



**ACADA**  
RENEWABLE EXPERIENCE

# HM20

## 3-phase



**IP66 Protection**



**Cold Temperature  
Resistance**



**Easy Installation**



**24/7 Monitoring System**



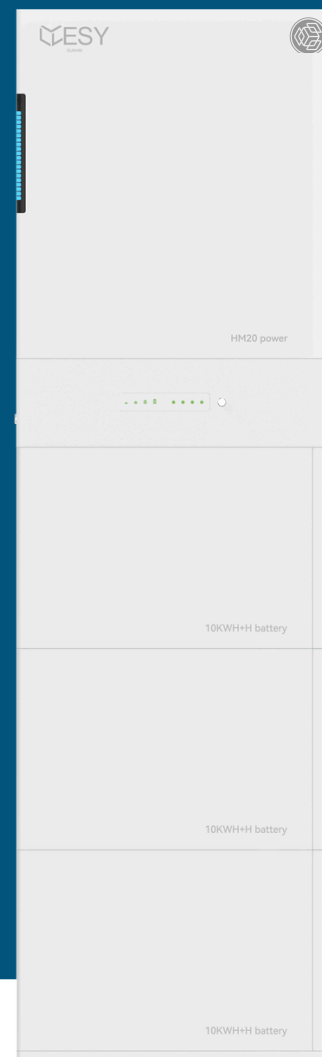
**Emergency Backup  
Power**



**Artificial Intelligence**



**Scalable System Capacity**



### Applicable Standards

#### Grid Connection:

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

#### Safety:

Inverter: IEC 62109-1; IEC 62109-2  
EMC: IEC 61000-6-1; IEC 61000-6-3  
Battery: IEC 62619:2022; ISO 13849  
IEC/EN 62040-1; VDE 2510-050:2017

#### Certificate Holder:

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Germany



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Model	No. of Modules	Max. Output Power	Usable Energy	Dimensions (L*W*H)	Weight
HM20-20	2	13.6 kW	21.08 kWh	660x270x1698 mm	213 kg
HM20-30	3	20 kW	31.62 kWh	660x270x2098 mm	298 kg
HM20-60	6	20 kW	63.24 kWh	(660x270x2098 mm)+(660x270x1408 mm)*1	558 kg
HM20-90	9	20 kW	94.86 kWh	(660x270x2098 mm)+(660x270x1408 mm)*2	818 kg

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

PV Input		AC Output (Backup)	
Max. Input Power	30 kW	Rated Output Power	20 kW
Rated Input Voltage	600 Vd.c.	Max. Output Power	20 kVA
Max. Input Voltage	1100 Vd.c.	Rated Output Voltage	400 V.a.c. 3L/N/PE
MPPT Voltage Range	160 Vd.c.~1000 Vd.c.	Rated Output Frequency	50/60 Hz
PV Max. Input Current	15 Ad.c./30 Ad.c.	Rated Output Current	30.4 A.a.c./28.9 A.a.c.
Max. Short Circuit Current	20 Ad.c./40 Ad.c.	Max. Output Current	30.4 A.a.c.
MPPT	2	Current Harmonics	≤3% (Linear Load)
		Switching Time	≤10 ms

Battery		Protection	
Rated Standby Voltage	51.2 Vd.c.	Anti-islanding Protection	Yes
Rated Operating Voltage	400 Vd.c.	PV Reverse Polarity Protection	Yes
Voltage Range	380 Vd.c.~410 Vd.c.	Insulation Resistance Detection	Yes
Protection	BMS/Software/Hardware/Fuse	Residual Current Detection	Yes
		Output Overcurrent Protection	Yes
		Output Short Circuit Protection	Yes
		Battery Reverse Polarity Protection	Yes

**ACADA GMBH**

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