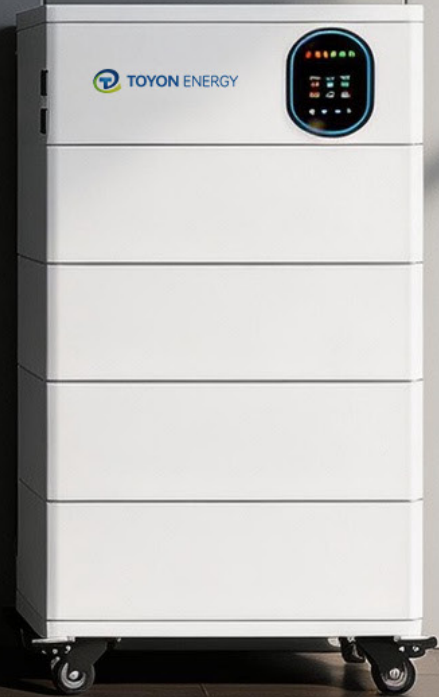


ALL IN ONE

Inverter + Battery

ESS ONE Series 4.2KW 6.2KW



Independent
Module



Customized
Logo



Multiple
Shell Colors



Customized
Capacity

Features







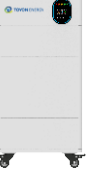
- Pure sine wave solar inverter(on/off Grid)
- Output power factor 1.0
- WIFI&GPRS available for IOS and Android
- Inverter can run without battery
- One-key restoration to factory Settings
- Dual communication ports for Battery communication and Wifi communication
- Built-in 120A MPPT Solar charge: max 6200W (for 4.2KW),max6500W(for 6.2KW)
- High PV input voltage range(60~500VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Dual output
- Built-in Lithium battery automatic activation

ESS ONE SERIES

PRODUCT DESCRIPTION

INVERTER		
MODEL	ESS ONE-4.2KW	ESS ONE-6.2KW
Phase	1-phase	
Maximum PV Input Power	6200W	6500W
Rated Output Power	4200W/4200VA	6200W/6200VA
Maximum Solar Charging Current	120A	
GRID-TIE OPERATION		
PV INPUT(DC)		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage/Initial Feeding Voltage	60VDC/90VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	18.2A	27.0A
Power Factor	>0.99	
EFFICIENCY		
Maximum Conversion Efficiency(DC/AC)	98%	
TWO LOAD OUTPUT POWER		
Full Load	4200W	6200W
Maximum Main Load	4200W	6200W
Second Load Range	840W~2940W	1240W~4340W
Maximum Load Cut Off Voltage	26VDC	52VDC
Maximum Load Return Voltage	27VDC	54VDC
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90~280VAC or 170~280VAC	
Frequency Range	50+1Hz/60+1Hz	
Maximum AC input Current	24.7A	36.4A
PV INPUT(DC)		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
BATTERY MODE OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Wave Form	Pure sine wave	
Efficiency (DC to AC)	94%	
BATTERY&CHARGER		
Nominal DC Voltage	24VDC	48VDC
Maximum Solar Charging Current	120A	120A
Maximum AC Charging Current	100A	100A
Maximum Sotar+AC Charging Current	120A	120A
HYBRID OPERATION		
PV INPUT(DC)		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage/Initial Feeding Voltage	90VDC/120VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	18.2A	27.0A
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90~280VAC or 170~280VAC	
Maximum AC Input Current	24.7A	36.4A
Maximum Charging Current	100A	
GENERAL		
PHYSICAL		
Dimension ,H*W*D(mm)	205*530*400	
Carton Dimension,H*W*D(mm)	280*600*470	
Net Weight (kg)	16	16.9
Gross Weight(kg)	17.5	18.4
INTERACE		
Communication Port	RS232/RS485/WIFI/GPRS/LITHIUM BATTERY	
ENVIRONMENT		
Humidity	5% to 95% Relative Humidity(Non-condensing)	
Operating Temperature	-10°C~50°C	
STANDARD		
Compliance Safety	CE	

ESS ONE SERIES

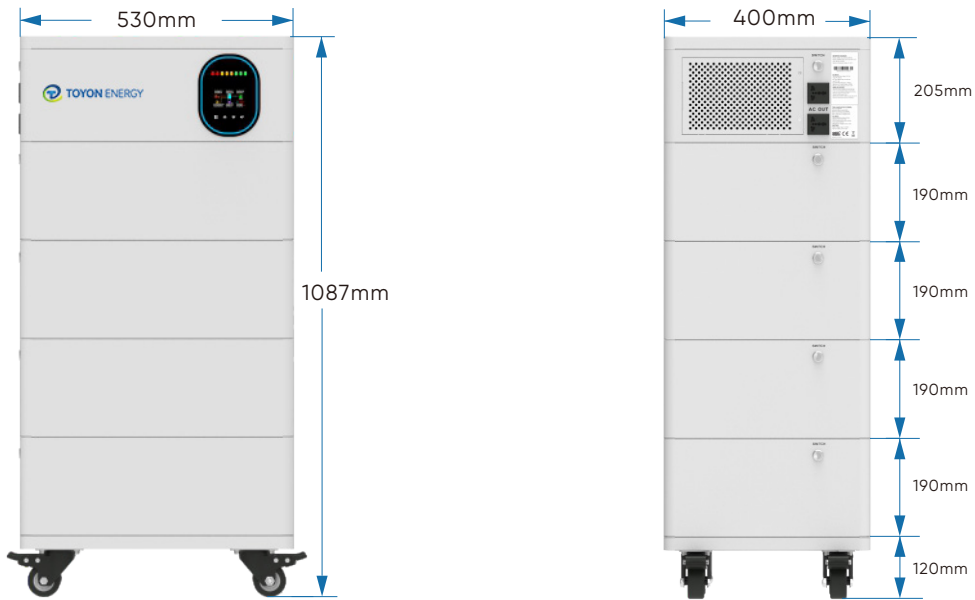
BATTERY		ESS ONE-4.2KW			ESS ONE-6.2KW			
MODEL	ESS ONE-4.2KW			ESS ONE-6.2KW				
System schematic								
Nominal voltage	25.6V			51.2V				
Number of module	1	2	3	1	2	3	4	
Nominal capacity	200AH	400AH	600AH	100AH	200AH	300AH	400AH	
Normal charging voltage	29.2V	29.2V	29.2V	58.4V	58.4V	58.4V	58.4V	
Maximum charging current	100A	100A	100A	100A	100A	100A	100A	
Discharge termination voltage	21.6V	21.6V	21.6V	40.5V	40.5V	40.5V	40.5V	
Recommended discharge termination voltage	22.4V	22.4V	22.4V	42V	42V	42V	42V	
Maximum discharge current	100A	100A	100A	100A	100A	100A	100A	
Single cell charging over voltage protection	3.8V	3.8V	3.8V	3.8V	3.8V	3.8V	3.8V	
Over voltage protection for the whole battery	29.2V	29.2V	29.2V	58.4V	58.4V	58.4V	58.4V	
Low voltage protection for single cell discharge	2.7V	2.7V	2.7V	2.7V	2.7V	2.7V	2.7V	
Low voltage protection for whole group discharge	21.6V	21.6V	21.6V	40.5V	40.5V	40.5V	40.5V	
Charge over current protection	102~112A	102~112A	102~112A	102~112A	102~112A	102~112A	102~112A	
Discharge over current protection	102~122A	102~122A	102~122A	102~122A	102~122A	102~122A	102~122A	
BMS Features	High accuracy cell level voltage, current measuring Over-charge, over-discharge protection Short-circuit protection Self-learning intelligent SOC calculation Cell level active equalization Multiple communication type Parallel connect function							
Working temperature	-20°C ~ 65°C							
Storage temperature	-10°C ~ 50°C							
Dimension ,H*W*D(mm)	190*530*400							
Carton Dimension ,H*W*D(mm)	265*600*470							
Net Weight (kg)	46.8	46.8(2PCS)	46.8(3PCS)	46.8	46.8(2PCS)	46.8(3PCS)	46.8(4PCS)	
Gross Weight(kg)	50	50(2PCS)	50(3PCS)	50	50(2PCS)	50(3PCS)	50(4PCS)	

SYSTEM DIAGRAM



ESS ONE SERIES

DIMENSION



BACK PANEL DESCRIPTION

— Neutral wire — Live wire — Communication cable

