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Three-Phase Solar Energy Storage System

Product Introduction:

The three-phase solar energy storage system features three-phase lines, offering higher output power and storage capacity. It enables more efficient power conversion and energy storage, and it is suitable for places with three-phase power supply. Through photovoltaic integration and peak shaving strategies, it effectively reduces electricity costs while ensuring a more stable power supply.

Product Features:

- 150% PV oversized and 110% overload output
- 3-phase unbalanced output
- 15A DC input current, supports high power PV panel
- Uninterrupted power supply
- Store the surplus energy from PV to battery
- Convenient Meter-free installation
- Low noise emission
- Safest LFP battery



Product Parameters

Model	CHIEF-5.0-T-A	CHIEF-8.0-T-A	CHIEF-10.0-T-A	CHIEF-12.0-T-A
PV Input				
Max. PV input Voltage	1000V			
MPPT Voltage Range	200~750V			
Max. DC Input Power	7500W	12000W	15000W	18000W
Start-up Voltage	200V			
Rated Operating Voltage	400V			
Max. Input Current	15A			
Isc PV	20A			
NO.of MPP Trackers	2			
NO.of Strings per MPP Tracker	1			
Battery				
Battery Voltage Range	150~690V			
Max. Charge/Discharge Current	25			
Battery Capacity	3.84 / 7.68 / 11.52 / 15.36 kWh			
AC Input/Output				
Rated Output Power	5000W	8000W	10000W	12000W
Rated Apparent Power	5000VA	8000VA	10000VA	12000VA
Max. Apparent Power	5500VA	8800VA	11000VA	12000VA
Max. Apparent Power From Grid	10000VA	16000VA	16600VA	20000VA
Rated Voltage	380 / 400V			
Rated Frequency	50/60 ($\pm 0.2\%$)Hz			
Rated AC Current To Grid	7.2A	11.6A	24.1A	20A
Rated AC Current From Grid	14.4A	23.2A	14.4A	28.8A
Max. Output fault Current	30(rms),42.42(peak)A			
AC Output Maximum Output Overcurrent Protection	30A			
AC Input Power Factor	(-0.8~0.8)			
AC Output Power Factor	1(-0.8~+0.8adjustable)			
THDi	<3%			
EPS Output (With Battery)				
Rated Apparent Power	5000VA	8000VA	10000VA	12000VA
Max. Output Power	6000W	9600W	12000W	14400W
Max. Apparent Power	6000VA	9600VA	12000VA	14400VA
Rated Voltage	380 / 400V			

Norminal Frequency	50/60 ($\pm 0.2\%$)Hz			
Rated Output Current	8.7A	13.9A	17.4A	20.9A
Max. Output Fault Current	30(rms),42.42(peak)A			
EPS Output Maximum Output Overcurrent Protection	30A			
Switch Time	<10ms			
Power Factor	-0.8~0.8			
Efficiency				
PV Max. Efficiency	97.6%			
PV Europe Efficiency	97%			
PV Max. MPPT Efficiency	99.9 %			
Battery Charge by PV Max. Efficiency	98%			
Battery Discharge Efficiency	96.7%			
General Data				
Dimension(W/D/H)	[W:700;D:263;H=500(EPS Box)+n*300(Battery box), ≤ 4]mm			
Net Weight	[Inverter 30,Battery 35*n,2 \leq n \leq 4]kg			
Operation Temp	-25°C~+60°C			
Relative Humidity	0~95%			
Altitude	≤ 3000 m			
Ingress Protection	IP65			
Cooling	Natural			
Inverter Topology	Non-isolated			
Over Voltage Category	III(AC), II (DC)			
Protective Class	Class I			
Active anti- islanding Method	Frequency Shift			
Human Interface	LED/APP			
BMS Communication Interface	SPI			
Meter Communication Interface	RS485			
Noise Emission	<25dB			
Standby Power Consumption	<5W			
Protection	Over/Under voltage protection, DC isolation protection, DC injection monitoring, Residual current detection, Anti-islanding protection, Over load protection, Battery Input reverse polarity protection, PV reverse polarity protection, Surge protection, Over heat protection.			

Main Application Scenarios

- Three-phase power supply systems for homes and offices
- Self-consumption using new energy sources
- Improve power quality
- Earn peak-valley electricity price differences
- Serve as a backup power source to enhance home electricity consumption stability

Typical Application Scenarios

