

# Vega

## C&I PV + BESS(Container solution)

THESS-500-1003

THESS-630-1290

THESS-1000-2007

THESS-1260-2150



### Product Overview

Vega is mainly aimed at the use of commercial energy storage application scenarios in both domestic and overseas market. The system integrates PV and energy storage technology to improve the self-utilization rate of PV, reduce PV power waste and direct grid-connection of PV. Integrated with standard 20-foot and 40-foot containers, fire extinguishing and intelligent temperature control systems with high safety protection levels are suitable for various PV energy storage and charging scenarios.

Integrated design, high protection level, convenient installation and transportation;

Independent battery and electrical space design enhances the level of protection;

The reliable integration of intelligent temperature control and fire management improves the fire safety protection of the system;

Meet the renewable energy storage, micro grid, peak regulation and other multiple application scenarios;

Support the access of photovoltaic power generation to improve the rate of self-consumption;

The whole container is certified by Classification Society to meet the overall transportation of the system.

Model	THESS-500-1003	THESS-630-1290	THESS-1000-2007	THESS-1260-2150
<b>AC (Grid tied)</b>				
Apparent Power	550kVA	693kVA	1100kVA	1280kVA
Rated Power	500kW	630kW	1000kW	1200kW
Rated Voltage	400V			
Rated Current	722A	909A	1444A	1563A
Voltage Range	360V ~ 440V			
Frequency	50/60Hz			
THDI	<3%			
Power Factor	- 0.9 leading ~ 0.9 lagging			
Wire Connection	3 / N / PE			
AC input	550kVA	693kVA	1100kVA	1280kVA
<b>AC (Off-grid)</b>				
Apparent Power	550kVA	693kVA	1100kVA	1280kVA
Rated Power	500kW	630kW	1000kW	1200kW
Rated Voltage	400V			
Rated Current	722A	909A	1444A	1563A
THDU	≤2%			
Frequency	50/60Hz			
Overload Capability	110% for long-term; 120% for 1min			
<b>DC (Battery and PV)</b>				
Max. PV Open-circuit Voltage	1000V DC			
Rated PV Power	500kWp	600kWp	1000kWp	1000kWp
Max. PV Power	1.1~1.4 times rated			
PV Voltage Range	400V ~ 600V DC			
Max. PV Current	100A×10	100A×12	100A×20	100A×20
PV MPPT NO.	10	12	20	20
Battery Voltage Range	627V ~ 850V			
Available Battery Capacity	1003.52kWh 1505.28kWh 2007.04kWh	1290.24kWh 1935.36kWh	2007.04kWh	2150.4kWh
Max. Charge Power	500kW	630kW	1000kW	1200kW
Max. Discharge Power	500kW	630kW	1000kW	1200kW
Max. Charge Current	722A	909A	1444A	1540A
Max. Discharge Current	722A	909A	1444A	1540A



Model	THESS-500-1003	THESS-630-1290	THESS-1000-2007	THESS-1260-2150
Basic Parameters				
Noise Level	<65dB (A) @1m			
IP protection level	IP54			
Fire protection	C6F120 fire extinguisher			
Operating Temperature	-25°C ~ +55°C			
Protection Function	Over /under voltage, Over current, Over/low temperature, SOC too high/low Low insulation impedance, Short circuit protection, etc			
Cooling	Forced air + Smart AC			
Relative Humidity	0 ~ 95%, non-condensing			
Max. Altitude	4000m (>2000m derating capacity)			
Dimensions ( W×D×H)	6058×2438×2896mm		12192×2438×2896mm	
Weight	25T (20 feet)		38T (40 feet)	
Build-in Transformer	Optional			
Communication				
HMI	Touch Screen			
Communication	RS485 / CAN / LAN			

## Certifications

### PCS Certifications:

CE, EN 61000-6-4:2019, EN 61000-6-2:2019, EN 62477-1:2012+A1:2017, EN62109-1:2010, EN 50549-1: 2019, C10/11.

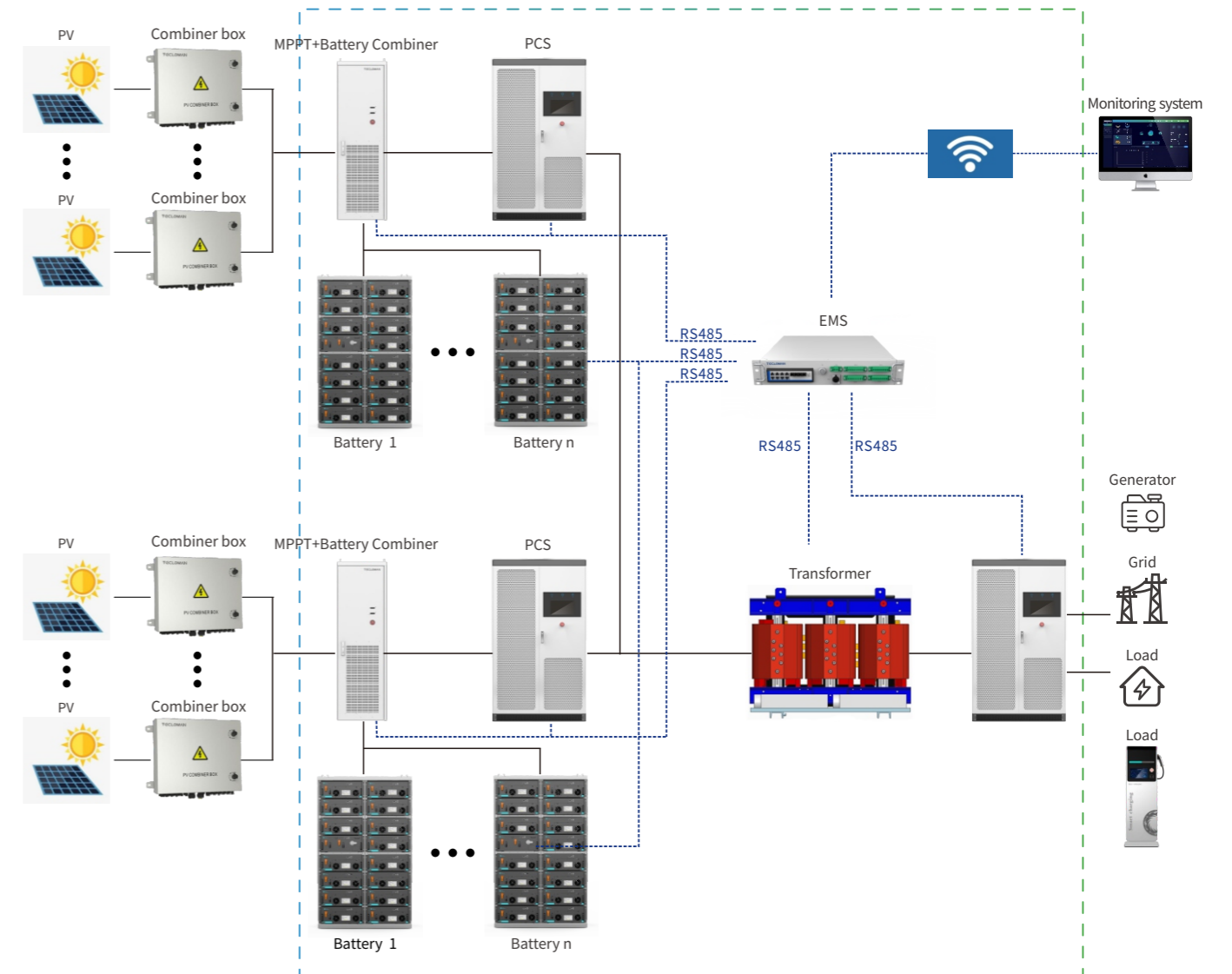
### Module Certifications:

GB/T36276-2018, IEC61629, UN38.3, EMC.

### Battery Certifications:

UL1973, UL9540A, IEC61629, UN38.3, GB/T36276-2018, ROHS, MSDS.

## Product Principle



### \* Remarks:

1. This system adopts standard container integration, container size is standard 20 feet or 40 feet.
2. 40-foot standard containers are used for systems with battery power over 1000kWh, and 20-foot standard containers are used for systems with battery power below 1000kWh.
3. 20-foot container dimensions: W×D×H = 6058×2438×2896mm.  
40-foot container dimensions: W×D×H = 12192×2438×2896mm.

