

## INDGO SOLAR 5BB Light-Weight Poly-Crystalline PV Module

### Poly- Crystalline PV Module

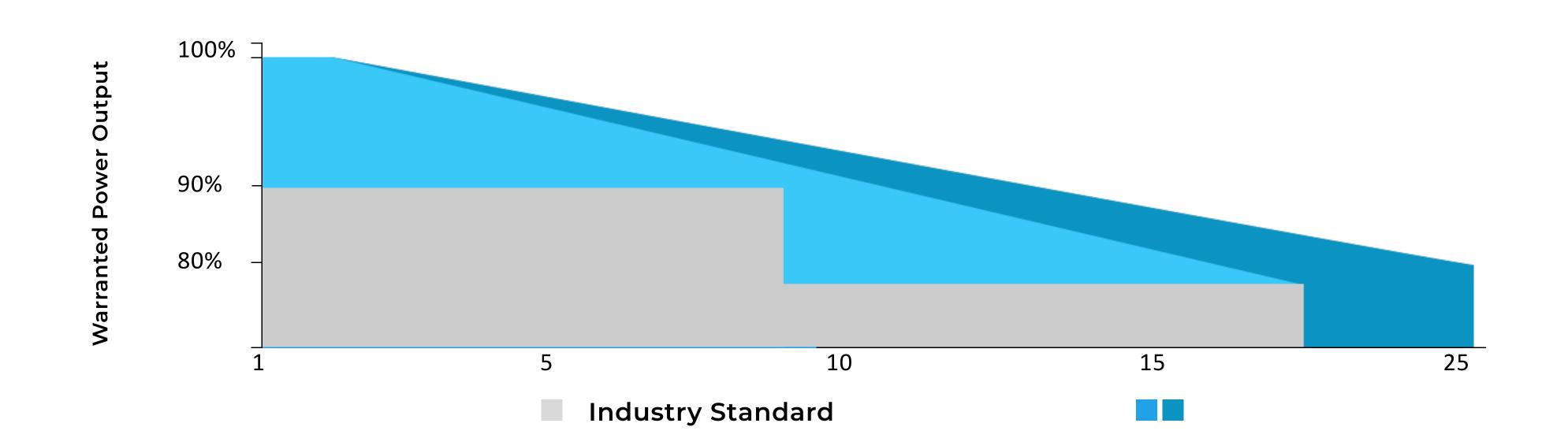
165W 12V

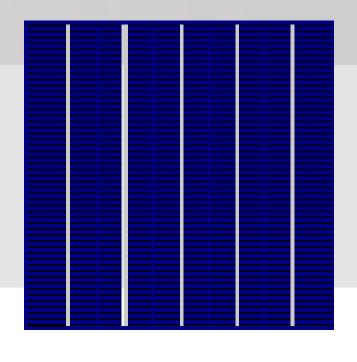
Indgo Solar panels combine high efficiency with the strongest durability and warranty available in the market today, resulting in more long-term energy and savings. Indgo Solar makes solar panels using 5bb 156.75 mm Poly-Crystalline cells in 12 volt & 24 volt solar panel design with anodized aluminium alloy frame with highest efficiency available in the market.

Indgo Solar 165 watt solar panel is made of A grade Poly-Crystalline cells to generate electricity from the sun. The cells are made of superior quality silicon which gives higher efficiency up to 20% and also performs better in low light. It is the latest panel in Poly-Crystalline technology that comes with 5 bus bars, 72 cells and 25 years linear performance warranty. IP68 rated junction box with MC4 connectors, 1 meter wire and anodized aluminium alloy frame is given for outside use.

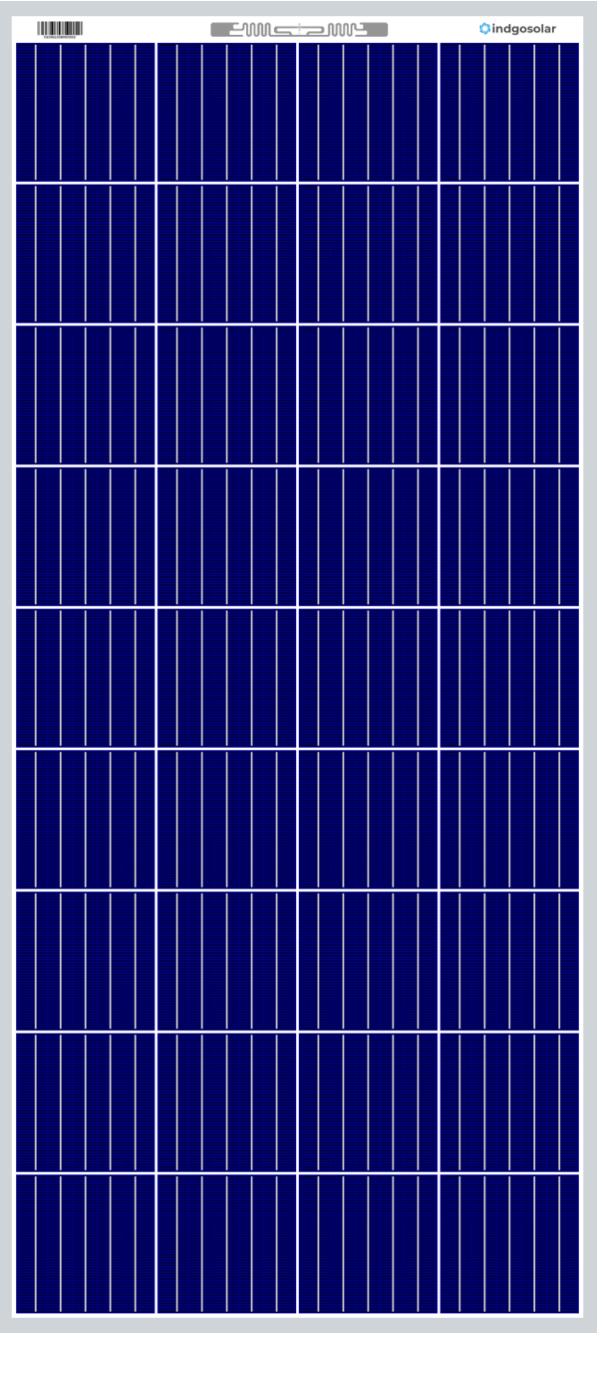
# Linear Performance Warranty

10 Years Product Warranty 25 Linear Power Warranty

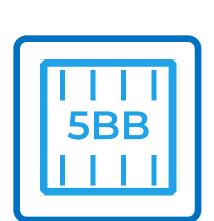




5BB



165W 24V Poly-Crystalline 5BB Module



### Innovative PV module

In comparison with common double glass modules, our modules are extremely robust and superior air tightness



### High Efficiency

Graphene coating can increase about 2W fo the module efficiency by rising around 0.5% of the light transmission



# Certified to withstand the most challenging environmental conditions

5400 Pa snow load (with safety factor 1.5) 2400 Pa wind load (with safety factor 1.5)



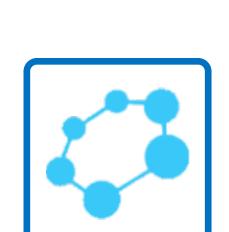
# Better Weak Illumination Response

Lower temperature coefficient and wide spectral response, higher power output, even under low-light settings



### Easy to install

The module is very light in weight so the instalation is easier and transport costs are lower



### Application

Indgo Solar panel perfect for charging (36AH-80AH) 12V battery and running Lead Acid and Li-Ion battery













# Product Specification INDGO SOLAR 5BB Light-Weight Poly-Crystalline PV Module

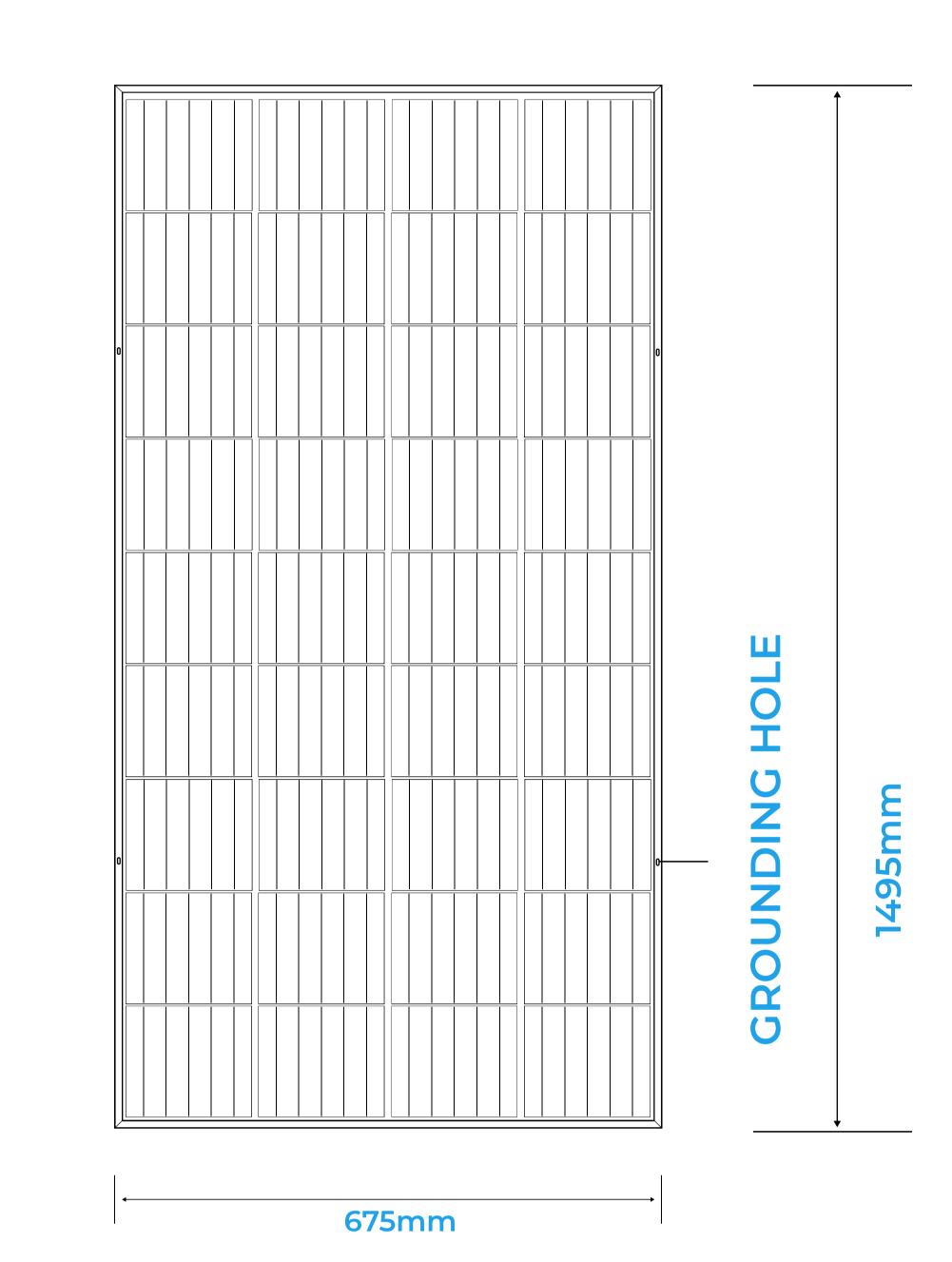
Electrical parameters at standard test conditions (STC:AM=1.5, 1000W/m2, Cells Temperature 25°C)

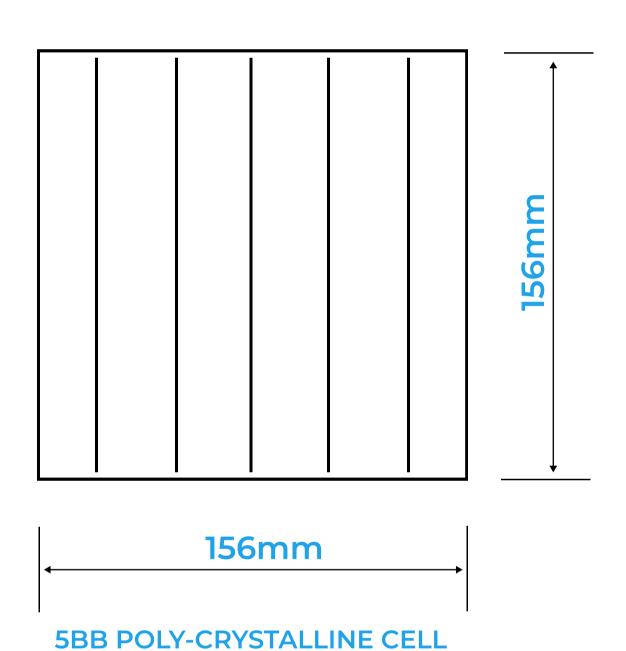
Electrical Properties	
Maximum Power (Pmax)	165 W
Maximum Power Voltage (Vmp)	19.21 V
Maximum Power Current (Imp)	8.59 A
Open Circuit Voltage (Voc)	22.88 V
Short Circuit Current (Isc)	8.98 A
Module Efficiency(%)	16.40
Maximum System Voltage	600 V
Maximum Series Fuse Rating	10.00 A
Cell Efficiency(%)	20.00
Application Class	A Grade

Mechanical Properties	
Length of Module	1495mm
Width of Module	675mm
Thickness of Frame	35mm
Cell Type	Poly Crystalline 5BB Cell
Cell Dimention	156.75mmx156.75mm
Front Cover	3.2mm High Transmission Low Iron Tempered Glass
Frame Type	Anodized Aluminium
Junction Box	IP68
Weight	22.00 Kg
Connector	MC4 IP68

Temperature Characteristics	
Temperature Coefficient of Isc (alsc)	0.050%/°C
Temperature Coefficient of Voc (Blsc)	-0.350%/°C
Temperature Coefficient of Pmax (yPmp)	-0.450%/°C
Normal Module Operating Temperature (NMOT)	47 +/- 2 °C

#### **Dimentions and Structure**





Working Conditions	
Maximum System Voltage	600 V DC
Operating Temperature	-40 °C ~ +85 °C
Maximum Series Fuse	10 A
Maximum Load Test	5400 Pa (Snow load), 2400 Pa (Wind load)

Warranty	
Product Warranty**	10 Years
Performance Warranty**	Linear Power Warranty for 25 years with 2.5% for 1st year degradation and 0.50% from 2years to 25years

<sup>\*\*</sup> Refer to Indgo Solar's warranty document for terms and conditions.