



Solar4WD
POWERING A SUSTAINABLE FUTURE



Solar Modules

MONO PERC 10BB

L'LIOS BLACK | 445 - 455 Wp

PRODUCT | KEY FEATURES



Anti-Reflective (AR) Coated
Glass Anti-Reflective Surface



Excellent Module Efficiency
with Mono PERC cells Through
100% Automation



Positive Power Tolerance with
Current Binning to Prevent
Mismatch Losses



Pre and Post EL Checking
With High Resolution Camera



IP68 Junction Box for
Long Term Endurance



100% High Voltage Testing
to Ensure Safety



MBB Half-Cell Technology
provides Better Performance
under Partial Shading

THE INDUSTRY'S BENCHMARK

Rayzon Solar is an internationally renowned leading solar energy cost effective befitting solutions provider having core competency in high efficiency PV module manufacturing and providing EPC solution. Rayzon PV modules are the best in class in terms of power output and long-term reliability.

Product Code

S4M445BPX

S4M450BPX

S4M455BPX



Linear Performance warranty*



Product warranty on materials
and workmanship

TECHNICAL DATA

PERFORMANCE UNDER STANDARD TEST CONDITIONS (STC) (irradiance of 1000 W/m², spectrum AM 1.5G and cell temperature of 25°C.)

Model Number	S4M445BPX	S4M450BPX	S4M445BPX
Nominal Maximum Power (Pmax)	445 W	450 W	455 W
Power Tolerance	0 to +4.99 W	0 to +4.99 W	0 to +4.99 W
Optimum Operating Voltage (Vmp)	35.28 V	35.52 V	35.75 V
Optimum Operating Current (Imp)	12.62 A	12.69 A	12.75 A
Open Circuit Voltage (Voc)	41.07 V	41.27 V	41.47 V
Short Circuit Current (Isc)	13.24 A	13.30 A	13.36 A
Module Efficiency	20.55 %	20.80 %	21.04 %
Fill Factor	81.91 %	82.11 %	82.27 %

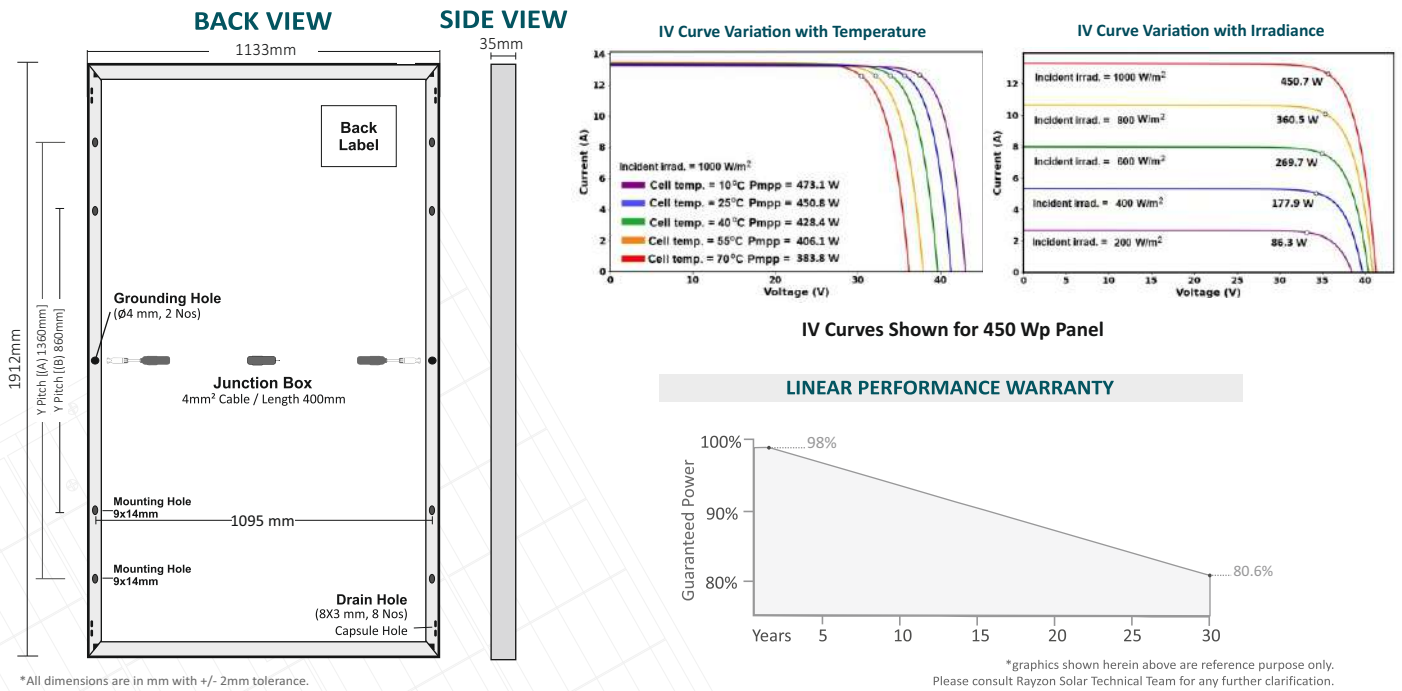
Note: Power Measurement uncertainty: < ±3%

PERFORMANCE UNDER NOCT (NOCT = 45.25°C irradiance of 800 W/m², ambient temperature of 20°C and Wind speed 1 m/s)

Maximum Power (Pmax)	329 W	333 W	337 W
Optimum Operating Voltage (Vmp)	32.48 V	32.70 V	32.92 V
Optimum Operating Current (Imp)	10.14 A	10.19 A	10.24 A
Open Circuit Voltage (Voc)	38.63 V	38.82 V	39.01 V
Short Circuit Current (Isc)	10.72 A	10.77 A	10.82 A

Mechanical Specifications

Dimensions (L x W x T in mm)	1912 x 1133 x 35
Weight(kg)	23.9
Cell type / No Of Cell	120 Half-cut Mono PERC Solar cells
Frame	Anodized Aluminum Alloy (6005, Temper T6, Black colour)
Front Cover	ARC coated Low Iron Tempered Glass (3.2 mm thick)
Encapsulate	Ethylene Vinyl Acetate (EVA) Sheet - PID resistant and UV resistant
Back Cover	Plasma Treated Fluoro-Based polymeric Backsheet (Black colour)
Junction Box	Split Junction Box (3 nos. with individual Bypass Diode) – Weatherproof (IP68)
Bypass Diode	40 A, 45 V, 200 °C max. junction temperature
Cable	4 sq. mm, 400 mm length (Customized cable length available on request)
Connectors	MC4 compatible (MC4 original available on request)
Application Class Rating	Class A
Safety Class Rating	Class II
Mechanical Load Test (as per IEC & UL)	5400 Pa-Front; 2400 Pa-Back
Mounting Holes Pitch (Y)-mm	[A] 1360, [B] 860
Mounting Holes Pitch (X)-mm	1095



MAXIMUM OPERATING CONDITIONS	TEMPERATURE COEFFICIENTS	STACKING STANDARD	20FT	40FT
Operating Temperature: -40°C to +85°C	Current α(Isc) : 0.0297%/°C	No. of Modules	155	682
Maximum System Voltage: 1500V	Voltage β(Voc) : -0.2470%/°C	No of Pallets	5	22
Maximum Series Fuse Rating: 25A	Power γ(Pmax) : -0.3303%/°C	Modules per Pallet / Weight	31Nos/790Kg	31Nos/790Kg
		Pallet dimensions	1950*1130*1275	1950*1130*1275

Caution: Please read safety and installation instruction before using the product. *Warranty: Linear performance warranty for 30 years, with degradation up to 2% in 1st year and 0.6%/year from year 2 to year 30. Please read warranty documents thoroughly. Disclaimer: Specifications included in the datasheet are subject to change without prior notice owing to continuous innovation in the Product Development and R&D Activities. Solar4WD reserves the right to make any adjustment to the information described here. Dataset contained in this specification do not form a representative of a single module data. @T&C Apply.