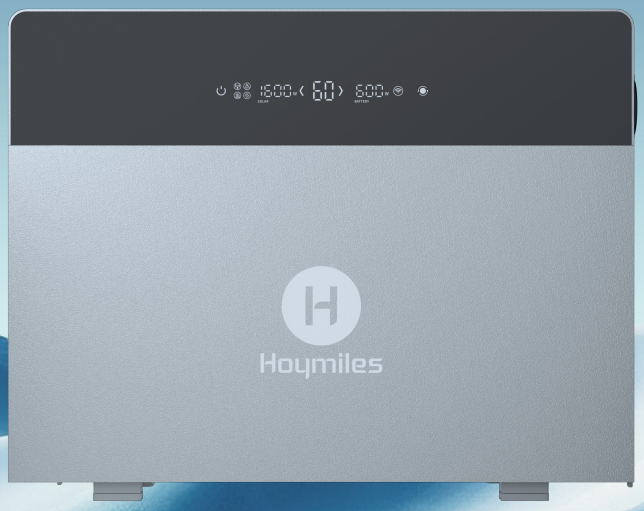
HiBattery 4020 AC

HB-4020-AC
HB-4020-S



Features

01 Enhanced Performance & Higher Returns

- *4 kWh built-in battery, expandable up to 16 kWh*
- *Built-in 2500 W inverter*
- *Maximum DC/AC efficiency 96.5%*

02 Easy Installation

- *Plug-and-play connection, home system setup in 1 minute*
- *Flexible stackable battery expansion*

03 Open Compatibility

- *Compatible with Hoymiles and third-party (Shelly, Everhome) meters*
- *Open MQTT protocol, compatible with third-party EMS*
- *Compatible with all existing residential solar installations*

04 Ultimate Safety

- *314 Ah LiFePO4 battery cells with > 8000 charge-discharge cycles*
- *Hoymiles BMS integrates 48 built-in protection functions*
- *Intelligent cell balancing to extend battery life*
- *Intelligent self-heating for low-temperature environments*
- *Built-in aerosol fire suppression, pressure relief valve and DC terminal over-temperature protection*
- *IP66 waterproof & dustproof*
- *Pack-level DC/DC balancing*

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Technical Specifications - HiBattery

Model	HB-4020-AC	HB-4020-ACM
AC On-Grid Port		
Rated output power (W)	800	2500
Rated output current (A)	3.48	10.87
Maximum output power (W)	800	2500
Maximum output current (A)	3.48	10.87
Maximum input power (W)	2500	
Maximum input current (A)	10.87	
Rated voltage/range (V)	230 / 180 to 270	
Rated frequency/range (Hz)	50 / 45 to 55	
Adjustable power factor (@nominal power)	>0.99 default; 0.8 leading ... 0.8 lagging	
Total harmonic distortion (@nominal power)	<3%	
AC Off-Grid Port		
Maximum output power (W)	2500	
Rated voltage (V)	230	
Rated frequency (Hz)	50	
Maximum output current (A)	10.87	
Maximum input power (W)	2500	
Maximum input current (A)	10.87	
Power factor	>0.99 default; 0.8 leading ... 0.8 lagging	
Battery		
Battery type	LFP	
Cycle life	≥8000 @70% SOH	
Rated capacity (Ah)	314	
Rated energy (Wh)	4020	
Rated voltage (V)	12.8	
Charging/discharging temperature (°C)	-20 to 55	
Maximum charging/discharging power (W)	2000	
Rated charging/discharging power (W)	2000	
DC/DC voltage (V)	48	
General		
Dimensions (W × H × D [mm])	520 × 199 × 384	
Weight (kg)	42	
Operating temperature (°C)*	-20 to 55	
Storage temperature (°C)	-30 to 60	
Humidity	5 to 100%	
Altitude (m)	4000	
Noise (dB)	<20	
Cooling	Natural convection	
Warranty	10 years	
Ingress protection	IP66	
Inverter topology	Isolated	
Display Interaction		
Display screen	LED	
Communication	Bluetooth, 2.4 GHz Wi-Fi	
Monitoring	S-Miles Cloud/Home	

* Below 0 °C, the heating film will automatically activate to bring the device within the charging temperature range.

Technical Specifications - Battery Pack

Model	HB-4020-S
Battery	
Battery type	LFP
Cycle life	≥8000 @70% SOH
Rated capacity (Ah)	314
Rated energy (Wh)	4020
Rated voltage (V)	12.8
Voltage range (V)	11.2 to 14.6
Rated charging/discharging power (W)	2000
Maximum charging/discharging power (W)	2000
General	
Dimensions (W × H × D [mm])	520 × 199 × 275
Weight (kg)	35
Operating temperature (°C)*	-20 to 55
Humidity	5 to 100%
Altitude (m)	4000
Cooling	Natural convection
Warranty	10 years
Ingress protection	IP66

* Below 0 °C, the heating film will automatically activate to bring the device within the charging temperature range.