

TGPRO

HOME ENERGY STORAGE SYSTEMS

Store solar energy, reduce electricity costs, and keep your home running—day or night, grid or no grid.

CONTACT TGPRO ENERGY AUSTRALIA



Single Phase ESS Series



Product Highlights

Plug & Play

Plug & Play stackable design,
10 minutes fast commissioning.

High PV Acceptance

40-600Vdc, 2X of rated power input.

Active Safety

AFCI active arcing protection.

More Options

3*5.12 kWh battery module + Optional battery stack.

MODEL	TG-SS-51LVP1-S1	TG-SS-51LVP1-S2	TG-SS-51LVP1-S3
PV Specifications			
Max. PV Input Power	11000W		
Nominal DC Voltage/Voc	360Vdc/600Voc		
Start-up/Min. Operation Voltage	50Vdc/40Vdc		
No. Of MPPT/Strings	2/1		
Max. PV Input/Short circuit current	16A/20A		
INPUT/OUTPUT(AC)			
Max. AC Input Power From Grid	11000VA		
Rated/Max. AC Output Power	6000W/6000VA		
Rated AC Output Current(at 230V)	26.1A		
Max. AC Output Current	27.3A		
Rated AC Voltage	220V/230V/240V		
AC Voltage Range	154V~276V		
Rated Grid Frequency	50Hz/60Hz		
Grid Frequency Range	45~55Hz/55~65Hz		
Harmonic(THD)	< 3%		
Power Factor At Rated Power	> 0.99		
Adjustable Power Factor	0.8leading/0.8lagging		
Grid Type	Single Phase		
Rated Output Power For Backup Load	6000W		
Frequency Range In Off Grid Mode	50Hz/60Hz(±0.5%)		
BATTERY DATA			
Rate Voltage(Vdc)	51.2		
Cell combination	16S1P*1	16S1P*2	16S1P*3
Rate Capacity(Ah)	100	200	300
Energy Storage(kWh)	5.12	10.24	15.36
Cycle life	25±2°C, 0.5C/0.5C, EOL70%≥6000		
Charge Voltage	57.6V		
Max. Charge/Discharge Current(A)	100		
Discharge Cut-off Voltage(VDC)	43.2		
Charge Cut-off Voltage(VDC)	58.4		
ENVIRONMENT			
Charge temperature	0°C~50°C@60±25% Relative Humidity		
Discharge temperature	-20°C~50°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)	640*2025*1008	640*205*1350	640*205*1692
Package Dimension L*W*H(mm)	760*725*345+760*335*450*1	760*725*345+760*335*450*2	760*725*345+760*335*450*3
Net weight(kg)	25+46*1	25+46*2	25+85*3
Gross weight(kg)	30+51*1	30+51*2	30+92*3
COMMUNICATION			
Protocol(Optional)	RS485/RS232/WLAN Optional		
CERTIFICATES			
EN, IEC, NRS, G99, UN38.3, MSDS, IEC62619, CE			



Single Phase ESS Series



Product Highlights

/ Flexible Investment

Plug & Play design, fast commissioning.

/ Active Safety

AFCI active arcing protection.

/ High PV Acceptance

40-600Vdc, 2X of rated power input.

/ More Options

2*10.24 kWh battery module + Optional battery stack.

MODEL	TG-51200-EP-S1	TG-51200-EP-S2
PV Specifications		
Max. PV Input Power	11000W	
Nominal DC Voltage/Voc	360Vdc/600Voc	
Start-up/Min. Operation Voltage	50Vdc/40Vdc	
No. Of MPPTs/Strings	2/1	
Max. PV Input/Short Circuit Current	16A/20A	
INPUT/OUTPUT(AC)		
Max. AC Input Power From Grid	11000VA	
Rated/Max. AC Output Power	6000W/6000VA	
Rated AC Output Current(at 230V)	26.1A	
Max. AC Output Current	27.3A	
Rated AC Voltage	220V/230V/240V	
AC Voltage Range	154V~276V	
Rated Grid Frequency	50Hz/60Hz	
Grid Frequency Range	45~55Hz/55~65Hz	
Harmonic(THD)	< 3%	
Power Factor At Rated Power	> 0.99	
Adjustable Power Factor	0.8leading/0.8lagging	
Grid Type	Single Phase	
Rated Output Power For Backup Load	6000W	
Frequency Range In Off Grid Mode	50Hz/60Hz(±0.5%)	
BATTERY DATA		
Rate Voltage(Vdc)	51.2	
Cell combination	16S2P*1	16S2P*2
Rate Capacity(Ah)	200	400
Energy Storage(kWh)	10.24	20.48
Cycle life	25±2°C, 0.5C/0.5C, EOL70%≥6000	
Charge Voltage	57.6V	
Max. Charge/Discharge Current(A)	100	
Discharge Cut-off Voltage(VDC)	43.2	
Charge Cut-off Voltage(VDC)	58.4	
ENVIRONMENT		
Charge temperature	0°C~55°C@60±25% Relative Humidity	
Discharge temperature	-20°C~55°C@60±25% Relative Humidity	
Storage temperature	-40°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)	620*212*1302	620*212*1900
Package Dimension L*W*H(mm)	760*725*345+735*715*340*1	760*725*345+735*715*340*2
Net weight(kg)	25+85*1	25+85*3
Gross weight(kg)	30+92*1	30+92*3
COMMUNICATION		
Protocol(Optional)	RS485/RS232/WLAN Optional	
CERTIFICATES		
EN, IEC, NRS, G99, UN38.3, MSDS, IEC62619, CE		



Three Phase ESS Series



Product Highlights

Plug & Play

Plug & Play stackable design,
10 minutes fast commissioning.

Efficiency

Up to 98.4% European 97.9%

Active Safety

AFCI active arcing protection.

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	
Charge Voltage	219	438
Max. Charge/Discharge Current(A)	30	
Discharge Cut-off Voltage(VDC)	168	336
Charge Cut-off Voltage(VDC)	210	420
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		