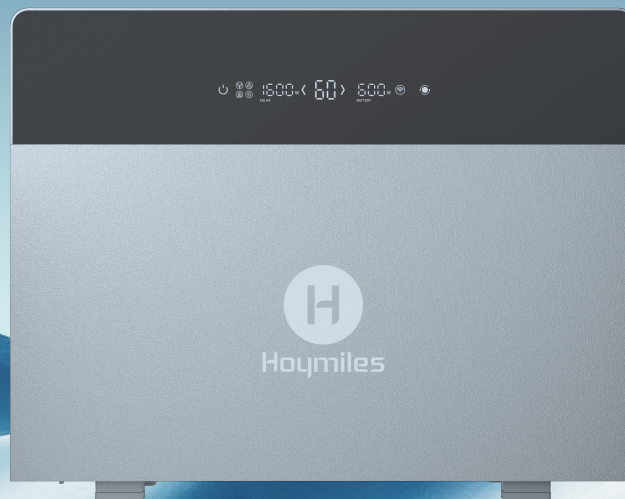




HiBattery 4020 X

HB-4020-X
HB-4020-S



Features

01

Enhanced Performance & Higher Returns

- 4 kWh built-in battery, expandable up to 16 kWh
- 4 MPPT + 4 kW PV input for maximum solar energy utilization
- 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

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

Technical Specifications - HiBattery

Model	HB-4020-X		HB-4020-XM	
DC Port				
Number of inputs			4	
Number of MPPTs			4	
Maximum number of PV modules			8	
Maximum input power (W)			1000 × 4	
Maximum input voltage (V)			60	
Maximum input current (A)			32 × 4	
Maximum short circuit current (A)			40 × 4	
Minimum/Maximum start voltage (V)			18/60	
MPPT voltage range (V)			16 to 60	
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.