



High Power Output
Low LCOE



Maximum Power
415W+



TWMPD

P-type Half-cell
Monofacial Full-black Module (54)

54HB395-415W

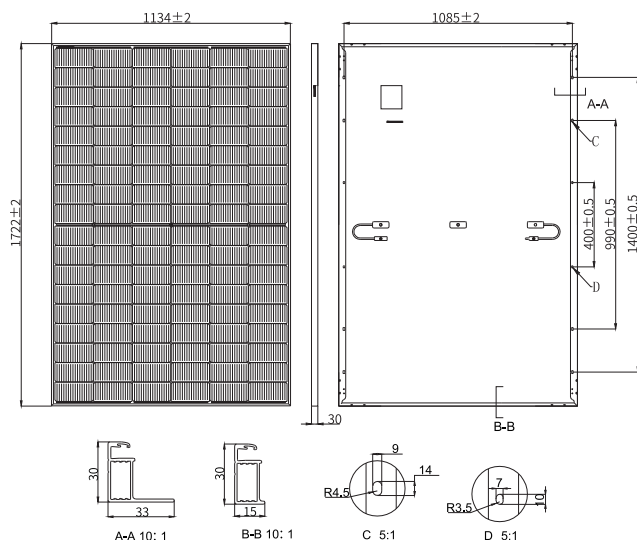


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DRAWINGS (Unit: mm)



ELECTRICAL CHARACTERISTICS (STC)

Module Type: TWMPD-54HBXXX

Maximum Power: Pmax [W]	395	400	405	410	415
Open Circuit Voltage: Voc [V]	36.98	37.07	37.23	37.38	37.53
Short Circuit Current: Isc [A]	13.70	13.79	13.87	13.93	13.99
Voltage at Maximum Power: Vmp [V]	30.84	31.01	31.21	31.40	31.60
Current at Maximum Power: Imp [A]	12.81	12.90	12.98	13.06	13.14
Module Efficiency: η [%]	20.2	20.5	20.7	21.0	21.3

ELECTRICAL CHARACTERISTICS (NMOT)

Maximum Power: Pmax [W]	298.2	302.0	306.0	310.0	314.0
Open Circuit Voltage: Voc [V]	34.80	34.88	35.12	35.31	35.50
Short Circuit Current: Isc [A]	10.96	11.03	11.10	11.16	11.22
Voltage at Maximum Power: Vmp [V]	29.10	29.26	29.47	29.68	29.89
Current at Maximum Power: Imp [A]	10.25	10.32	10.38	10.44	10.51

* STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass1.5, Measuring Tolerance: ±3%
* NMOT: Irradiance 800W/m², Ambient Temperature 20°C, Air Mass1.5, Wind Speed 1m/s

TEMPERATURE PARAMETERS

Temperature Coefficient (Pmax)	-0.33%/°C
Temperature Coefficient (Voc)	-0.27%/°C
Temperature Coefficient (Isc)	+0.05%/°C
NMOT	45±2°C

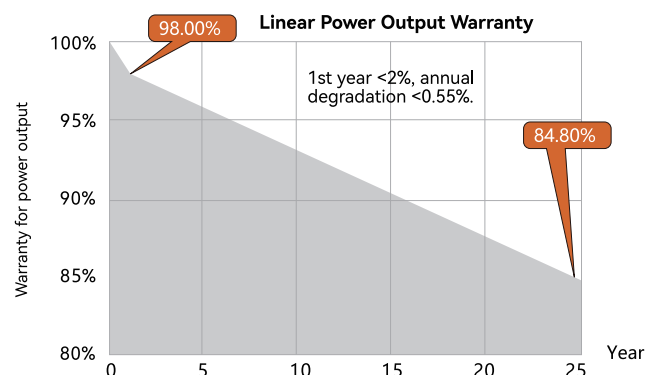
MAXIMUM RATINGS

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25A
Power Output Tolerance	0~+5W

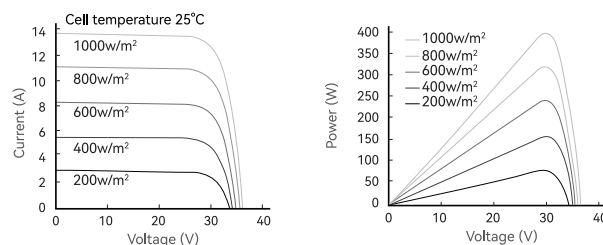
MECHANICAL PARAMETERS

Cells	TPC (P Type Monocrystalline Cell)
Cell Orientation	108[6X18]
Dimension	1722±2X1134±2X30mm
Weight	20.5kg
Front Glass	3.2mm high transmittance, AR coated tempered glass
Backsheet	Black inside and white outside/Black
Frame	Anodized aluminum alloy black frame
Junction Box	IP68, 3 diodes
Output Cable	4.0mm ²
Cable Length	±1200mm, length can be customized
Wind/Snow Load	2400Pa/5400Pa
Packaging	36pcs per pallet, 936pcs per 40'HC

WARRANTY



I-V CURVE



CERTIFICATIONS

Quality Management System and Product Certification

ISO 9001:2015 / quality management system
ISO 14001:2015 / environmental management system
ISO 45001:2018 / occupation health safety management system
ISO 50001:2011 / energy management system
IEC TS 62941—2016 / PV industry quality management system
IEC 61215/61730, IEC 62804(PID), IEC 61701(Salt),
IEC 62716 (Ammonia), IEC 60068-2-68(Sand)

