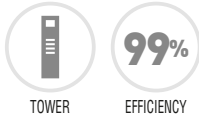
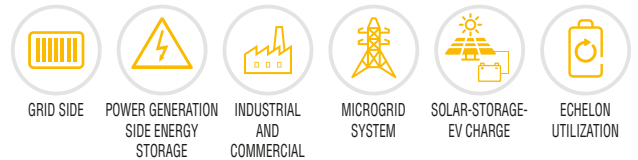


# SMART MULTIGRID SERIES

## 30-630 kW

PCS



### Bi-directional Power Converter With Islanding Mode For On-Grid & Off-Grid Applications

- + Maximum Power Density, High Efficiency 99%
- + Fully DSP Controlled , 3Level IGBT Technology
- + AC/DC Dual Power Supply To Increase System Availability
- + Wide Battery DC Voltage Range
- + Support Black start, On-grid charge/discharge and Off-grid
- + Designed for Multi-grid support functions: Backup Power, Frequency Regulation, Voltage Support, Load Shifting, Demand Response (Peak Shaving)
- + Wide Application Area:Grid Ancillary Services ,Power Generation, Industrial and Commercial, Solar + Storage, EV Charge , PV, Wind Power Station, Microgrid

#### High Performance

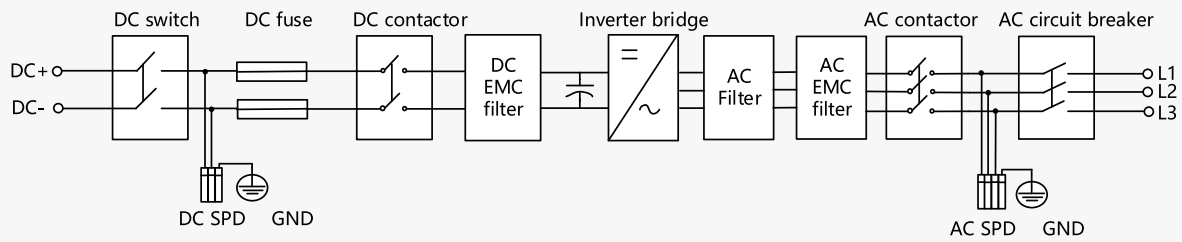
- + Maximum power density, maximum efficiency 99%. Low power consumption with intelligent temperature control system.
- + High quality and stability of power supply in islanding mode.
- + Boosted overload and short-circuit capability.
- + Virtual generator, AVC, AGC capability.

#### High Reliability

- + Using high performance DSP, the system is more stable and effective.
- + Patent software control and detection algorithm.
- + AC/DC double power supply backup to ensure control system is always power on.
- + Redundant cooling system.
- + Heat dissipation design of key components.

#### Flexibility

- + Compatible with all battery technologies.
- + Wide battery voltage range.
- + Support on-grid charge/discharge and off-grid independently working.
- + Reactive power and active power can be adjusted.
- + Support black start , support multi - machine parallel function.
- + Flexible communication mode, receive BMS instructions in real time.
- + Small size, convenient for easy operation and maintenance.
- + Can be integrated into microgrids with existing PV plants.

**PRODUCT TOPOLOGY**


MODEL	With Transformer						Without Transformer	
	0030T	0050T	0100T	0150T	0250T	0500T	0500	0630
<b>DC BATTERY</b>								
Battery Voltage Range	300V-850V			400V-850V	500V-850V	600V-850V		
Max. Current	43A	167A	334A	501A	570A	1200A	930A	1200A
<b>AC (ON-GRID)</b>								
Max. Output Power	33kVA	55kVA	110kVA	165kVA	275kVA	550kVA	550kVA	693kVA
Rated Power	30kW	50kW	100kW	150kW	250kW	500kW	500kW	630kW
Rated Voltage	400V						400V (315, 360V Optional)	
Voltage Range	320V-460V							
Rated Current	43A	72A	144A	216A	361A	722A	722A	909A
Max. Output Current	48A	80A	160A	240A	400A	800A	800A	1000A
Rated Frequency	50/60Hz							
Frequency Range	45-55/55-65Hz							
THDI	<3%							
PF	1 Lagging - 1 Leading							
AC Connection	3W+N+PE						3W+PE	
<b>AC (OFF-GRID)</b>								
Rated Voltage	400V							
THDU	<1% Linear <5% Non-Linear							
Rated Frequency	50/60Hz							
Overload Capability	110% - Continuous							
<b>GENERAL</b>								
Max. Efficiency	96.3%	96.5%	97.1%	97.2%	97.3%	97.5%	98.7%	
Protection Degree	IP21							
Transformer	Yes							
Self-Consumption	<10W							
On/Off Grid Transfer	Manual (Default) Automatic (Optional)							
<b>ENVIRONMENTAL</b>								
Operation Temperature	-30°C ~+55°C							
Cooling	Forced Air							
Relative Humidity	0-95% Non-Condensing							
Max. Altitude	5000m (Derated Above 3000m)							
Noise Emission	<65dB							
<b>COMMUNICATION</b>								
Display	Touch Screen LCD							
BMS Interface	RS485/CAN							
Device Interface	RS485, TCP/IP							
Certificates	CGC, TUV							
<b>DIMENSIONS &amp; WEIGHT</b>								
Cabinet Dimensions (mm)	Width	800			1200	1600	1200	
	Depth	800			800	1050	800	
	Height	2050			2050	2050	2050	
Net Weight (kg)	600	650	910	950	1350	2460	1000	1100

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