

# 户用储能 Household

HB1030EH02



MPPT

UPS





|               | HB1030<br>EH024                   | HB1030<br>EH048 | HB1036<br>EH048 | HB1040<br>EH048 | HB1046<br>EH048 | HB1050<br>EH048 | HB1060<br>EH048 |  |
|---------------|-----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|
| <b>PV</b>     |                                   |                 |                 |                 |                 |                 |                 |  |
| PV            | 3900W                             | 3900W           | 4680W           | 5200W           | 5980W           | 6500W           | 7800W           |  |
| PV            | 550Vdc                            |                 |                 |                 |                 |                 |                 |  |
| PV            | 90Vdc                             |                 |                 |                 |                 |                 |                 |  |
| MPPT          | 370Vdc(125-500V)                  |                 |                 |                 |                 |                 |                 |  |
| MPPT          | 280-500Vdc                        |                 |                 |                 |                 |                 |                 |  |
| PV            | 13A                               |                 |                 |                 |                 |                 | 13A+13A         |  |
| PV            | 17A                               |                 |                 |                 |                 |                 | 17A+17A         |  |
| MPPT /        | 1/1                               |                 |                 |                 |                 |                 | 2/1+1           |  |
| <b>AC</b>     |                                   |                 |                 |                 |                 |                 |                 |  |
| 220V/230Vac   |                                   |                 |                 |                 |                 |                 |                 |  |
| 50/60Hz(±5) / |                                   |                 |                 |                 |                 |                 |                 |  |
|               | 13A                               | 13.6A           | 16.4A           | 18.2A           | 20.9A           | 22.7A           | 27.2A           |  |
|               | 15A                               | 15A             | 18A             | 20A             | 23A             | 25A             | 30A             |  |
|               | 3000W                             | 3000W           | 3600W           | 4000W           | 4600W           | 5000W           | 6000W           |  |
|               | 3300VA                            | 3300VA          | 3960VA          | 4400VA          | 5060VA          | 5500VA          | 6600VA          |  |
|               | 3300W                             | 3300W           | 3960W           | 4400W           | 5060W           | 5500W           | 6600W           |  |
|               | 0.5% In                           |                 |                 |                 |                 |                 |                 |  |
|               | L+N+PE                            |                 |                 |                 |                 |                 |                 |  |
| (cos )        | 0.99 @                            |                 | 0.8             |                 | -0.8            |                 |                 |  |
| (THDi)        | 3%                                |                 |                 |                 |                 |                 |                 |  |
| (THDu)        | 2%( )                             |                 |                 |                 |                 |                 |                 |  |
|               | 10ms( )                           |                 |                 |                 |                 |                 |                 |  |
|               | 105% , 106%-120% 1min , >125% 10S |                 |                 |                 |                 |                 |                 |  |
|               |                                   |                 |                 |                 |                 |                 |                 |  |
|               | 3 / / BMS                         |                 |                 |                 |                 |                 |                 |  |
|               | 24Vdc(20-30V)                     | 48Vdc(40-60V)   |                 |                 |                 |                 |                 |  |
|               | 120A                              | 70A             | 90A             | 100A            | 115A            | 120A            | 120A            |  |
|               | 100A                              | 70A             | 90A             | 100A            | 100A            | 100A            | 100A            |  |
| <b>PV</b>     |                                   |                 |                 |                 |                 |                 |                 |  |
| PV            | 97.6%                             |                 |                 |                 |                 |                 |                 |  |
|               | 97.0%                             |                 |                 |                 |                 |                 |                 |  |
| MPPT          | 99%                               |                 |                 |                 |                 |                 |                 |  |
| <b>AC</b>     |                                   |                 |                 |                 |                 |                 |                 |  |
|               | +LED                              |                 |                 |                 |                 |                 |                 |  |
|               | RS485/CAN/DRM                     |                 |                 | 4G/WIFI/GPRS/   |                 |                 |                 |  |
|               | DC Type II / AC Type III          |                 |                 |                 |                 |                 |                 |  |
| (dB)          | 30                                |                 |                 |                 |                 |                 |                 |  |
|               | -25°C-60°C( 45 )                  |                 |                 |                 |                 |                 |                 |  |
|               | 0-100%                            |                 |                 |                 |                 |                 |                 |  |
|               | 3000m (>2000m )                   |                 |                 |                 |                 |                 |                 |  |
|               | 15W                               |                 |                 |                 |                 |                 |                 |  |
|               | IP66                              |                 |                 |                 |                 |                 |                 |  |
| W*D*H (mm)    | 505*188*410                       |                 |                 |                 |                 |                 |                 |  |
| (kg)          | 25                                |                 |                 | 28              |                 |                 |                 |  |
|               | 5 /10                             |                 |                 |                 |                 |                 |                 |  |



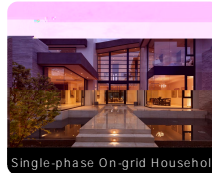
# HOUSEHOLD ENERGY STORAGE SYSTEM



HB1030EH024 1060EH048 SERIES

## Application Scenarios

Small household single-phase hybrid energy storage system, suitable for new installation or modification of photovoltaic



## Application System Diagram





Product Data Sheet

| MODEL                             | HB1030<br>EH024                                                              | HB1030<br>EH048 | HB1036<br>EH048 | HB1040<br>EH048 | HB1046<br>EH048 | HB1050<br>EH048 | HB1060<br>EH048 |
|-----------------------------------|------------------------------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>PV Input</b>                   |                                                                              |                 |                 |                 |                 |                 |                 |
| Max PV Input Power                | 3900W                                                                        | 3900W           | 4680W           | 5200W           | 5980W           | 6500W           | 7800W           |
| Max PV Input Voltage              | 550Vdc                                                                       |                 |                 |                 |                 |                 |                 |
| PV Input Startup voltage          | 90Vdc                                                                        |                 |                 |                 |                 |                 |                 |
| MPPT Input Voltage                | 370Vdc(125-500V)                                                             |                 |                 |                 |                 |                 |                 |
| MPPT Full Load Voltage Range      | 280-500Vdc                                                                   |                 |                 |                 |                 |                 |                 |
| PV Max Input Current              | 13A                                                                          |                 |                 |                 |                 | 13A +13A        |                 |
| PV Short-circuit Current          | 17A                                                                          |                 |                 |                 |                 | 17A +17A        |                 |
| Number of MPPT / Strings per MPPT | 1/1                                                                          |                 |                 |                 |                 | 2/1+1           |                 |
| <b>AC Output</b>                  |                                                                              |                 |                 |                 |                 |                 |                 |
| Rated Output Voltage              | 220V/230Vac                                                                  |                 |                 |                 |                 |                 |                 |
| Output Frequency Range            | 50/60Hz(±5) Intelligent adaptive/Settable                                    |                 |                 |                 |                 |                 |                 |
| Rated Output Current              | 13A                                                                          | 13.6A           | 16.4A           | 18.2A           | 20.9A           | 22.7A           | 27.2A           |
| Max Grid-connected Current        | 15A                                                                          | 15A             | 18A             | 20A             | 23A             | 25A             | 30A             |
| Rated Grid-connected Power        | 3000W                                                                        | 3000W           | 3600W           | 4000W           | 4600W           | 5000W           | 6000W           |
| Max Grid-connected Viewing Power  | 3300VA                                                                       | 3300VA          | 3960VA          | 4400VA          | 5060VA          | 5500VA          | 6600VA          |
| Max Grid-connected Active Power   | 3300W                                                                        | 3300W           | 3960W           | 4400W           | 5060W           | 5500W           | 6600W           |
| DC Component                      | 0.5% In                                                                      |                 |                 |                 |                 |                 |                 |
| Grid Type                         | Single-phase L+N+PE                                                          |                 |                 |                 |                 |                 |                 |
| Output Power Factor(cos φ)        | 0.99 @ Rated power Adjustable 0.8 leading-0.8 lagging                        |                 |                 |                 |                 |                 |                 |
| THDI                              | 3%                                                                           |                 |                 |                 |                 |                 |                 |
| THDu                              | 2%(Linear load)                                                              |                 |                 |                 |                 |                 |                 |
| Transfer Time                     | 10ms(Typical value)                                                          |                 |                 |                 |                 |                 |                 |
| Off-grid Overload Capability      | 105%Long-term work , 106%-120% 1min , >125% 10S                              |                 |                 |                 |                 |                 |                 |
| <b>Battery Input</b>              |                                                                              |                 |                 |                 |                 |                 |                 |
| Battery Type                      | Lead-acid, lithium batteries, gel batteries, etc                             |                 |                 |                 |                 |                 |                 |
| Charging Mode                     | 3-section type/Equilibrium/Self-adaption BMS                                 |                 |                 |                 |                 |                 |                 |
| Battery Voltage                   | 24Vdc(20-30V)                                                                | 48Vdc(40-60V)   |                 |                 |                 |                 |                 |
| Max Discharge Current             | 120A                                                                         | 70A             | 90A             | 100A            | 115A            | 120A            | 120A            |
| Max Charging Current              | 100A                                                                         | 70A             | 90A             | 100A            | 100A            | 100A            | 100A            |
| <b>Efficiency</b>                 |                                                                              |                 |                 |                 |                 |                 |                 |
| Max PV Conversion Efficiency      | 97.6%                                                                        |                 |                 |                 |                 |                 |                 |
| European Efficiency               | 97.0%                                                                        |                 |                 |                 |                 |                 |                 |
| MPPT Efficiency                   | 99%                                                                          |                 |                 |                 |                 |                 |                 |
| <b>General Parameters</b>         |                                                                              |                 |                 |                 |                 |                 |                 |
| Display                           | Touch Screen+LED                                                             |                 |                 |                 |                 |                 |                 |
| Communication Mode                | Standard RS485/CAN/DRM Optional 4G/WIFI/GPRS/temperature compensation module |                 |                 |                 |                 |                 |                 |
| Surge Protection                  | DC Type II / AC Type III                                                     |                 |                 |                 |                 |                 |                 |
| Noise (dB)                        | 30                                                                           |                 |                 |                 |                 |                 |                 |
| Cooling                           | Natural convection                                                           |                 |                 |                 |                 |                 |                 |
| Operating Ambient Temperature     | -25°C ~ 60°C( 45 Derating )                                                  |                 |                 |                 |                 |                 |                 |
| Humidity                          | 0-100%                                                                       |                 |                 |                 |                 |                 |                 |
| Altitude                          | 4000m (>2000m Derating )                                                     |                 |                 |                 |                 |                 |                 |
| Electricity Consumption At Night  | 15W                                                                          |                 |                 |                 |                 |                 |                 |
| Protection Degree                 | IP66                                                                         |                 |                 |                 |                 |                 |                 |
| Installation Method               | Wall-mounted                                                                 |                 |                 |                 |                 |                 |                 |
| Dimension. W*D*H(mm)              | 505*188*410                                                                  |                 |                 |                 |                 |                 |                 |
| Weight (kg)                       | 25                                                                           |                 |                 |                 |                 | 28              |                 |
| Warranty                          | 5 years standard/10 years optional                                           |                 |                 |                 |                 |                 |                 |

Specifications are subject to change without advance notice.