

690-715W

SUBSTRATE
GLASS ●
MESH GLASS ●

FRAME TYPE
ALUMINIUM ●
STEEL ●

FRAME VARIANT
SILVER ●
BLACK ●

MAXIMUM EFFICIENCY %

23.02

CELL TYPE

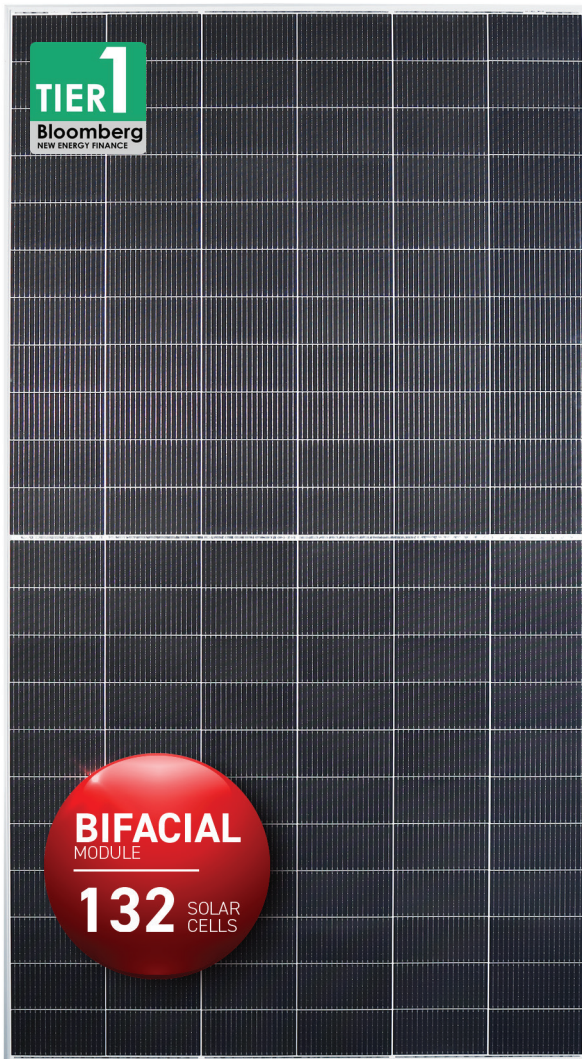
G12 HALF CUT

PRODUCT WARRANTY

12 YEARS

PERFORMANCE WARRANTY

30 YEARS



LOWER LCOE

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



0% NEGATIVE POWER TOLERANCE

- Positive power tolerance of upto 0 ~ 4.99Wp
- Module current binning radically reduces string mismatch losses



IMPROVED LONGEVITY

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



PREMIUM PERFORMANCE PARAMETERS

- N-TYPE solar cell upto 80% bifaciality, brings higher energy yield from rear side
- Lower temperature coefficient minimizing generation losses at high temperature



SUPERIOR HAIL TEST PERFORMANCE

- ø 45mm hail test passed from third party laboratory with impact velocity up to 27m/s

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.66.AAA.05 (AAA=690-715)

ELECTRICAL PARAMETERS | STC^{1,2}

Peak Power P_{max} (Wp)	690	695	700	705	710	715
Maximum Voltage V_{mpp} (V)	39.7	39.9	40.1	40.2	40.4	40.6
Maximum Current I_{mpp} (A)	17.38	17.43	17.48	17.53	17.58	17.63
Open Circuit Voltage V_{oc} (V)	47.3	47.5	47.6	47.8	48.0	48.1
Short Circuit Current I_{sc} (A)	18.29	18.36	18.43	18.5	18.57	18.64
Module Efficiency (%)	22.21	22.37	22.53	22.70	22.86	23.02

1) STC: 1000 W/M² IRRADIANCE, 25°C CELL TEMPERATURE, AM1.5G SPECTRUM ACCORDING TO EN 60904-3 | 2) TOLERANCE OF RATING AT STC ($P_{max} / I_{sc} / V_{oc}$) (%): 0-3/+10/+10 | ELECTRICAL MEASUREMENT UNCERTAINTY IS WITHIN ± 2%

ELECTRICAL PARAMETERS | NOCT³

Peak Power P_{max} (Wp)	519.5	523.4	527.3	531.2	535.1	539
Maximum Voltage V_{mpp} (V)	37.1	37.2	37.3	37.4	37.5	37.6
Maximum Current I_{mpp} (A)	14.03	14.08	14.13	14.18	14.23	14.28
Open Circuit Voltage V_{oc} (V)	44.4	44.6	44.8	45	45.2	45.4
Short Circuit Current I_{sc} (A)	14.78	14.83	14.88	14.93	14.98	15.03

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

ELECTRICAL PARAMETERS | BNPI^{4,5}

Peak Power P_{max} (Wp)	765	770	776	781	787	792
Maximum Voltage V_{mpp} (V)	39.7	39.9	40.1	40.2	40.4	40.6
Maximum Current I_{mpp} (A)	19.26	19.31	19.37	19.42	19.48	19.53
Open Circuit Voltage V_{oc} (V)	47.3	47.5	47.6	47.8	48	48.1
Short Circuit Current I_{sc} (A)	20.27	20.34	20.42	20.50	20.58	20.65

4) BNPI: 1000W/M² ± 0.135, BIFACILITY COEFF. (β) 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/+10/+10

TEMPERATURE COEFFICIENTS (Tc) PERMISSIBLE OPERATING CONDITIONS

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

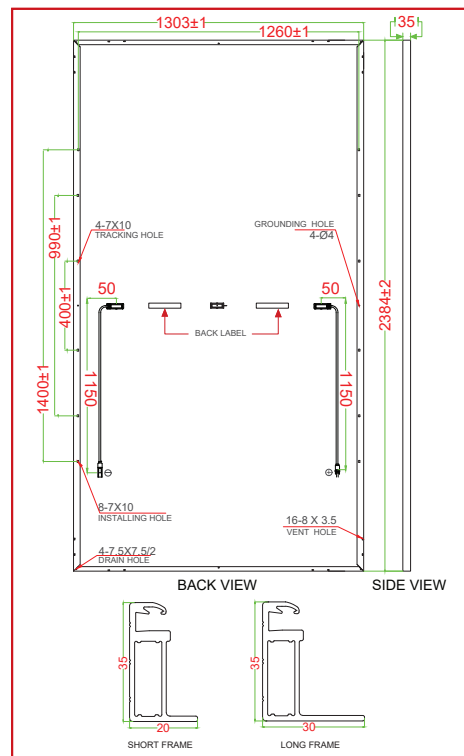
MECHANICAL DATA

Length × Width × Height	2384 X 1303 X 35 mm (93.86 x 51.30 x 1.38 inches)
Weight	39.5 Kg (87.08 lbs)
Junction Box	IP 68, Split Junction Box with individual bypass diodes
Cable & Connectors**	1200 mm (+ve terminal) and 1200 mm (-ve terminal) length cables, Staubli Evo Connectors
Application Class	Class A (Safety class II)
Superstrate**	2.0 mm (0.098 inches) high transmission ARC Semi-tempered glass (low iron content)
Cells	66 (132 half-cells) N-TYPE bifacial solar cells
Substrate	2.0 mm (0.098 inches) high transmission heat strengthened glass/ mesh glass** (low iron content)
Frame	Anodized aluminium/ Alloy steel frame**
Mechanical Load Test	5400 Pa (Snow load), 2400 Pa (Wind load)
Cell Encapsulant	EPE/ EVA
Maximum Series Fuse Rating	30 A
Hail Test	Ø 45mm Impact Velocity up to 27m/s

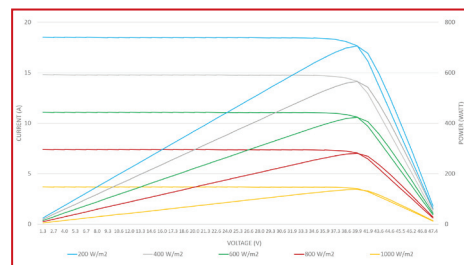
WARRANTY

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

DIMENSIONS IN MM

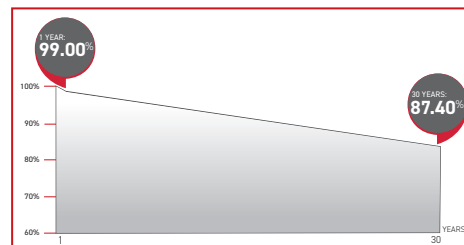


TYPICAL I-V CURVES⁶



6) AVERAGE RELATIVE EFFICIENCY REDUCTION OF 5% AT 200 W/M² ACCORDING TO EN 60904-1

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. | *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

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

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