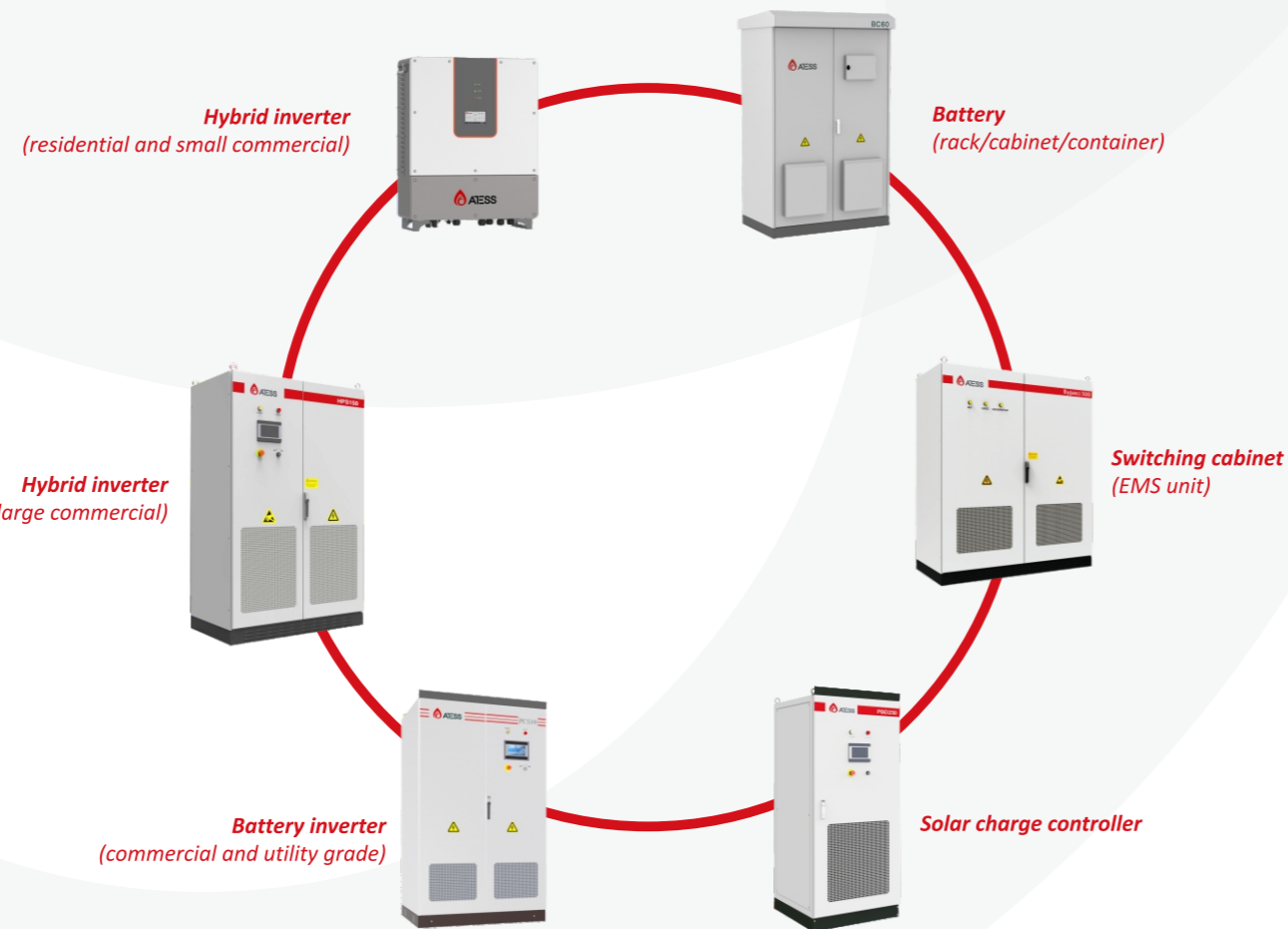


As a professional ESS products provider, ATESS has been supplying products worldwide for different applications since 2013. With full capacity range, wide category coverage, flexible customization capability, ATESS is able to supply optimized total solutions, and provide design guide, technical support at the same time.



## 01 Peak shaving

Utilize electricity price difference, charge battery at low price and discharge at high price to maximize system profit, compensate local transformer limit.

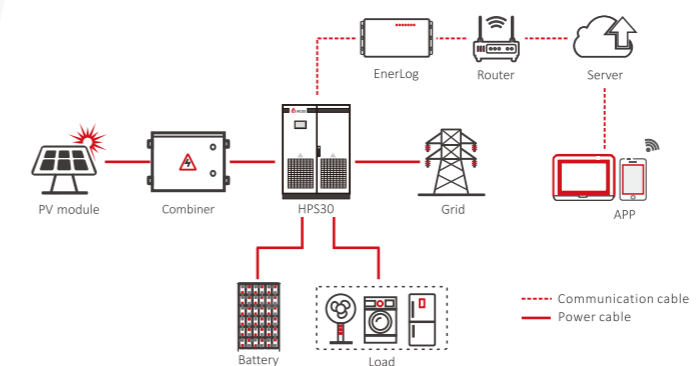
### Features

- Lower price, lower electricity bill
- Avoid transformer expansion, reduce system investment
- Reduce extra charge by over limit consumption

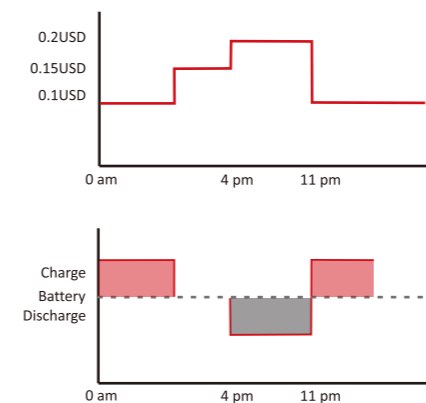
### Recommended Products

HPS 5-150kW, Battery, ShineMaster

### System diagram



### Sequence diagram



## 02 Back-up

Storage battery provide back-up power supply for unstable grid, during grid failure, seamless switches to off-grid mode within 20ms to realize uninterruptable supply.

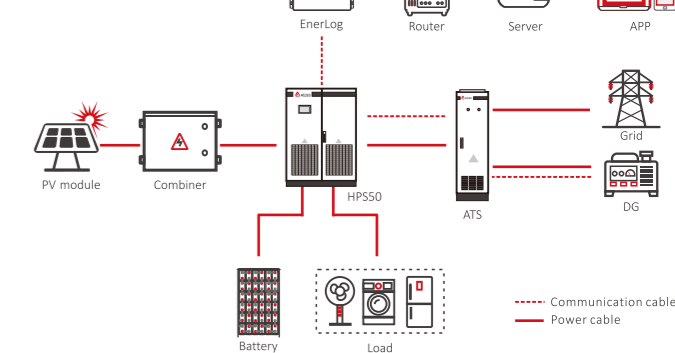
### Features

- Seamless transfer, reliable and uninterruptable
- Automatic disconnection and reconnection
- Comprehensive battery protection

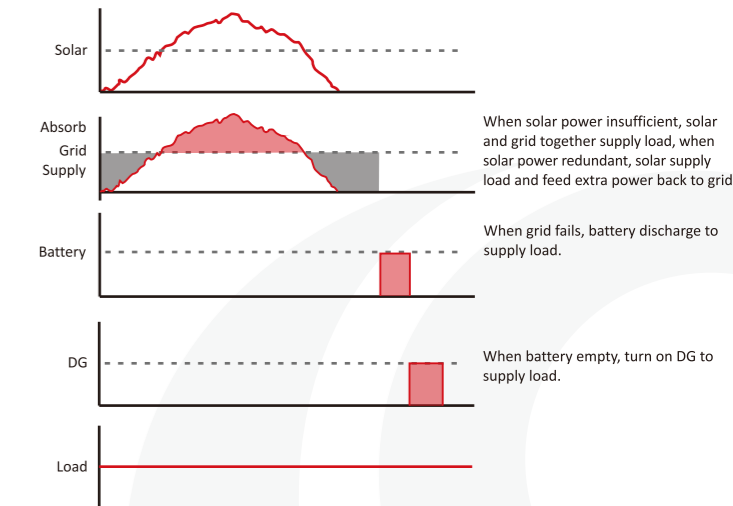
### Recommended Products

HPS 5-150kW, Battery, ShineMaster, ATS cabinet

### System diagram



### Sequence diagram



## 03 Micro-grid

Rural areas, home, shop, school or villa use, majorly realize self consumption from solar, support automatic DG connection and control as back-up power.

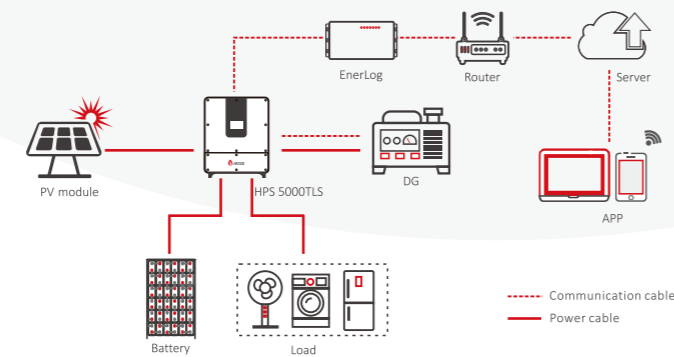
### Features

- Seamless transfer, reliable and uninterruptable
- Automatic disconnection and reconnection
- Comprehensive battery protection

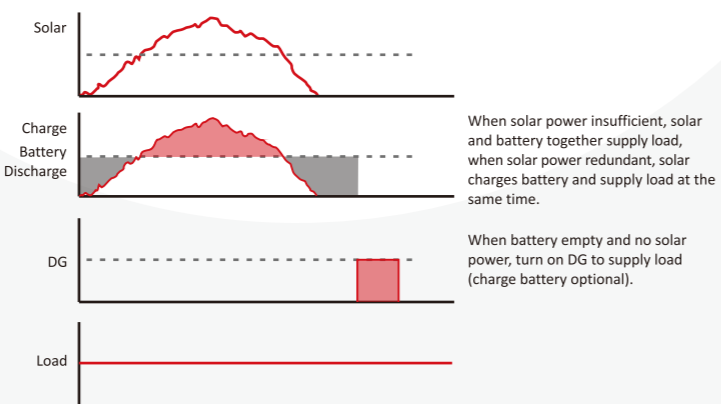
### Recommended Products

HPS 5-10kW

### System diagram



### Sequence diagram



## 04 Large scale off-grid

Remote islands or villages where grid is not available, solar storage system works as the main power source, DG as backup, the solution can reduce fuel cost and air pollution. Solution also suitable in areas with unstable grid for hybrid application.

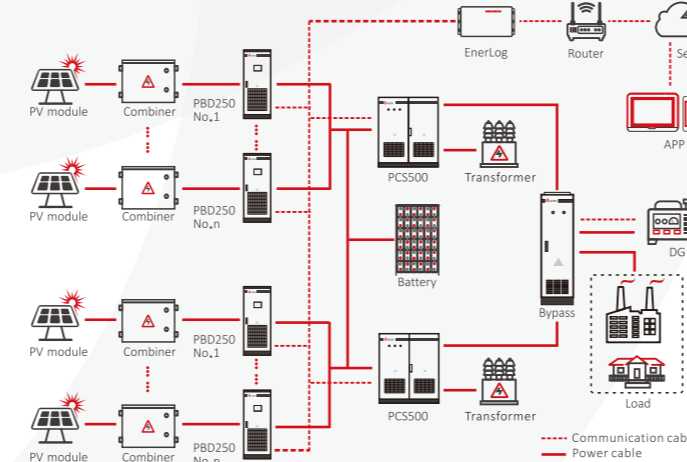
### Features

- DC coupled, more stable and reliable
- Modular design charger, easier system expansion
- Firm new energy, improve power quality

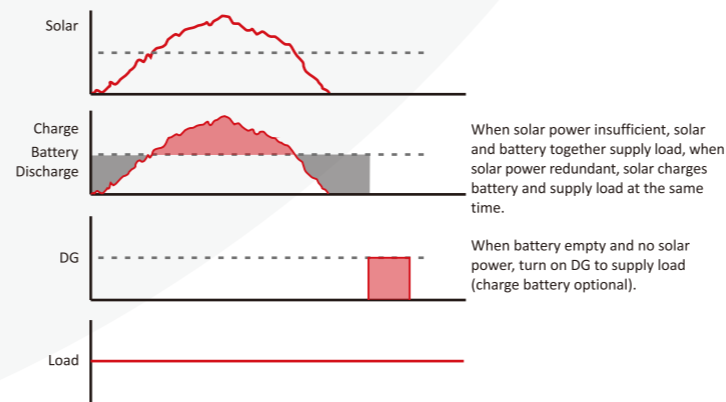
### Recommended Products

PCS500, Battery, PBD250, ShineMaster, Bypass cabinet

### System diagram



### Sequence diagram



## 05 Grid support

Voltage, PF, Frequency regulation for traditional thermal power plant by supplying or absorbing active/reactive power to or from the grid on demand.

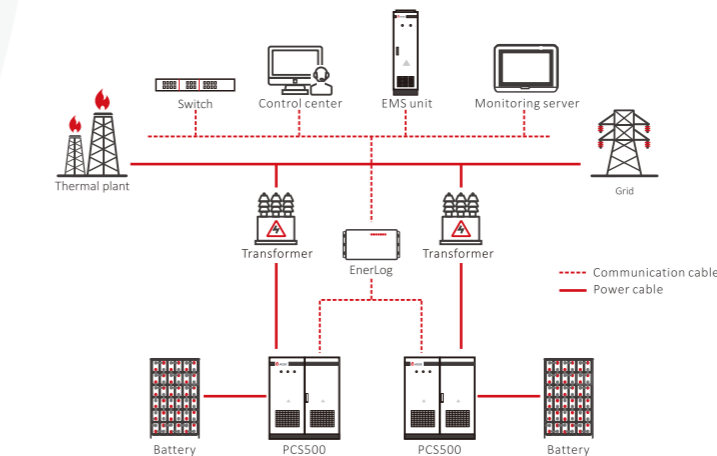
### Features

- Milli-second response, accurate regulation
- Reduce thermal plant wearout
- Reduce coal consumption and pollution

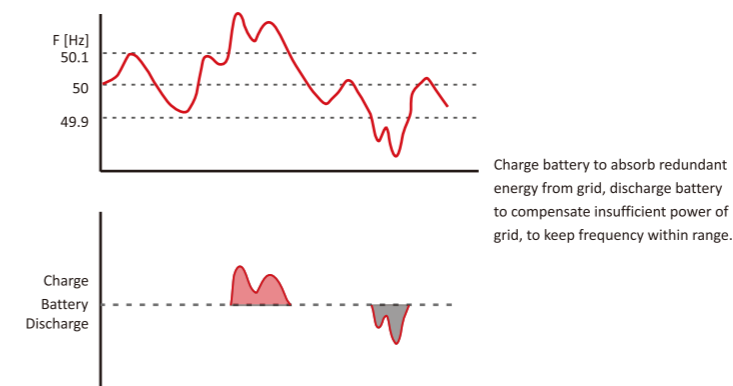
### Recommended Products

PCS500, Battery, ShineMaster, EMS unit (bypass)

### System diagram



### Sequence diagram



## 06 Renewable energy firming

Firm renewable energy source to avoid grid inrush, reduce energy waste caused by renewable limitation by storing energy in battery, maximize system profit.

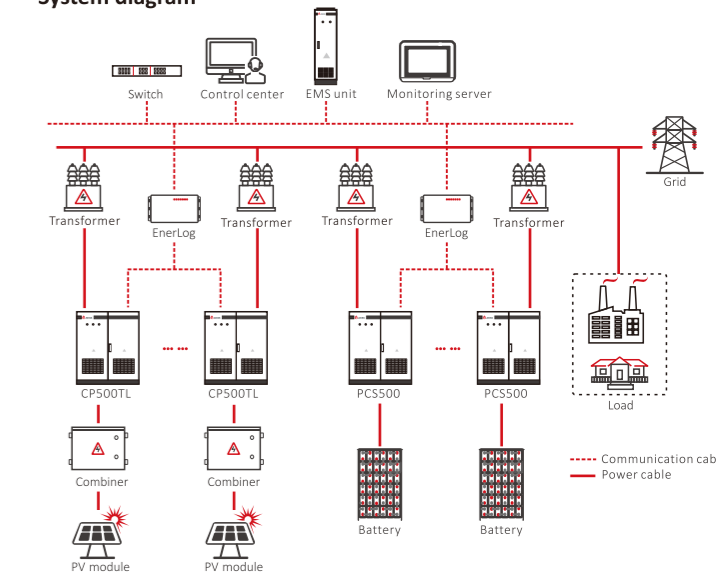
### Features

- Reduce grid investment for renewable energy connection
- Reduce grid stress from renewable inrush
- Save redundant energy, improve system profit

### Recommended Products

PCS500, CP500, Battery, ShineMaster, EMS unit(bypass)

### System diagram



### Sequence diagram

