



Three Phase ESS Series

CE MSDS IEC UN38.3

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*9.6 kWh battery module + Optional battery stack.

Model	TG-ESS-T-8kw/9.6kwh	TG-ESS-T-8kw/19.2kwh	TG-ESS-T-10kw/9.6kwh	TG-ESS-T-10kw/19.2kwh
PV Specifications				
Max.PV Input Power(Wp)	12000		15000	
Rated/Max. PV Input Voltage (Vdc)	600/1000		600/1000	
Start-up Input Voltage (Vdc)	250		250	
MPPT Voltage Range (Vdc)	200-950		200-950	
No.Of MPPTs/Strings Per MPPT	2(1/1)		2(1/2)	
Max.PV Input Current(A)	32(16+16)		48(16+32)	
Input/Output(AC)				
Inverter model	THI-8000-3P-HVL		THI-10000-3P-HVL	
Max.AC Input Power From Grid(VA)	18600		20600	
Rated AC Output Power(W)	8000		10000	
Max.AC Output Apparent Power(VA)	8800		11000	
Rated/Max.AC Output Current(A)	12.1/13.3		15.2/16.7	
Rated AC Voltage(Vac)	3L/N/PE ,220/380,230/400,240/415			
AC Voltage Range(Vac)	270-480			
Rated Grid Frequency(Hz)	50/60			
Grid Frequency Range(Hz)	45-55Hz/55-65Hz			
Harmonic(THD)(Of Rated Power)(%)	<3			
Power Factor At Rated Power	>0.99			
Adjustable Power Factor	adj.0.8 leading to 0.8 lagging			
AC Type	Three phase			
Integrated	Anti-islanding Protection			
Backup Data(off-grid mode)				
Rated Output voltage(Vac)	3L/N/PE,220/230/240(±2%)			
Rated Frequency(Hz)	50/60(±0.5%)			
Total output THDV for liner load(%)	≤2			
Switch time to emergency mode(ms)	≤10			
Rated Output Power	8000W/8000VA		10000W/10000VA	
Peak Output Power	9600VA,5min		12000VA,5min	
Battery Data				
Battery model	TG-ESS-9HV-S1	TG-ESS-9HV-S2	TG-ESS-9HV-S1	TG-ESS-9HV-S2
Rate Voltage (Vdc)	192	384	192	384
Cell combination	60S1P*1	60S1P*2	60S1P*1	60S1P*2
Rate Capacity(Ah)	50Ah			
Energy Storage(kWh)	9.6	19.2	9.6	19.2
Cycle life	25±2°C,0.5C/0.5C,EOL70%≥6000			
Max.Charge/Discharge Current(A)	30/30			
Expansion	Supports up to 4 battery clusters in parallel			
Discharge Cut-off Voltage (Vdc)	162	324	162	324
Charge Cut-off Voltage (Vdc)	216	432	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)	800*188*1275	800*188*1798	800*188*1275	800*188*1798
Package Dimension L*W*H(mm)	Battery box outer packaging L920*W310*H750 Inverter box outer packaging L915*W600*H305 Main control box outer packaging L890*W275*H380			
Net weight	Inverter box:45kg Battery box:101kg Main control box and base:16.5kg	Inverter box:45kg Battery box:101kg*2 Main control box and base:16.5kg	Inverter box:45kg Battery box:101kg Main control box and base:16.5kg	Inverter box:45kg Battery box:101kg*2 Main control box and base:16.5kg
Gross weight	Inverter box:51kg /Battery box:112kg /Main control box:20kg			
Communication(Optional)	RS485/CAN/WLAN Optional			
Certificates	EN,IEC,UN38.3,MSDS,CE			