



MODEL



655-680W

PREXOS VSMDHT.66.AAA.05 FRAME TYPE TRANSPARENT BACKSHEET •

**ALUMINIUM** 

FRAME VARIANT SILVER • **BLACK** •

STFFI •

21.89

PRODUCT WARRANTY

**MESH BACKSHEET** 

PERFORMANCE WARRANTY





#### 0% NEGATIVE POWER TOLERANCE

- Positive power tolerance of upto 0 ~ 4.99Wp
- Module I<sub>mp</sub> binning radically reduces string mismatch



#### **LOWER LCOE**

- · Lower balance of systems cost
- Improves value proposition of the product with competitive



# HIGHLY AUTOMATED PRODUCTION LINE

- Multi stage EL and digitalised visual inspection results lower defect rates
- · Implemented engineering excellence ensure top notch quality



#### PROLONGED SAFETY ASSURANCE

- IP68 with potting JB provides higher level of water ingress protection
- · High Insulation resistance for ensuring electrical safety



# RELIABILITY IS IMPROVED

- Higher corrosion resistance to severe conditions of sand dust, concentrated ammonia and salt mist
- · Low risk of module warping & micro cracking













#### SYSTEM CERTIFICATES

IEC 61215: 2021, IEC 61730, UL 61215, UL 61730, IS 14286, IS/IEC 61730, IEC 61701, IEC 62716, IEC 60068-2-68, CAN-CSA

#### INTERNATIONAL ORGANIZATION FOR STANDARDIZATION:

- · ISO 9001:2015/ Quality Management System
- · ISO 14001:2015/ Environmental Management System
- ISO 45001:2018/ Occupational Health and Safety Management System
- · SA 8000 :2014/ Social Accountability International









# TECHNICAL DATA

# THIS DATASHEET IS APPLICABLE FOR: PREXOS VSMDHT.66.AAA.05 (AAA=655-680)

# **ELECTRICAL PARAMETERS | STC1,2**

Peak Power P <sub>max</sub> (Wp)	655	660	665	670	675	680
Maximum Voltage $V_{mpp}$ (V)	40.6	40.7	40.8	40.9	41	41.1
Maximum Current I <sub>mpp</sub> (A)	16.14	16.22	16.3	16.4	16.5	16.56
Open Circuit Voltage V <sub>oc</sub> (V)	47.6	47.7	47.8	48	48.1	48.28
Short Circuit Current I <sub>sc</sub> (A)	17.31	17.4	17.48	17.55	17.56	17.56
Module Efficiency (%)	21.09	21.25	21.41	21.57	21.73	21.89

1)STC:1000 W/M² IRRADIANCE, 25°C CELL TEMPERATURE, AM1.5G SPECTRUM ACCORDING TO EN 60904-3 | 2) TOLERANCE OF RATING AT STC (P<sub>100</sub> / 1<sub>50</sub> / 1<sub>50</sub> / 1<sub>50</sub> | 0-3/25/15 |
ELECTRICAL MEASUREMENT UNCERTAINTY IS WITHIN ± 2%

#### **ELECTRICAL PARAMETERS | NOCT<sup>3</sup>**

Peak Power P <sub>max</sub> (Wp)	490.2	494.1	497.2	501.2	504.6	508.4
Maximum Voltage V <sub>mpp</sub> (V)	37	37.1	37.1	37.3	37.4	37.5
Maximum Current I <sub>mpp</sub> (A)	13.3	13.3	13.4	13.5	13.5	13.6
Open Circuit Voltage V <sub>oc</sub> (V)	44.3	44.4	44.5	44.6	44.7	44.8
Short Circuit Current I <sub>sc</sub> (A)	14	14.1	14.1	14.2	14.3	14.3

3)NOCT IRRADIANCE 800 W/M2, AMBIENT TEMPERATURE 20°C, WIND SPEED 1 M/SEC

# **ELECTRICAL PARAMETERS | BNPI<sup>4,5</sup>**

Peak Power P <sub>max</sub> (Wp)	717	722	728	733	739	744
Maximum Voltage V <sub>mpp</sub> (V)	40.6	40.7	40.8	40.9	41	41.1
Maximum Current I <sub>mpp</sub> (A)	17.7	17.8	17.8	17.9	18	18.1
Open Circuit Voltage V <sub>oc</sub> (V)	47.6	47.7	47.8	48	48.1	48.3
Short Circuit Current I <sub>sc</sub> (A)	18.9	19	19.1	19.2	19.2	19.2

4) BNPI: 1000W/M²+¢,135, BIFACILITY COEFF. (ф) AT BNPI PMM, loc IS 70±10% & FOR Voc IS 99±10%, AM 1.5, 25°C [5] TOLERANCE OF RATING AT BNPI (PM9/ loc/ Voc) [%]: 0-3/±5/±5

# TEMPERATURE COEFFICIENTS (Tc) PERMISSIBLE OPERATING CONDITIONS

Tc of Open Circuit Voltage (β)	-0.27%/°C
Tc of Short Circuit Current (α)	0.050%/°C
Tc of Power (γ)	-0.35%/°C
Maximum System Voltage	1500V
NOCT	45°C ± 2°C
Temperature Range	-40°C to + 85°C

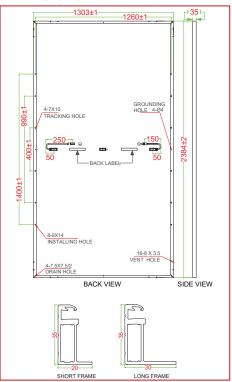
# **MECHANICAL DATA**

Length × Width × Height	2384 X 1303 X 35 mm (93.86 x 51.30 x 1.38 inches)	
Weight	33.6 Kg (74.08 lbs)	
Junction Box	IP 68, Split Junction Box with individual bypass diodes	
Cable & Connectors#	200 mm (+ve terminal) and 300 mm (-ve terminal) length cables,MC4 Compatible/MC4 Connectors	
Application Class	Class A (Safety class II)	
Superstrate##	3.2 mm (0.125 inches) high transmission ARC tempered glass (low iron content)	
Cells	66 Mono PERC (132 half-cells ) P-Type bifacial solar cells	
Substrate	High transmittance composite film with white/black mesh	
Frame	Anodized aluminium/ Alloy steel frame#*	
Mechanical Load Test	5400 Pa (Snow load), 2400 Pa (Wind load)	
Cell Encapsulant	POE/ EPE/ EVA	
Maximum Series Fuse Rating	30 A	
Hail Test	Ø 45mm   Impact Velocity up to 27m/s	

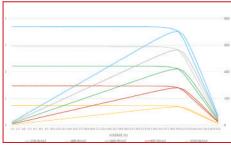
### **WARRANTY**

Product Warranty**	12 years
Performance Warranty**	Linear Power Warranty for 30 years with 2% for 1st year degradation and 0.5% from year 2 to year 30

#### **DIMENSIONS IN MM**



#### TYPICAL I-V CURVES7



#### PERFORMANCE WARRANTY



# PACKAGING INFORMATION

Quantity /Pallet	31
Pallets/Container (40'HC)	17
Quantity/Container (40'HC)	527

"All (\*) certifications under progress. | \*\*Refer to Vikram Solar's warranty document for terms and conditions. | "460mm(15.75 inches), 1000mm(19.39 in inches), 1200mm (17.24 inches) cable lengths are also available | "Mn-ligare Glass is also available | "Ne are applicable product | "With additional Cost & Lead Time subject to availability | STC: Standard Testing Condition | BNP|: Bifacial Nameplate tradiance | NOCT: Normial Operating Cell Temperature.

Preyns-132-E-GG-2023-R03

CAUTION: READ SAFETY AND INSTALLATION MANUAL BEFORE USING THE PRODUCT.

Specifications included in this datasheet are subject to change without notice. Electrical data whost guarantees, Please confirm your exact requirement with the company representative while placing your order.

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