

# 1000Vdc Energy Storage Converter

## BCS100K~500K-A Series

### High efficiency

- Integrated output isolation transformer
- Bidirectional converter, charge & discharge batteries
- Multiple charge modes including constant current charging, equalized charging and float charging

### Power grid adaptability

- Smart grid design & power grid dispatching
- Advanced islanding detection technology
- Reactive power compensation and other functions
- Off-Grid independent operation

### System characteristics

- Isolation between batteries & grid
- Charging and discharging time setting for 12 segments, better for customer's on-site applications
- On/off grid switching time: general conditions <200ms; zero transition can be achieved under specific conditions (external connection of SCR)
- Four periods of time (peak, flat, valley and sharp) price setting, flexible calculation of user profitability



## Technical Specification

Items	BCS100K-A	BCS250K-A	BCS500K-A
<b>DC Input (PV)</b>			
MAX. DC voltage	1000Vdc		
DC voltage range	500~900Vdc		
Max. DC current	228A	566A	1125A
Auto buffering function	13A/13A		
<b>AC Output (On-grid)</b>			
Rated AC output power	100kW	250kW	500kW
Max. AC output power	110kVA	275kVA	550kVA
Rated output voltage	400Vac		
Output voltage range	-15%~10% (settable)		
Rated grid frequency	50Hz/60Hz (settable)		
Max. output current	159A	397A	794A
Power factor	>0.99 (at rated power)		
Adjustable power factor	1 (leading)~1 (lagging)		
THDi	<3% (at rated power)		
<b>Off-grid AC output</b>			
Rated AC output voltage	400Vac		
Output voltage precision	1%		
Max. output current	159A	397A	794A
THDu	<3% (linear load)		
Rated output frequency	50Hz /60Hz		
Overloading capability	110% overload		
<b>Efficiency</b>			
Max. efficiency	96.40%	97.20%	97.60%
<b>General data</b>			
Isolation transformer	Yes		
IP rating	IP20		
Operation temperature	-30°C~65°C (>45°C derating)		-30°C~65°C (>40°C derating)
Relative humidity	0~95% (no condensation)		
Cooling type	Intelligent forced air cooling		
Dimensions (W×H×D)	800×1800×800mm	1000×1950×800mm	1400×1950×1000mm
Weight	730kg	1450kg	2050kg
Altitude	5000m (>3000m derating)		
Display	Touch screen		
Communication protocol	Modbus-RTU, Modbus-TCP		
Communication interface	RS485, Ethernet		
Standard	IEC62477-1, IEC61000, EN50549, VDE-AR-N4110		
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- Specification indexes may be subject to changes without further notice.