

* Integrated MPPT, separate solar inverters not required
* Three phase industrial design
* Easy to install. Single, floor-standing unit instead of multiple boxes.
* Compact, Small footprint, self-contained
* Single connection going to the Distribution Board
* Automatic diesel generator management
* Indoor and Outdoor models
* Suitable for Microgrids
* Can be connected to grid if required
* Reduce diesel consumption
* Lower generation run time, lower maintenance

The OZTRON Solar-Diesel-Battery Hybrid Power System integrates solar for an off-grid site. It can reduce or eliminate the use of diesel generator and greatly reduce the operating cost.

Solar supplies most of the day-time load. The battery smooths out the fluctuations in solar output. The generator is switched on only when solar is low and the generator load is maintained at an optimum level.

The Hybrid system also smoothens a fluctuating load and presents even loading on the generator.

The cost of electricity generated from solar is about half that of diesel.

**Solar-Battery-Diesel Hybrid Power System**

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| --- | --- |
|  | **Oztron**  **Energy**  *The Technology Source for Green Energy* |

***Remote Monitoring & Management***

The system is remotely managed to ensure optimum performance.

* Firmware upgrades
* Remote maintenance
* Conforms to Australian Standards
* Customized Energy Management System
* Customized configuration to suit individual needs
* Local support
* Modular construction, can be connected in parallel for higher capacity
* CEC approved 3 phase inverter
* Can operate with or without generator
* Can do Cold Start
* Lithium Ferrous battery, 10 year design life

A close up of a map

Description automatically generated

## Specifications

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | **HST30-28** | **HST50-66** | **HST100-114** | **HST100-133** |
| Rated Continuous Capacity | 30kVA | 50kVA | 50kVA | 100kVA |
| AC Voltage range, 3φ (generator synchronized) | 329V to 459V | | | |
| AC Voltage 3φ (stand alone) | 400V ±10%. settable | | | |
| Frequency | 50Hz | | | |
| Inverter Peak Efficiency | 95.5% | | | |
| PV Voltage Range | 400V – 800V | 520V – 900V | | |
| MPPT Voltage Range | 400V – 600V | 520V – 800V | | |
| Number of MPPT inputs | 2 | 1 or 2 | 2, 3, 4 | 2, 3, 4 |
| Maximum MPPT power | 50kW | 100kW | 200kW | 200kW |
| Battery Nom Voltage, V | 384V | 480V | 384V | 448V |
| Battery Nom Capacity | 28.4 kWh | 35.5 kWh | 113.7 kWh | 132.6 kWh |
|  |  |  |  |  |
| Usable full power autonomy | 45 minutes | 64 minutes | 54 minutes | 64 minutes |
| Parallel Operation | No | Yes | Yes | Yes |
| Isolation | No | Yes | Yes | Yes |
| Operating Temperature | 0 °C to 50 °C | | | |
| Weight | 394kg | 828 kg | 1152 kg | 1344 kg |
| Size (W x D x H), mm | 600 x 600 x 2150 | 1400 x 800x 2150 | 1400 x 800x 2150 | 1400 x 800x 2150 |
| Protection Grade | IP21 | | | |
| Communications | MODBUS TCP/IP, Optional 3G/4G | | | |
| Certification | AS4777, VDE 4105, IEC62477, IEC61000, TUV, CE | | | |

**Notes:**

1. Higher protection grade and outdoor type enclosures available for specific applications.
2. Other battery configurations are also available.
3. Larger systems are custom configured using multiple modules.
4. Larger systems can be supplied in transportable shipping containers.