



Three Phase ESS Series



Product Highlights

/ Plug & Play

Plug & Play stackable design,
10 minutes fast commissioning.

/ Active Safety

AFCI active arcing protection.

/ Efficiency

Up to 98.4% European 97.9%

/ More Options

2*9.6kWh battery module + Optional battery stack.

MODEL	TG-ESS-9HV-S1		TG-ESS-9HV-S2	
PV Specifications				
Max. PV Input Power	15000W			
Nominal DC Voltage/Voc	600Voc			
Start-up/Min. Operation Voltage	180Vdc			
MPPT Voltage Range	150-950Vdc			
No. Of MPPTs/Strings	2(1/2)			
Max. PV Input Current	48A(16A+32A)			
INPUT/OUTPUT(AC)				
Max. AC Input Power From Grid	20500VA			
Rated AC Output Power	10000W			
Max. AC Output Apparent Power	11000VA			
Rated/Max. AC Output Current	15.2A/16.7A			
Rated AC Voltage	3/N/PE 220V/380V 230V/400V 240V/415V			
AC Voltage Range	270-480V			
Rated Grid Frequency	50Hz/60Hz			
Grid Frequency Range	45-55Hz/55-65Hz			
Harmonic(THD)(Of Rated Power)	< 3%			
Power Factor At Rated Power	> 0.99			
Adjustable Power Factor	0.8leading...0.8lagging...			
AC Type	Three phase			
BATTERY DATA				
Rate Voltage(Vdc)	192		384	
Cell combination	60S1P*1		60S1P*2	
Rate Capacity(Ah)	50			
Energy Storage(kWh)	9.6		19.2	
Cycle life	25±2°C, 0.5C/0.5C, EOL70%≥6000			
Max. Charge/Discharge Current(A)	30			
Discharge Cut-off Voltage(VDC)	162		324	
Charge Cut-off Voltage(VDC)	216		432	
ENVIRONMENT				
Charge temperature	0°C~55°C@60±25% Relative Humidity			
Discharge temperature	-20°C~55°C@60±25% Relative Humidity			
Storage temperature	-20°C~50°C@60±25% Relative Humidity			
MECHANICAL				
IP Class	IP65			
Material System	LiFePO4			
Case Material	Metal			
Case Type	All In One Stack			
Product Dimension L*W*H(mm)	Inverter high-voltage box: 800*210*775/Battery box: 800*188*512(single)			
Package Dimension L*W*H(mm)	Inverter high-voltage box: 1115*300*880 Battery box: 920*310*735(single) (Packaging size Including accessories)		Inverter high-voltage box: 1115*300*880 Battery box: 920*310*735(single)*2 (Packaging size Including accessories)	
Net weight(kg)	Inverter high-voltage box: 65kg Battery box: 95kg Accessory box: 9kg		Inverter high-voltage box: 65kg Battery box: 95kg*2 Accessory box: 9kg	
Gross weight(kg)	Inverter high-voltage box: 76kg(Including accessories)/Battery box: 105kg			
COMMUNICATION				
Protocol(Optional)	RS485/RS232/WLAN Optional			
CERTIFICATES				
	EN, IEC, NRS, G99, UN38.3, MSDS, CE			