# HBS

## Single Phase AC Couple

## 3.68-5K



**Hi**
**HYPONTECH**

BATTERY    FAULT    COM    BUCK-UP    GRID

| | | | | |
|---|---|---|---|---|
| Aluminum Alloy **Die Casting** | **MES + FCT + CRM** IT Infrastructure | Peak Efficiency **97.6%** | **Easy to** Install and Service | **Energy** Management |

**Block Diagram**



BATTERY → LC EMI FILTER → DC⇌DC → **DC/AC** → RY-M / HCT / RY-S → OUTPUT EMI FILTER → GFCI → L GRID N

**DSP** Wi-Fi GPRS Power Meter

CAN\RS 485 communication **DISPLAY**
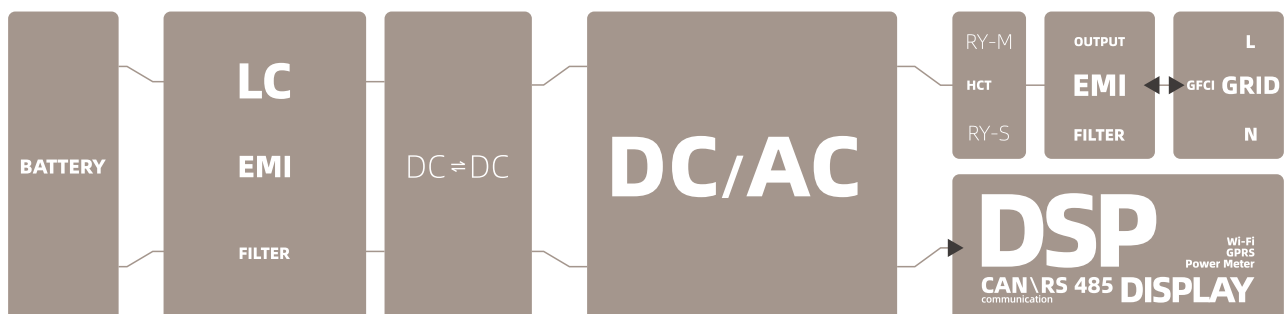
| MODEL (AC - COUPLE BATTERY INVERTER) | HBS-3680 | HBS-5000 |
| --- | --- | --- |

## BATTERY INPUT DATA

| | | |
| --- | --- | --- |
| Battery Type | Li-Ion | |
| Battery Voltage Range / V | 85 - 480 | |
| Start Up Voltage / V | 90 | |
| Max. Charging/Discharging Current / V | 25/25 | |
| Charging Strategy for Li-Ion Battery | Self-Adaption to BMS | |

## OUTPUT (AC TO GRID)

| | | |
| --- | --- | --- |
| Rated Power to Grid / W | 3680 | 5000 |
| Max. Apparent AC Power to Grid / VA | 3680 | 5000 |
| Rated Grid Voltage / Vac | 220/230/240 | |
| Rated Power Frequency / Hz | 50/60 | |
| Max. Output Current to Grid / A | 16 | 23 |
| Max. AC Current from Grid / A | 16 | 23 |
| Power Factor | 0.8ind to 0.8cap | |
| THDi at Rated Power | <3% | |

## OUTPUT (AC TO LOADS)

| | | |
| --- | --- | --- |
| Max. Apparent Output Power / VA | 3680 | 5000 |
| Peak Apparent Output Power / VA | 4416 for 60" | 6000 for 60" |
| Rated Power Frequency / Hz | 50/60 | |
| Max. Output Current / A | 16 | 23 |
| Automatic Switch Time / ms | <10 | |
| Nominal Output Voltage / V | 230 (±2%) | |
| Nominal Ouput Frequency / Hz | 50/60(±0.2%) | |
| THDv at Linear Load | <3% | |

## EFFICIENCY

| | | |
| --- | --- | --- |
| Battery Charge/Discharge From/ To AC Max. Efficiency | 97.0% | |

## PROTECTION FUNCTION

| | |
| --- | --- |
| Anti-Islanding | Integrated |
| Insulation Resistance Detection | Integrated |
| Residual Current Monitoring | Integrated |
| Output Over Current | Integrated |
| Output Over Voltage | III (AC) |
| Output Short Circuit | Integrated |
| Surge Protection | AC: Type II |

## GENERAL DATA

| | |
| --- | --- |
| Dimensions (W*H*D) / mm | 395*328*154 |
| Weight / kg | 9.8 |
| Noise Emission (typical) / dB (A) | <30 |
| User Interface | LED |
| Battery Connection Type | SUNCLIX |
| AC Connection Type | Plug-in Connector |
| Communication with Portal | WiFi/GPRS (Optional) |
| Communication with BMS | CAN |
| Communication with Power Meter | RS485 |
| Cooling Method | Natural Cooling |
| Operating Ambient Temperature / ℃ | -25℃ - +60℃ |
| Allowable Relative Humidity Range | 0% - 100% |
| Max. Operating Altitude / m | 3000 (>3000 Derating) |
| Degree of Protection (IEC 60529) | IP65 |
| Climatic Category (IEC 60721-3-4) | 4K4H |
| Isolation Method | Transformerless |
| Power Loss On Night Mode / W | <1 |

20210104EN