HYPERSOL

HIGH EFFICIENCY N-TYPE PV MODULE

Mono PERC | **N-TYPE** | HJT

MODEL:
HYPERSOL VSMDH.66.AAA.05

695-720W

SUBSTRATE
GLASS
MESH GLASS

FRAME TYPE
ALUMINIUM

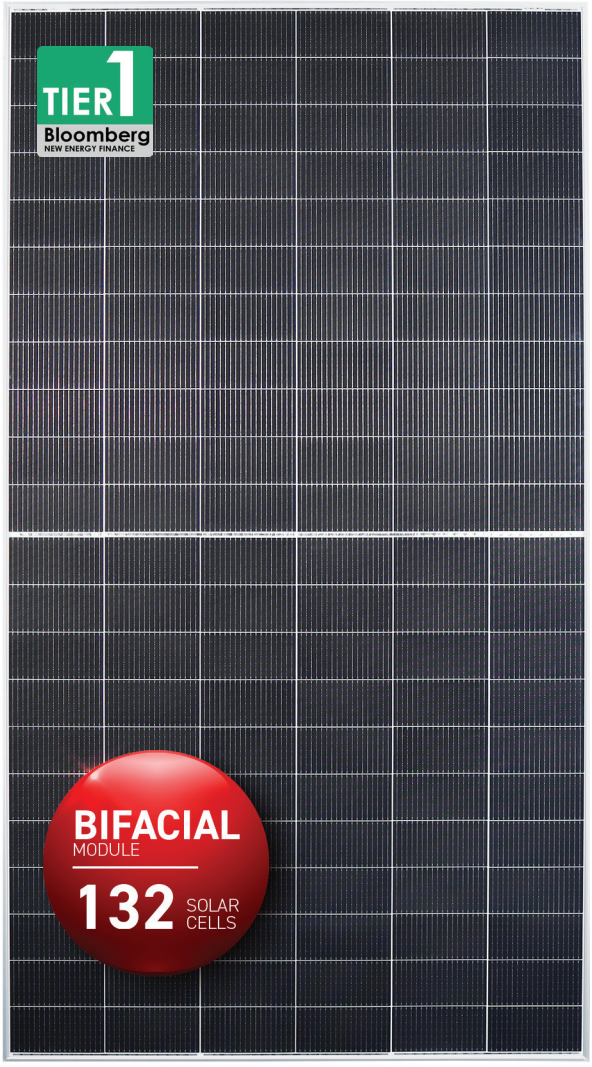
FRAME VARIANT
SILVER
BLACK

MAXIMUM EFFICIENCY %
23.18

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

- ⌀ 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

vikramsolar
CREATING CLIMATE FOR CHANGE

Monocrystalline Solar PV Modules, Bifacial, GG, G12 N-TYPE

vikramsolar
CREATING CLIMATE FOR CHANGE

Mono PERC | **N-TYPE** | HJT

TECHNICAL DATA

HYPERSOL 695-720W

THIS DATASHEET IS APPLICABLE FOR: **HYPERSOL VSMDH.66.AAA.05 (AAA=695-720)**

ELECTRICAL PARAMETERS | STC[1,2]

Peak Power P_{max} (Wp)	695	700	705	710	715	720
Maximum Voltage V_{mpp} (V)	40.2	40.4	40.6	40.8	41.0	41.2
Maximum Current I_{mpp} (A)	17.29	17.33	17.37	17.41	17.45	17.49
Open Circuit Voltage V_{oc} (V)	48.4	48.6	48.8	49.0	49.2	49.4
Short Circuit Current I_{sc} (A)	18.34	18.36	18.4	18.44	18.48	18.52
Module Efficiency (%)	22.37	22.53	22.70	22.86	23.02	23.18

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

ELECTRICAL PARAMETERS | NOCT[3]

Peak Power P_{max} (Wp)	523.5	527.9	530.9	535.4	539.7	543.1
Maximum Voltage V_{mpp} (V)	37.6	37.7	37.9	38.1	38.3	38.4
Maximum Current I_{mpp} (A)	13.94	13.99	14	14.05	14.09	14.13
Open Circuit Voltage V_{oc} (V)	45.5	45.7	45.9	46.1	46.3	46.5
Short Circuit Current I_{sc} (A)	14.79	14.82	14.86	14.89	14.92	14.95

3) NOCT IRRADIANCE 800 W/M^2, AMBIENT TEMPERATURE 20°C, WIND SPEED 1 M/SEC

ELECTRICAL PARAMETERS | BNPI[4,5]

Peak Power P_{max} (Wp)	765.4	770.9	776.4	781.9	787.4	792.9
Maximum Voltage V_{mpp} (V)	40.2	40.4	40.6	40.8	41.0	41.2
Maximum Current I_{mpp} (A)	19.04	19.08	19.13	19.17	19.22	19.26
Open Circuit Voltage V_{oc} (V)	48.4	48.6	48.8	49.0	49.2	49.4
Short Circuit Current I_{sc} (A)	20.20	20.22	20.26	20.31	20.35	20.40

4) BNPI: 1000W/M^2+ϕ.135, BIFACILITY COEFF. (ϕ) 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_{MPP}/ I_{SC}/ V_{OC}) [%] : 0-3/±5/±5

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)	-0.28%/°C
Maximum System Voltage	1500V
NOCT	45°C ± 2°C
Temperature Range	-40°C to + 85°C

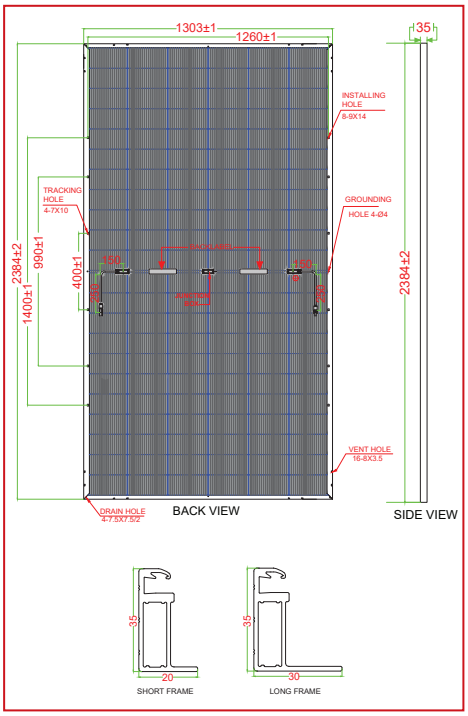
MECHANICAL DATA

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#	400 mm (+ve terminal) and 400 mm (-ve terminal) length cables, MC4 Compatible/Staubli EVO connectors
Application Class	Class A (Safety class II)
Superstrate##	2.0 mm (0.08 inches) high transmission ARC Semi-tempered glass (low iron content)
Cells	66 (132 half-cells) N-TYPE bifacial solar cells
Substrate	2.0 mm (0.08 inches) high transmission heat strengthened glass/mesh glass (low iron content)
Frame	Anodized aluminium
Mechanical Load Test	5400 Pa (Snow load), 2400 Pa (Wind load)
Cell Encapsulant	EPE/EVA or EPE/EPE
Maximum Series Fuse Rating	30 A
Hail Test	Ø 40mm

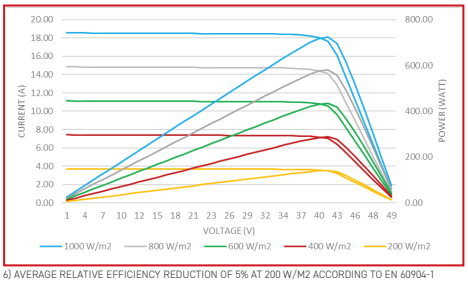
WARRANTY

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

DIMENSIONS IN MM

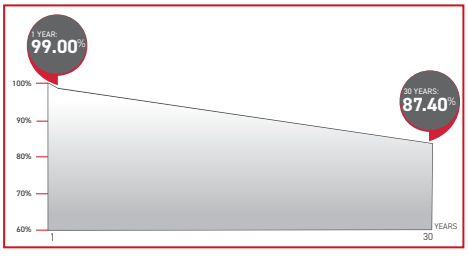


TYPICAL I-V CURVES[6]



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. |#1200mm (47.24 inches), 1400mm (55.12 inches), 1600mm (62.99 inches) cable lengths are also available | ##Anti-glare Glass is also available | *As per applicable product | STC : Standard Testing Condition | BNPI : Bifacial Nameplate Irradiance | NOCT : Nominal Operating Cell Temperature

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

Specifications included in this datasheet are subject to change without notice. Electrical data without guarantee. Please confirm your exact requirement with the company representative while placing your order.
Vikram Solar and all its accompanying logos are trademarks of Vikram Solar Limited registered in India.

sales@vikramsolar.com www.vikramsolar.com