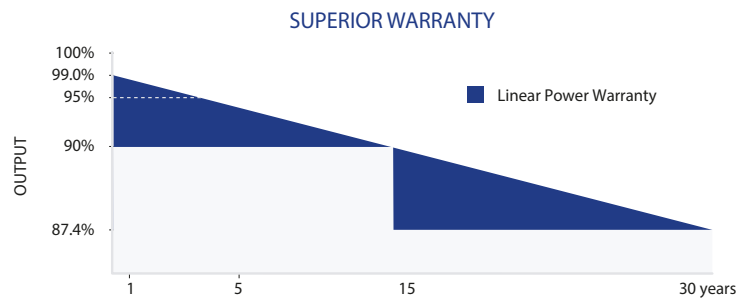





# HELIUS GENESIS

HMF144T10R  
580W - 600W

PREMIUM N-TYPE MONOCRYSTALLINE CELLS  
MBB HALF CELL TECHNOLOGY



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 Energy panels reduce cover 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 Energy warranty can guarantee the longevity of your project.



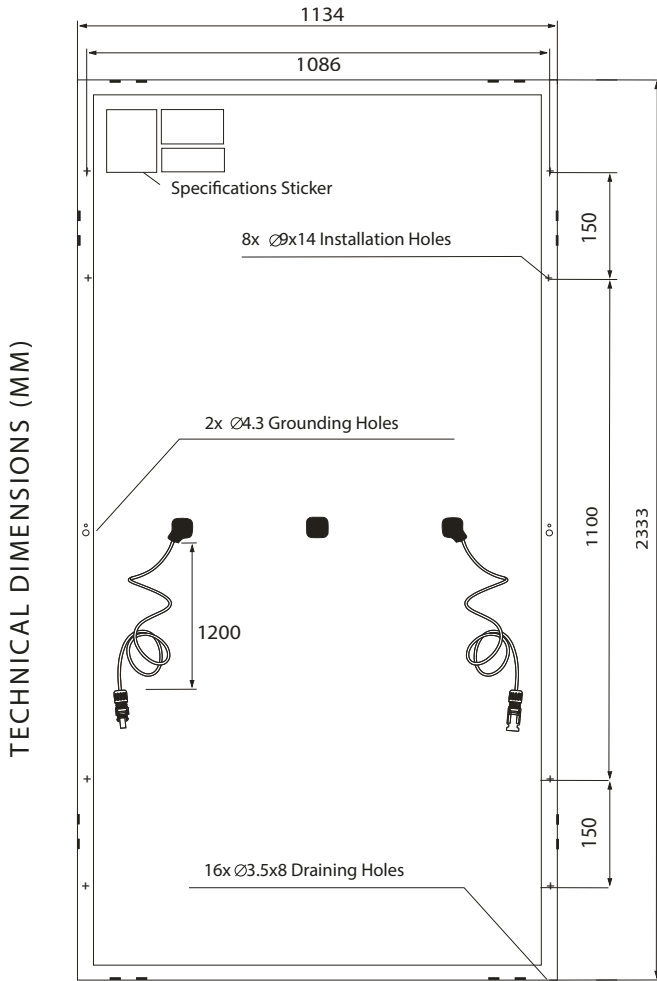
**FIRE-PROOF PERFORMANCE**

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.

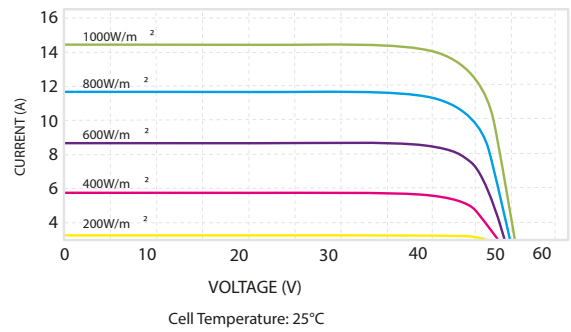


### MECHANICAL CHARACTERISTICS

Dimensions	2333 x 1134 x 30mm
Solar Cells	144 Monocrystalline N-Type Cells
Weight	27.2 kg
Frame	Anodized Aluminium Alloy
Frontal Glass	3.2 mm High Transmission, Low Iron Tempered
J-Box	IP68 / 3 bypass diodes
Cables	4mm / Length 1200mm or Customized

### TEMPERATURE CHARACTERISTICS

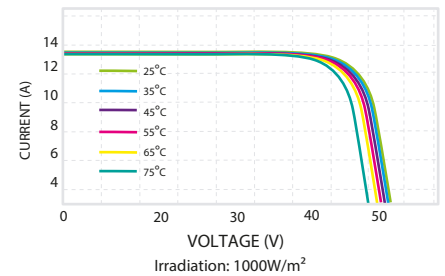
Temperature Coefficient $I_{sc}$	0.045% / °C
Temperature Coefficient $V_{oc}$	-0.25% / °C
Temperature Coefficient $P_{max}$	-0.30% / °C
Nominal Module Operating Temperature NMOT	44°C +2°C
Operational Temperature	-40°C ~+85°C



### 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/m<sup>2</sup>, 25°C, AM=1.5



### 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)	1020

Helius Energy reserves the right to change data and specifications without notices. All rights are reserved to Helius Energy. For more Informations, contact a technical representative or [www.he-solar.com](http://www.he-solar.com)

DECEMBER 2024

