

TopCon BIFACIAL

**30-year linear power
output warranty**

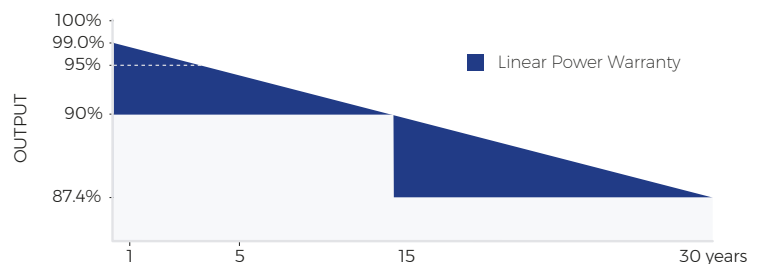
**15-years
product warranty**

HELIUS GENESIS

HMB144T10R
580W - 600W

PREMIUM N-TYPE MONOCRYSTALLINE CELLS
MBB HALF CELL TECHNOLOGY

SUPERIOR WARRANTY



INMETRO, IEC 61215, IEC 61730, IEC TS 62804, IEC 61701
ISO 9001:2008 - ISO 14001:2004 - OSHAS 18001:2007



SUPERIOR QUALITY

With MBB technology and half cell design, Helius Sunlink PV panels reduce conver of cell by busbars and improve current collection ability on cloudy days.



HIGH EFFICIENCY AND POWER DENSITY

High conversion efficiency and up to 600W.
More gain power per square meter.



PERFORMANCE WARRANTY

With up to 30 years of solar generation, Helius Sunlink PV warranty can guarantee the longevity of your project.



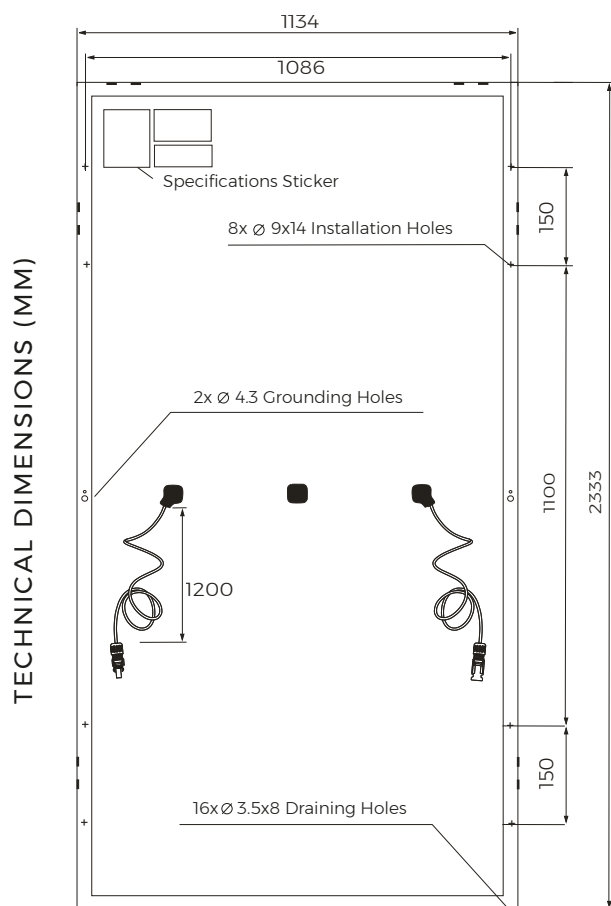
FIRE-PROOF PERFORMANCE

Modules are approved and tested under IEC 61730 and Class C Fire Test.



LIGHT AND RELIABLE

Much lighter modules with thicker frames to ensure module resilience. Modules could be applied under ammonia, salt mist, high temperature, high humidity condition.

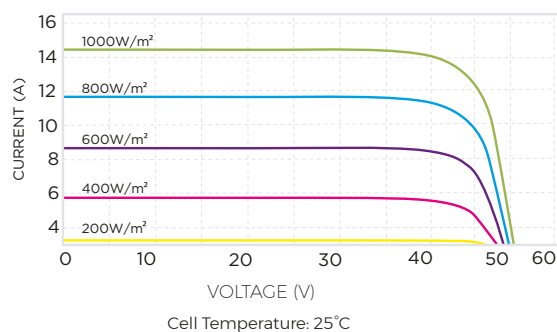


MECHANICAL CHARACTERISTICS

Dimensions	2333 x 1134 x 30mm
Solar Cells	144 Monocrystalline N-Type Cells
Weight	32.2 kg
Frame	Anodized Aluminium Alloy
Glass	2.0 mm + 2.0mm High Transmission, Low Iron Tempered
J-Box	IP68 / 3 bypass diodes
Cables	4mm / Length 1200mm or customized

TEMPERATURE CHARACTERISTICS

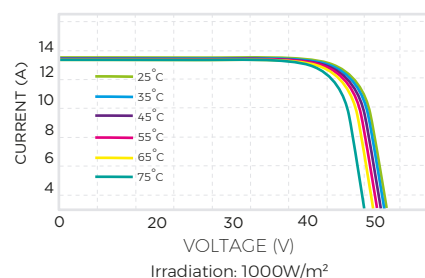
Temperature Coefficient I_{sc}	0.045% / °C
Temperature Coefficient V_{oc}	-0.25% / °C
Temperature Coefficient P_{max}	-0.30% / °C
Nominal Module Operating Temperature NMOT	44 °C ± 2 °C
Operational Temperature	-40 °C ~ +85 °C



ELECTRICAL CHARACTERISTICS

HMF144T10R	580HL	585HL	590HL	595HL	600HL
Maximum Power P_{Max} (W)	580	585	590	595	600
Maximum Power Voltage V_{mp} (V)	43.06	43.22	43.42	43.62	43.82
Maximum Power Current I_{mp} (A)	13.47	13.53	13.59	13.62	13.70
Open Circuit Voltage V_{oc} (V)	51.60	51.8	52.00	52.12	52.29
Short Circuit Current I_{sc} (A)	14.23	14.32	14.35	14.40	14.44
Module Efficiency	22.1%	22.2%	22.3%	22.4%	22.5%
Maximum System Voltage	1500VCC				
Maximum Series Fuse	25A				

Test Conditions: 1000W/m², 25°C, AM =1.5



ELECTRICAL CHARACTERISTICS WITH REAR POWER GAIN (590W)

P_{max} Gain (%)	10%	20%	30%
Maximum Power P_{Max} (W)	649	708	767
Maximum Power Voltage V_{mp} (V)	43.42	43.42	43.42
Maximum Power Current I_{mp} (A)	14.94	16.30	17.66

PACKAGING CONFIGURATION

Modules per Container 40HQ	720 pcs
Pallets per Container 40HQ	20
Modules per Pallet	36
Pallet Dimensions	2376 x 1260 x 1196mm
Gross Weight per Pallet (kg)	1170

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