SURYAVA

HIGH EFFICIENCY HJT PV MODULES

Mono PERC | nTOPCon | **HJT**

MODEL:
SURYAVA VSMDH.66.AAA.05

700-725W

SUBSTRATE	FRAME TYPE	FRAME VARIANT
GLASS	**ALUMINIUM**	**SILVER**
MESH GLASS	STEEL	BLACK

MAXIMUM EFFICIENCY %	CELL TYPE	PRODUCT WARRANTY	PERFORMANCE WARRANTY
23.34	G12 **HALF CUT**	12 YEARS	30 YEARS

EXCELLENT LOW-LIGHT PERFORMANCE

- Superior generation with wide spectral response
- Higher performance under low light scenarios

IMPROVED LONGEVITY

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

0% NEGATIVE POWER TOLERANCE

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

PREMIUM PERFORMANCE PARAMETERS

- HJT solar cell upto 90% bifaciality, brings higher energy yield from rear side
- Lower temperature coefficient minimizing generation losses at high temperatures

SUPERIOR HAIL TEST PERFORMANCE

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

PRODUCT CERTIFICATES

R-51000566
R-61002070

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

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CREATING CLIMATE FOR CHANGE

Monocrystalline Solar PV Modules, Bifacial, GG, G12 HJT

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CREATING CLIMATE FOR CHANGE

Mono PERC nTOPCon HJT

TECHNICAL DATA

SURYAVA 700-725W

THIS DATASHEET IS APPLICABLE FOR: **SURYAVA VSMDH.66.AAA.05 (AAA=700-725)**

ELECTRICAL PARAMETERS | STC[1,2]

Peak Power P_{max} (Wp)	700	705	710	715	720	725
Maximum Voltage V_{mpp} (V)	42.14	42.28	42.43	42.57	42.72	42.86
Maximum Current I_{mpp} (A)	16.62	16.68	16.74	16.8	16.86	16.92
Open Circuit Voltage V_{oc} (V)	50.5	50.65	50.8	50.95	51.1	51.25
Short Circuit Current I_{sc} (A)	17.4	17.46	17.52	17.58	17.64	17.7
Module Efficiency (%)	22.53	22.7	22.86	23.02	23.18	23.34

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/±10/±10| ELECTRICAL MEASUREMENT UNCERTAINTY IS WITHIN ± 2%

ELECTRICAL PARAMETERS | NOCT[3]

Peak Power P_{max} (Wp)	531.85	535.7	539.6	543.3	547.3	551.1
Maximum Voltage V_{mpp} (V)	39.88	40.03	40.2	40.3	40.5	40.63
Maximum Current I_{mpp} (A)	13.33	13.38	13.42	13.47	13.51	13.56
Open Circuit Voltage V_{oc} (V)	47.88	48.03	48.2	48.3	48.5	48.63
Short Circuit Current I_{sc} (A)	14.03	14.08	14.13	14.18	14.23	14.28

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)	780	786	791	797	803	808
Maximum Voltage V_{mpp} (V)	42.1	42.3	42.4	42.6	42.7	42.9
Maximum Current I_{mpp} (A)	18.5	18.6	18.7	18.7	18.8	18.9
Open Circuit Voltage V_{oc} (V)	50.5	50.7	50.8	51	51.1	51.3
Short Circuit Current I_{sc} (A)	19.4	19.5	19.5	19.6	19.7	19.7

4) BNPI: 1000W/M^2+ϕ.135, BIFACILITY COEFF. (ϕ) AT BNPI P_{MAX}, I_{SC} IS 85±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/±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)	-0.26%/°C
Maximum System Voltage	1500V
NOCT	45°C ± 2°C
Temperature Range	-40°C to + 85°C

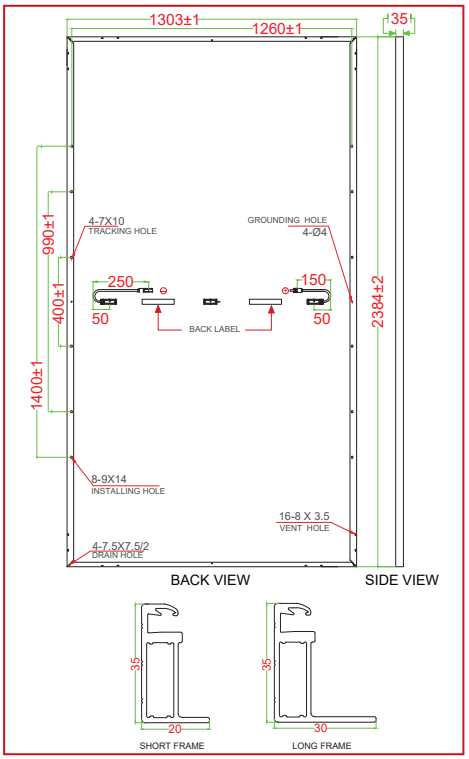
MECHANICAL DATA

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#	200 mm (+ve terminal) and 300 mm (-ve terminal) length cables, MC4 Compatible/MC4 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 HJT 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

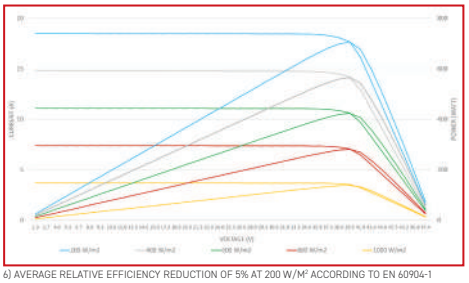
WARRANTY

Product Warranty**	12 years
Performance Warranty**	Linear Power Warranty for 30 years with 1% for 1st year degradation and 0.38% from year 2 to year 30

DIMENSIONS IN MM

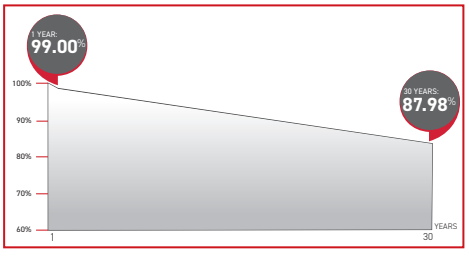


TYPICAL I-V CURVES[6]



6) AVERAGE RELATIVE EFFICIENCY REDUCTION OF 5% AT 200 W/M^2 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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