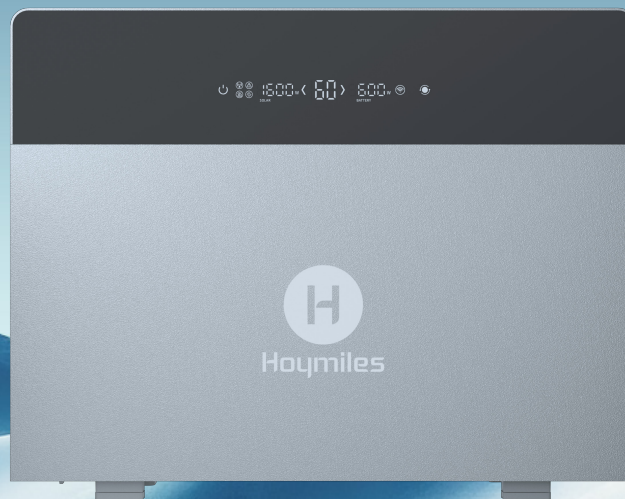




HiBattery 4020 X

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

Product Name	HiBattery 4020 X
Model	HB-4020-X/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
Rated output current (A)	3.48
Maximum output power (W)	2500
Maximum output current (A)	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 × 384 × 199
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 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 × 275 × 199
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.