

SMART RESPONSE

SERIES

400-1000 kVA

PCS



GRID SIDE



INDUSTRIAL
AND
COMMERCIAL



SOLAR-STORAGE-
EV CHARGE



TOWER



98%

EFFICIENCY

Bi-directional Power Converter Specially Designed For Demand Response

+ **Smart RESPONSE** Bi-Directional Power Converter with 3Level IGBT Technology, has dual-function storage capability which enables the energy available during the day to be stored in cyclic batteries, then converted and fed back into the network as usable AC current that is injected into the grid.

+ **Smart RESPONSE** PCS provides an outstanding conversion efficiency factor for both charging and discharging phases. Fully compliant with smart grid systems to import and export power inline with the voltage and frequency regulations, FFR and DFFR schemes required by utilities to support the grid.



High Performance

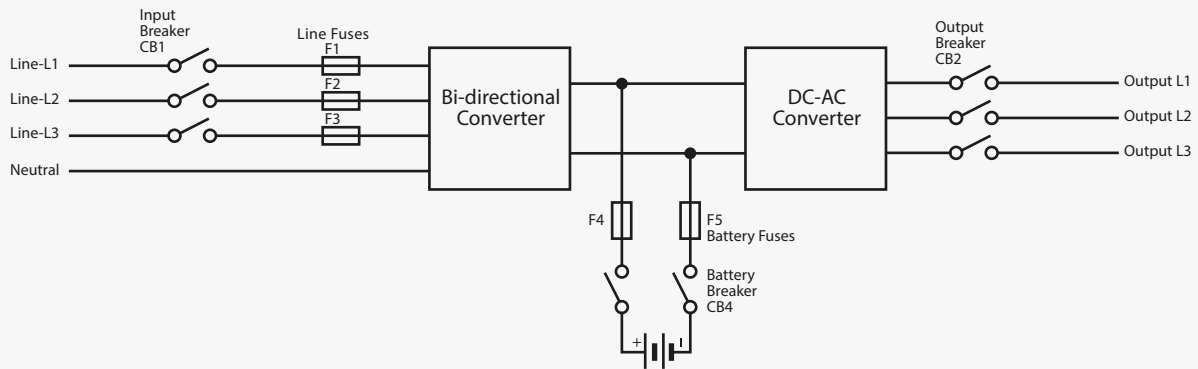
- + Maximum efficiency 98%.
- + Boosted overload and short-circuit capability.
- + Quick Power Transfer/System Response Time (<40ms).

High Reliability

- + Using high performance DSP, the system is more stable and effective.
- + Excellent software control and detection algorithm.
- + Heat dissipation design of key components.

Flexibility

- + Compatible with all battery technologies.
- + Wide battery voltage range.
- + Parallel redundancy for future growth.
- + Highest level of power in one module.
- + Reactive power and active power can be adjusted.
- + Small size, convenient for easy operation and maintenance.

PRODUCT TOPOLOGY


POWER	400kW	500kW	600kW	1000kW
INPUT (DC)				
DC Voltage Range	540 ~ 850 VDC			
Rated Discharge Power	400kW	500kW	800kW	1000kW
Rated Charge Power	400kW	500kW	800kW	1000kW
Max. Discharge DC Current	600A	750A	1200A	1500A
Max. Charge DC Current	600A	750A	1200A	1500A
Battery Compatibility	Lithium-Ion / Lead Acid / Flow			
INPUT (AC)				
Rated Voltage	380V/400V/440V			
Rated Frequency	50Hz/60Hz			
THDi	<3%			
EFFICIENCY				
Efficiency at Nominal Capacity	98%			
ENVIRONMENT				
Protection Glass	IP20			
Operating Ambient Temperature	0°C ~ 40°C			
Storage Ambient Temperature	-15°C ~ 45°C			
Relative Humidity	0% - 95% Without Condensation			
Acoustic Level at 1 m	< 64 DB			
Altitude	0 - 1000m Without Derating			
COMMUNICATION				
Energy Management Communication	Modbus RTU, SNMP, Dry Contact			
Battery Management Communication	CAN, Modbus RTU			
PROTECTIONS				
AC	Overload, Overcurrent, Overtemperature, Overvoltage, Undervoltage, Short Circuit			
DC	Overcurrent, Overcharge, Undercharge, Overtemperature			
DIMENSION & WEIGHT				
Dimensions (WxDxH) (mm)	1200 x 845 x 2102	1200 x 845 x 2102	2345 x 485 x 2003	2345 x 485 x 2003
Weight (kg)	850	850	1740	1990
STANDARDS				
Quality	ISO 9001, ISO 14001, ISO 18001, TSE-HYB			
Performance	EN62040-3 (VFI-SS-111, Bureau Veritas Certified)			
EMC/LVD	EN62040-2, EN62040-1, EN60950, (TÜV SÜD Certified)			

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