



TAKE THE SUN HOME

HM20 (3-Phase)

ALL-IN-ONE RESIDENTIAL ENERGY STORAGE SYSTEM



Easy Installation



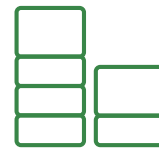
Temperature Resistance

IP66

IP66 Waterproof



24-hour Monitoring System



Expandable Capacity



Artificial Intelligence (AI) Operation

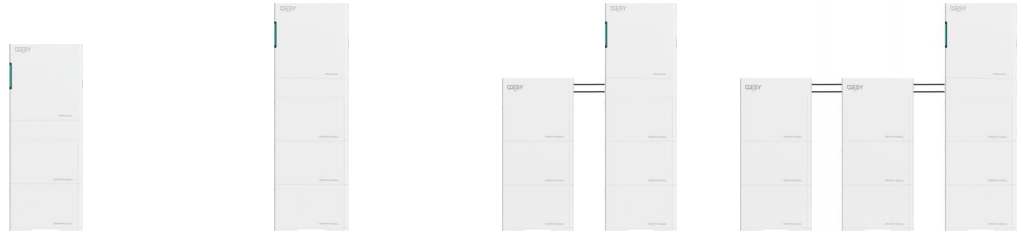
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Parameters

MODEL	HM20-20	HM20-30	HM20-60	HM20-90
No. of Modules	2	3	6	9
Max. Output Power (kW)	13.6	20	20	20
Usable Energy (kWh)	21.08	31.62	63.24	94.86
Dimensions (LxWxH mm)	660x270x1698	660x270x2098	(660x270x2098)+ (660x270x1408)x1	(660x270x2098)+ (660x270x1408)x2
Weight (kg)	213	298	558	818
Battery Type	IFpP			
Cycle Life	≥6000 Times 25 °C			
Conversion Efficiency	98.20%			
MPPT Efficiency	99.90%			
Mounting	Modular Stacking/Ground			
Communication	WiFi/Bluetooth			
Application Software Support System	iOS/Android/Web			
Cooling Method	Air Cooling			
Operating Temperature Range (°C)	-25~60			
Optimum Operating Temperature Range (°C)	25±2			
Humidity	0~100% Relative Humidity			
Noise Level (dB) at 1m	≤45			
Protection Rating	IP66			
Warranty	10 Years			

PV Input

Max. Input Power	30 kW
Rated Input Voltage	600 Vd.c.
Max. Input Voltage	1100 Vd.c.
MPPT Voltage Range	160 Vd.c.~1000 Vd.c.
PV Max. Input Current	15 Ad.c./30 Ad.c.
Max. Short Circuit Current	20 Ad.c./40 Ad.c.
MPPT	2

AC Output (Backup)

Rated Output Power	20 kW
Max. Output Power	20 kVA
Rated Output Voltage	400 Va.c. 3L/N/PE
Rated Output Frequency	50/60 Hz
Rated Output Current	30.4 Aa.c./28.9 Aa.c.
Max. Output Current	30.4 Aa.c.
Current Harmonics	≤3% (Linear Load)
Switching Time	≤10 ms

Battery

Rated Standby Voltage	51.2 Vd.c.
Rated Operating Voltage	400 Vd.c.
Voltage Range	380 Vd.c.~410 Vd.c.
Protection	BMS/Software/Hardware/Fuse

Protection

Anti-islanding Protection	Yes
PV Reverse Polarity Protection	Yes
Insulation Resistance Detection	Yes
Residual Current Detection	Yes
Output Overcurrent Protection	Yes
Output Short Circuit Protection	Yes
Battery Reverse Polarity Protection	Yes

AC Output (Grid)

Rated Output Power	20 kW
Max. Output Power	22 kVA
Rated Output Voltage	400 Va.c. 3L/N/PE
Rated Output Current	30.4 Aa.c./28.9 Aa.c.
Max. Output Current	33.5 Aa.c./31.8 Aa.c.
Rated Output Frequency	50/60 Hz
Current Harmonics	≤3% (@Rated Power)
Power Factor Range	0.8 leading~0.8 lagging

AC Input (Grid)

Max. Apparent Power	30 kVA
Grid Type	400 Va.c. 3L/N/PE
Max. Input Current	45.6 Aa.c.
Input Voltage Range	320 Va.c.~480 Va.c.
Input Frequency Range	50/60 Hz

Applicable Standards

Grid Connection:

AUS: AS 4777.2; CEC+RCM; DE: DIN VDE V 0124-100:2020; VDE-AR-N 4105:2018; AT: OVE Directive R 25:2020; TOR Erzeuger Type A V1.2; IT: CEI 0-21; UK: G99/1-8 typeA; IE: Distribution Code Version 8; BE: C10/11:2021; CH: NA/EEA-NE7-CH:2020; FR: DINVDE 0126-1-1 VFR:2019; ES: NTS 631 V21 SEPE (type A); UNE 217001; UNE 217002; PT: RfG + Portugal deviation

Safety:

Inverter: IEC 62109-1; IEC 62109-2 Battery: IEC 62619:2022; ISO 13849; IEC/EN 62040-1; VDE 2510-050:2017

EMC:

IEC 61000-6-1; IEC 61000-6-3