

175/350/500/630kW

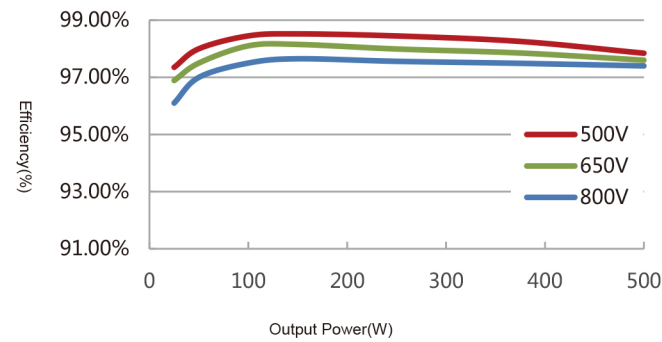
Energy Storage Inverter

CPS energy storage inverter is mainly applicable to energy storage systems accounting for a major part in the smart grid. The battery in the energy storage system is used to recycle, convert and discharge the electricity power while the energy storage inverter can adjust the frequency and power during peak and trough hours in order to strengthen the regional grid adaptability lower the grid investment and further raise the safety, stability and electricity quality of the public grid. Besides, the energy storage system, together with the new energy power generation, composes the micro-grid, which can effectively resolve the power shortage in distant countryside and islands to raise the people’ s living standard.



Efficiency Curve

CPS ECB500KTL-CN



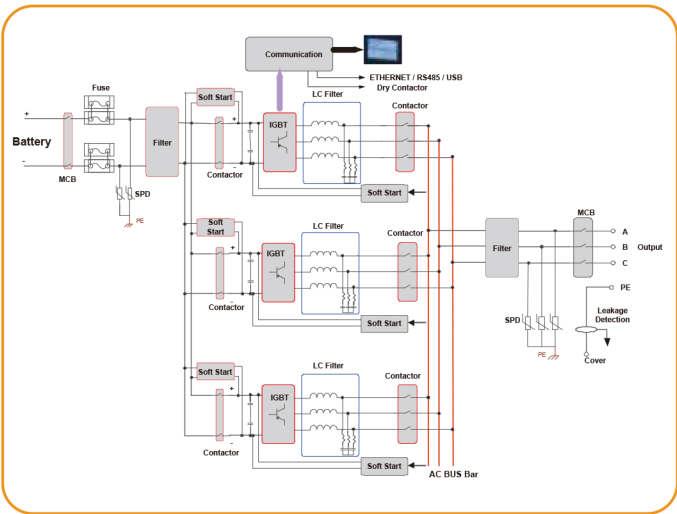
Efficiency Curve

- Max. efficiency of 98.8%, Euro efficiency of 98.5%
- Bi-directional energy flow, four quadrant inverter

High Reliability

- Short response time less than 20ms
- Support over-loading capacity, front-side service access
- Dual DSP and MCU design, double backups and multi-monitoring availabilities strengthen system reliability
- Support ZVRT, single and three phase voltage dip

Schematic Diagram



Broad Adaptability

- Seamless switch between on/off grid mode
- Reactive power control, -0.9 to +0.9 power factor
- Active power derating from 0-100%
- Extreme low output current THD (1.3%)
- 3 independent Ethernet ports for MODBUS TCP protocol
- Advanced thermal design, fan speed control
- Support various energy storage systems, including fluid, lithium, plumbic acid and super capacitor, etc.

Model Name	CPS ECB175KTL	CPS ECB350KTL	CPS ECB500KTL	CPS ECB630KTL
DC Input				
Max. Battery Voltage	900Vdc			
Battery Voltage Range	585-850Vdc			615~850Vdc
Rated Battery Voltage	680Vdc	680Vdc	680Vdc	700Vdc
Battery Ripple voltage	<2%			
Battery voltage Setpoint	<1%			
Max. Battery current	383A	768A	1150A	1250A
AC Grid-Tied MODE				
Rated AC Power	175kW	350kW	500kW	630kW
Max. AC Power	193KVA	385KVA	550KVA	660KVA
Rated Grid Voltage	380Vac			400Vac
Grid Voltage Range*	-15%,+15%			
Rated Grid Frequency *	50/60Hz			
Grid Frequency Range	47~51.5/57~63Hz			
Total Harmonic Distortion	<3%			
Power Factor	≥0.99（±0.9 adjustable）			
AC Off-Grid MODE				
Rated AC Power	175kW	350kW	500kW	630kW
Max. AC Power	193KW	385KW	550KW	660KW
Rated Output Voltage	380Vac			400Vac
Voltage Deviation	-15%,+15%			
Voltage unbalance facor	2%			
Voltage Total Harmonic Distortion	<3%			
Rated Output Frequency *	50/60Hz			
Operating Performance				
Max. Efficiency	98.80%			
Euro. Efficiency	98.50%			
Protection Degree	IP20			
Cooling	Forced air cooling			
Operating Temperature Range	-25°C to +60°C (derating from 50°C)			
Storage Temperature Range	-40°C to +70°C			
Operating Humidity	0-95%, non-condensing			
Operating Altitude	4000m (derating from 3000m)			
Display and Communication				
User Interface and Display	Touchscreen			
Communication	RS485,Ethernet			
Modbus Data Mapping	MODBUS RTU / MODBUS TCP			
Mechanical				
Dimensions (WxHxD)	1110x1967x800mm			
Weight	300kg	600kg	900kg	900kg
Safety				
Compliance	IEC 61727, IEC 62116, IEC 62477, GB/T 34120, GB/T 34133			
*The different of 'Range of Vout & Frequency', is due to the different National standards.				

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