



TAKE THE SUN HOME

HM15/HM20 All-in-One Residential Energy Storage System (3-PHASE)



Seamless
Emergency
Power



Real-
Time
Monitoring



Sustainable &
Cost-
Saving



Expandable,
Modular
Design



Weather-
Resilient
Design



AI-
Driven
Performance



Ease
of
Maintenance



Energy
Management
Optimization

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HM15/HM20 Multiple Batteries Overview



HM15/20-20



HM15/20-30



HM15/20-60



HM15/20-90

Model	HM15/HM20-20	HM15/HM20-30	HM15/HM20-60	HM15/HM20-90
Battery Quantity	2	3	6	9
Max. Output Power	15/20 kW	15/20 kW	15/20 kW	15/20 kW
Battery Capacity	21.08 kWh	31.62 kWh	63.24 kWh	94.86 kWh
Dimensions (LxWxH)	660x270x1725 mm	660x270x2131 mm	660x270x2131 mm +(660x270x1448 mm)x1	660x270x2131 mm +(660x270x1448 mm)x2
Weight	213 kg	298 kg	558 kg	818 kg

Parameters	HM15	HM20
Battery Type	IFpP	IFpP
Cycle Life	≥6000 Times 25 °C	≥6000 Times 25 °C
Conversion Efficiency	98.20%	98.20%
MPPT Efficiency	99.90%	99.90%
Mounting	Modular Stacking/Ground	Modular Stacking/Ground
Communication	WiFi/Bluetooth/4G	WiFi/Bluetooth/4G
Application Software Support System	iOS/Android/Web	iOS/Android/Web
Cooling Method	Air Cooling	Air Cooling
Operating Temperature Range	-25~60 °C	-25~60 °C
Optimum Operating Temperature Range	25±2 °C	25±2 °C
Humidity	0~100% Relative Humidity	0~100% Relative Humidity
Noise Level	≤45 dB	≤45 dB
Protection Rating	IP66	IP66
Warranty	10 Years	10 Years

PV Input	HM15	HM20
Max. Input Power	30 kW	30 kW
Rated Input Voltage	650 Vd.c.	650 Vd.c.
Max. Input Voltage	1000 Vd.c.	1000 Vd.c.
MPPT Voltage Range	160 Vd.c.~950 Vd.c.	160 Vd.c.~950 Vd.c.
PV Max. Input Current	16 Ad.c./32 Ad.c.	16 Ad.c./32 Ad.c.
Max. Short Circuit Current	24 Ad.c./48 Ad.c.	24 Ad.c./48 Ad.c.
MPPT	2	2

AC Output (Backup)	HM15	HM20
Rated Output Power	15 kW	20 kW
Max. Output Apparent Power	15 kVA	20 kVA
Rated Output Voltage	400 Va.c. 3L/N/PE	400 Va.c. 3L/N/PE
Rated Output Frequency	50/60 Hz	50/60 Hz
Rated Output Current	21.7 Aa.c.	29.0 Aa.c.
Max. Output Current	21.7 Aa.c.	29.0 Aa.c.
Current Harmonics	≤3% (Linear Load)	≤3% (Linear Load)
Switching Time	≤10 ms	≤10 ms

Battery	HM15	HM20
Rated Operating Voltage	450 Vd.c.	450 Vd.c.
Voltage Range	380 Vd.c.~560 Vd.c.	380 Vd.c.~560 Vd.c.
Protection	BMS/Software/Hardware/Fuse	BMS/Software/Hardware/Fuse

AC Input (Grid)	HM15	HM20
Max. Input Apparent Power	22.5 kVA	30 kVA
Grid Type	400 Va.c. 3L/N/PE	400 Va.c. 3L/N/PE
Max. Input Current	32.6 Aa.c.	40 Aa.c.
Input Voltage Range	320 Va.c.~480 Va.c.	320 Va.c.~480 Va.c.
Input Frequency Range	50/60 Hz	50/60 Hz

AC Output (Grid)	HM15	HM20
Rated Output Power	15 kW	20 kW
Max. Output Apparent Power	16.5 kVA	22 kVA
Rated Output Voltage	400 Va.c. 3L/N/PE	400 Va.c. 3L/N/PE
Rated Output Current	21.7 Aa.c.	29.0 Aa.c.
Max. Output Current	23.8 Aa.c.	31.8 Aa.c.
Rated Output Frequency	50/60 Hz	50/60 Hz
Current Harmonics	≤3% (@Rated Power)	≤3% (@Rated Power)
Power Factor Range	0.8 leading~0.8 lagging	0.8 leading~0.8 lagging

Protection	HM15	HM20
Anti-islanding Protection	Yes	Yes
PV Reverse Polarity Protection	Yes	Yes
Insulation Resistance Detection	Yes	Yes
Residual Current Detection	Yes	Yes
Output Overcurrent Protection	Yes	Yes
Output Short Circuit Protection	Yes	Yes
Battery Reverse Polarity Protection	Yes	Yes

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