable Development Goals where all member nations have agreed achieve clean energy for their consumption.

Becquer has its foundation in Singapore with operations in 5 countries with the fortune 500 firms like Amazon, Walmart(flipkart), Texas Instruments, AM/NS, Grupo Bimbo(Harvest Gold), Piramal, Lumax auto, Toyota, Coldman, Luve group, MAN, Ddecor, Alltime plastic, Frontier polymers, JOPP auto, JRG Sanko Sankei, Mahindra, Organic India, and Otis elevators.

Electrical Characteristics		Mono-Crystalline Module				
		535	540	545	550	555
Nominal Output (Pmpp)	W	535	540	545	550	555
Open Circuit Voltage(Voc)	V	46.8	46.9	47.0	47.1	47.2
Short Circuit Voltage (Isc)	А	14.65	14.76	14.86	14.97	15.07
Voltage at Pmax (Vmpp)	V	38.8	38.9	39.0	39.1	39.2
Current at Pmax (Impp)	А	13.77	13.87	13.97	14.07	14.17
Module Efficiency	%	21.7	21.9	22.3	22.5	23.0
Cell Type	-	PERC Mono-Crystalline Silicon Shingled				
Maximum System Voltage	V	1,500				
Temperature Coefficiency of Pmax	%/°C	-0.34				
Temperature Coefficiency of Voc	%/°C	-0.27				
Temperature Coefficiency of Isc	%/°C	0.04				

<sup>\*</sup>All data at STC(Standard Test Conditions). Above data may be changed without prior notice.

\*Tolerance of Pmax:0~+5W.

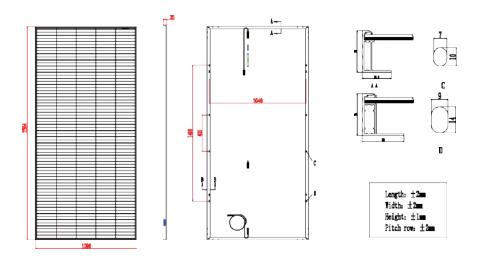
\*Measuring uncertainty of power:±3%

\* Performance deviation of Voc [V], Isc [A], Vm[V] and Im[A]:±3%.

#### **Mechanical Characteristics**

Dimensions	2,384 × 1,096 × 35mm (L × W × H)				
Weight	28.3kg				
Solar Cells	345 cells, PERC Mono-Crystalline Shingled				
Output Cables	Length 1,200mm, 1×4mm <sup>2</sup> Connector Make : Staubli PV-KST4-EVO2/xy_UR PV-KBT4-EVC				
Junction Box	IP68, TUV&UL, Three Diodes				
Construction	Front Glass: Tempered glass, 3.2mm Encapsulation: EVA (Ethylene-Vinyl-Acetate)				
Frame	Anodized Aluminum				

## Module Diagram (Unit: mm)



## Installation Safety Guide

- Only qualified personnel should install or perform maintenance.
- Be aware of dangerous high DC voltage.
- Do not damage or scratch the rear surface of the module.
- Do not handle or install modules when they are wet.

Nominal Operating Cell Temperature	42.3°C ( ±2°C )		
Operating Temperature	-40 ~ 85°C		
Maximum System Voltage	DC 1,500		
Fire Rating	Class C		
Series Fuse Rating	25A		
Maximum	Front 5,400 Pa		
Surface Load Capacity	Rear 2,400 Pa		

AM1.5 1000W/m<sup>2</sup>

Voltage(V)

## I-V Curves Current [A]

