Power Conversion System (ECO-PCS)

Brief

This product is a modular inverter specifically designed for small-scale energy storage systems. It achieves bidirectional energy conversion in ESS and can meet the requirements of various scenarios such as C&I ESS, substation energy storage, PV-plus microgrid with ESS.



Features



Ultra-High Efficiency

GEN7 IGBT, three-level topology and minimal switch loss modulation method, conversion efficiency reaches up to 99%.



Flexible Configuration

Modular design enables parallel expansion, can directly connect to LV distribution.



Reliable

IP65 protection level, ms-level on-/off-grid switching.



Versatile Applications

Extra-wide DC voltage input range, suitable for various battery types and scenarios.



Unique Design

Adapt to single-/three-phase loads, active/reactive power control capabilities



| Excellent load-bearing

100% three-phase unbalanced loads, strong resistance to load fluctuations.



Specifications

DC Part	ECO-PCS-100/0.4-S	ECO-PCS-100/0.4-T	ECO-PCS-200/0.69-S
Voltage Range	615~950V DC	615~950V DC	1060-1500V DC
Maximum Current	165A	165A	189A
Maximum Voltage	1000V DC	1000V DC	1500V DC
Maximum Power	110kW	110kW	220kW
AC Part			
Rated Power	100kW	100kW	200kW
Max. Power	110kW	110kW	220kW
THDi	< 3%	< 3%	< 3%
Wiring	3P3W	3P4W	3P3W
Nominal Voltage	400V AC	400V AC	690V AC
Power Factor	>0.99	>0.99	>0.99
Power Factor Range	-1 lagging~1 leading	-1 lagging~1 leading	-1 lagging~1 leading
Nominal Frequency	50/60Hz	50/60Hz	50/60Hz
General			
System Efficiency	≥98.2%	≥98.2%	≥98.2%
Switching Time	≤50ms	≤50ms	≤50ms
Connectivity	RS485/CAN	RS485/CAN	RS485/CAN
Ingress Rating	IP20	IP20	IP20
Cooling	Forced Air Cooling	Forced Air Cooling	Forced Air Cooling
Operating Temperature	-30~55℃	-30~55℃	-30~55℃
Humidity	5~95%RH	5~95%RH	5~95%RH
Dimensions (W*H*D)	440*620*225mm	440*620*225 mm	720*640*270 mm
Weight	50kg	50kg	68kg
Compliance		IEC62477-1	