

# 605-630W

SUBSTRATE  
 GLASS   
**MESH GLASS**

FRAME TYPE  
**ALUMINIUM**

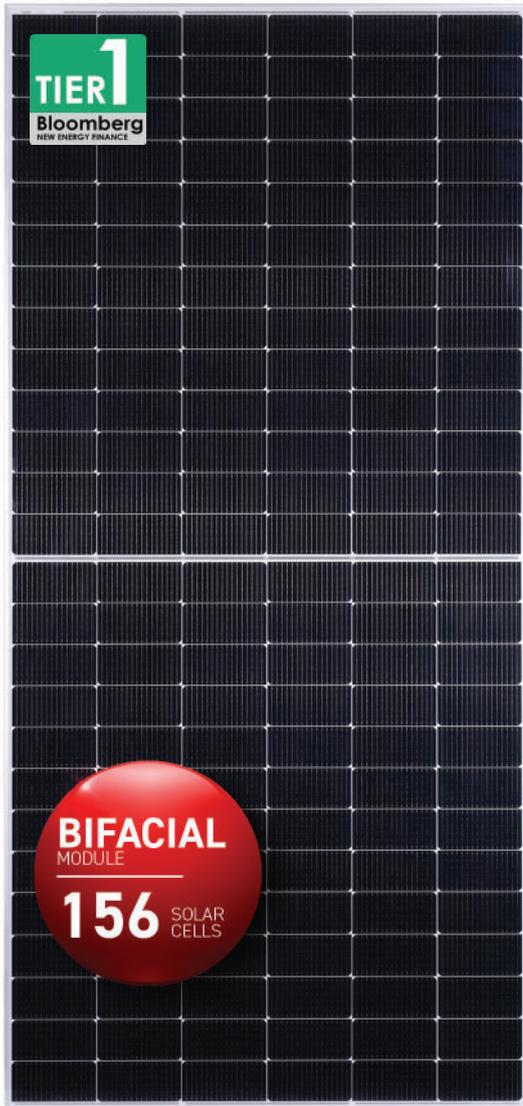
FRAME VARIANT  
**SILVER**   
 BLACK

MAXIMUM EFFICIENCY %  
**22.62**

CELL TYPE  
**M10 HALF CUT**

PRODUCT WARRANTY  
**12** YEARS

PERFORMANCE WARRANTY  
**30** YEARS



### 0% NEGATIVE POWER TOLERANCE

- Positive power tolerance of upto 0 ~ 4.99Wp
- Module  $I_{mp}$  binning radically reduces string mismatch losses



### IMPROVED LONGEVITY

- Excellent anti-PID performance via optimized process and materials control
- Lower susceptibility to LID & LeTID



### LOWER LCOE

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



### HIGHLY AUTOMATED PRODUCTION LINE

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



### SUPERIOR HAIL TEST PERFORMANCE

- ø 40mm hail test passed from third party laboratory

#### PRODUCT CERTIFICATES



#### 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

THIS DATASHEET IS APPLICABLE FOR: HYPERSOL VSM DH.78.AAA.05 (AAA=605-630)

### ELECTRICAL PARAMETERS | STC<sup>1,2</sup>

Peak Power $P_{max}$ (Wp)	605	610	615	620	625	630
Maximum Voltage $V_{mpp}$ (V)	45.53	45.7	45.9	46.1	46.31	46.51
Maximum Current $I_{mpp}$ (A)	13.3	13.36	13.41	13.45	13.5	13.55
Open Circuit Voltage $V_{oc}$ (V)	54.3	54.5	54.7	54.9	55.1	55.3
Short Circuit Current $I_{sc}$ (A)	13.94	14	14.06	14.12	14.18	14.24
Module Efficiency (%)	21.72	21.90	22.08	22.26	22.44	22.62

1) STC: 1000 W/M<sup>2</sup> IRRADIANCE, 25°C CELL TEMPERATURE, AM1.5G SPECTRUM ACCORDING TO EN 60904-3 | 2) TOLERANCE OF RATING AT STC ( $P_{max}$  /  $I_{sc}$  /  $V_{oc}$ ) [%]: 0-3/+5/+5 | ELECTRICAL MEASUREMENT UNCERTAINTY IS WITHIN ± 2%

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

Peak Power $P_{max}$ (Wp)	456.0	460.1	464.0	467.5	471.1	475.5
Maximum Voltage $V_{mpp}$ (V)	42.7	42.9	43.1	43.3	43.4	43.6
Maximum Current $I_{mpp}$ (A)	10.7	10.7	10.8	10.8	10.9	10.90
Open Circuit Voltage $V_{oc}$ (V)	51.0	51.3	51.4	51.6	51.8	52.0
Short Circuit Current $I_{sc}$ (A)	11.3	11.3	11.36	11.40	11.45	11.51

3) NOCT (IRRADIANCE 800 W/M<sup>2</sup>, AMBIENT TEMPERATURE 20°C, WIND SPEED 1 M/SEC)

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

Peak Power $P_{max}$ (Wp)	670.3	675.9	681.4	687.0	692.5	698.0
Maximum Voltage $V_{mpp}$ (V)	45.53	45.7	45.9	46.1	46.31	46.51
Maximum Current $I_{mpp}$ (A)	14.74	14.80	14.86	14.90	14.96	15.01
Open Circuit Voltage $V_{oc}$ (V)	54.3	54.5	54.7	54.9	55.1	55.3
Short Circuit Current $I_{sc}$ (A)	15.45	15.51	15.58	15.64	15.71	15.78

4) BNPI: 1000W/M<sup>2</sup>±q.135, BIFACILITY COEFF. (q) AT BNPI  $P_{max}$ ,  $I_{sc}$  IS 75±5% & FOR  $V_{oc}$  IS 99±10%, AM 1.5, 25°C | 5) TOLERANCE OF RATING AT BNPI ( $P_{max}$  /  $I_{sc}$  /  $V_{oc}$ ) [%]: 0-3/+5/+5

### TEMPERATURE COEFFICIENTS (Tc) PERMISSIBLE OPERATING CONDITIONS

Tc of Open Circuit Voltage ( $\beta$ )	-0.26%/°C
Tc of Short Circuit Current ( $\alpha$ )	0.046%/°C
Tc of Power ( $\gamma$ )	-0.30%/°C
Maximum System Voltage	1500V
NOCT	45°C ± 2°C
Temperature Range	-40°C to + 85°C

### MECHANICAL DATA

Length × Width × Height	2456 × 1134 × 35mm (96.69 × 44.65 × 1.38 inches)
Weight	35±5% Kg (77.16 lbs)
Junction Box	IP 68, Split Junction Box with individual bypass diodes
Cable & Connectors <sup>#</sup>	200 mm (+ve terminal) and 300 mm (-ve terminal) length cables, MC4 Compatible/MC4 Connectors
Application Class	Class A (Safety class II)
Superstrate <sup>#</sup>	2.0 mm (0.098 inches) high transmission ARC Semi-tempered glass (low iron content)
Cells	78 (156 half-cells) TOPCon n-Type bifacial solar cells
Substrate	2.0 mm (0.098 inches) high transmission heat strengthened glass/ mesh glass <sup>#</sup> (low iron content)
Frame	Anodized aluminium
Mechanical Load Test	5400 Pa (Snow load), 2400 Pa (Wind load)
Cell Encapsulant	EPE/ EVA
Maximum Series Fuse Rating	30A
Hail Test	Ø 40mm

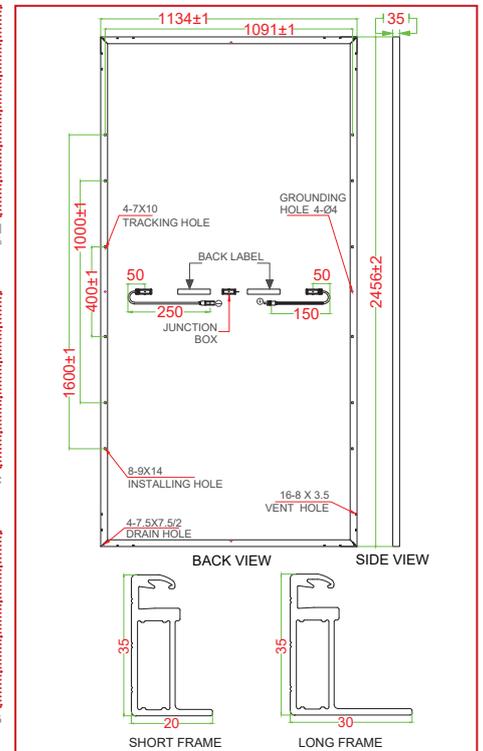
### WARRANTY

Product Warranty <sup>**</sup>	12 years
Performance Warranty <sup>**</sup>	Linear Power Warranty for 30 years with 1% for 1 <sup>st</sup> year degradation and 0.4% from year 2 to year 30

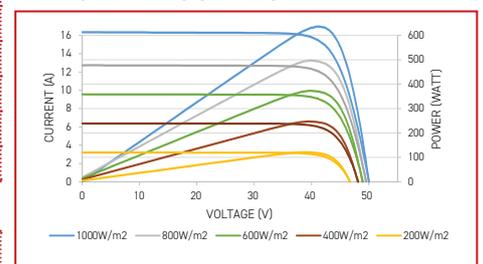
**CAUTION: READ SAFETY AND INSTALLATION MANUAL BEFORE USING THE PRODUCT.**

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### DIMENSIONS IN MM

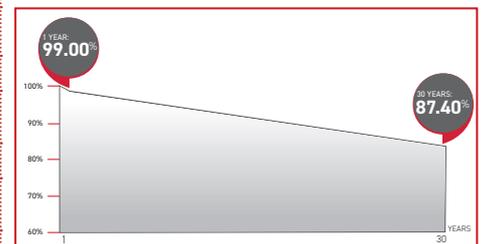


### TYPICAL I-V CURVES<sup>6</sup>



6) AVERAGE RELATIVE EFFICIENCY REDUCTION OF 5% AT 200 W/M<sup>2</sup> ACCORDING TO EN 60904-1

### PERFORMANCE WARRANTY



### PACKAGING INFORMATION

Quantity /Pallet	31
Pallets/Container (40'HC)	16
Quantity/Container (40'HC)	496

\*All (\*) certifications under progress. | \*\*Refer to Vikram Solar's warranty document for terms and conditions. | #400mm(15.75 inches), 1000mm(39.37 inches), 1200mm (47.24 inches) cable lengths are also available | \*Anti-glare Glass is also available | \*As per applicable product | \*With additional Cost & Lead Time subject to availability | STC: Standard Testing Condition | BNPI: Bifacial Nameplate Irradiance | NOCT: Nominal Operating Cell Temperature