

ECO Intelligent Battery System

Hybrid Solar Inverter & Lithium-ion Battery



Tabuchi Electric, a worldwide leader in solar inverter manufacturing, offers a hybrid solar inverter + battery system for the North American market. Optimized for energy management and cost performance.

EIBS features:

- ▶ 3 MPPT 5.5kW solar inverter
- Bi-directional DC/DC converter for the battery
- Automatic transfer switch
- Battery charge controller (BATTERY MANAGEMENT SYSTEM)
- 9.89kWh lithium-ion battery
- Solar, battery, and whole house monitoring
- Dynamic Demand Response



Hybrid Solar Inverter (EHW-S55P3B-PNUS)

| Input (DC: Photovoltaic) | | | | Output (AC: Stand-alone) | | | |
|--|------------|---|---|-------------------------------|-----------------------------|--|--|
| Max. input voltage | | | 450V | Connection Type | Single phas | Single phase 2-wire | |
| Max. usable input power per string | | | 2150W | Conversion method | | e voltage controller method | |
| Operation voltage range | | | 80 - 450V | Max. output power | 2.0kVA ^{*3} | | |
| Min. input voltage/Start voltage | | | 80V/100V | Rated output voltage | 120±5V | | |
| Number of independent MPPTs | | | 3 | hated output voltage | | | |
| Max. input operating current per string | | | 10.3A | Efficiency (Solar) | | | |
| Max. short circuit current 1.25 Imax | | | 15A | | | | |
| | | | | | 93.3% (DC300 V, 75% output) | | |
| • | | Grid-tied operation | Stand-alone operation | CEC Efficiency | CEC Efficiency 91.5% | | |
| Number of input circuits | | 1 circuit | 1 circuit | General Data | | | |
| Charge power | | 1.5kW ^{*1} | 1.5kW *1 | | | | |
| Discharge power | | 2.0kW ^{*1} | 2.0kW *1 | Inverter Dimensions W x H x D | | 680 x 1200 x 250 mm (26.8 x 47.2 x 9.8 in) | |
| Conversion method (Charge) | | PWM method by power command (Constant current, Constant voltage control) | Bus voltage stablization PWM method (Constant current, constant voltage control | Inverter Weight | | 76Kg (168lb)*4 | |
| | | | | Battery Dimensions W x H x D | | 580 x 600 x 551.5 mm (22.8 x 23.6 x 21.7 in) | |
| | | | | Battery Weight | | 110Kg (243lb) *4 | |
| Conversion method (Discharge) PWM method by power command | | PWM method by power | Bus voltage stablization PWM method | Operating temperature rar | nge | -20° C to + 40° C (Inverter) | |
| | | | | Topology | | High frequency isolated transformer method | |
| | | | | Cooling concept | | Active cooling (fan) | |
| | | | | Enclosure Rating | | Inverter = NEMA 3R, Battery = Indoor | |
| Output (AC: Grid-tied) | | | | Features | | | |
| Grid connection type | • • | | d to single-phase, 3-wire type) | - | | | |
| Conversion method | Voltage ty | pe current controller metho | od | DC terminal | | Terminal block (+,-)x4 | |
| Rated output power *2 | | | | AC terminal | | Terminal block (U, O, W) | |
| ated AC voltage 240V | | | Stand-alone terminal | | Terminal block (2 poles) | | |
| Nominal AC voltage range AC211.2V-264V | | | Grounding terminal | | Terminal block (1 pole) | | |
| Rated grid frequency/range 60Hz / 58.0Hz to 62.0Hz | | | Remote Controller | | Accessory | | |
| Max. output current | | | | Communication Interface | | RS-485 | |
| Power factor at rated ≥ 0.95 output power | | | | Certification | | UL1741/1699B/60950-1, CSA C22.2. No 107.1/No. 60950-1, IEEE 1547a, CEC, Hawaii requirement, FCC class B | |
| PV Modules | | | | Main Pane | | To individual circuits Electrical usage may include the following:* - Refrigerator - Low Energy Lighting - Computer/Entertainment - Heating (electric fan for gas heater) *Available battery hours vary with electrical usage Loads To appliances that selected to keep running during a power outage | |
| Power from the grid Power from PV Modules Power from the Storage Battery | | | lar Inverter 9.89kWh Storage Battery | | ontroller | *1 Limited periods of maximum output. *2 Value calculated when all strings were in use. *3 When power is supplied to electric appliances connected to the stand-alone outlets, inrush current may trip protective devices and prevent the appliances from running. *4 Weights do not include shipping boxes or cable | |



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