TECLOMAN

Polar

C&I PV + BESS

THESS-30-114/129/143/157

THESS-60-114/129/143/157

THESS-90-258/286/315

THESS-120-286/315

THESS-150-315/387/430/473



Product Overview

Polar is mainly aimed at the scenarios of commercial & industrial battery storage applications. The system integrates photovoltaic solar and battery storage technologies to improve the spontaneous self-consumption rate of solar generation, reduce abandoned solar. The system has both indoor and outdoor designs to meet different installation environments, and its power and energy capacity can be flexibly configured according to needs. The system adopts modular PCS and MPPT to improve the maintenance and redundancy of the system.

- Modular design, can be flexibly configured according to requirements.
- Independent battery and electrical space design enhances the level of protection.
- Arbitrary standardized expansion, flexible and can be used in a variety of scenarios.
- Professional cloud platform monitoring, multi-dimensional after-sales service system.
- Support the access of photovoltaic power generation to improve the rate of self-consumption.

PCS Certifications: EN IEC 61000-6-2:2019、EN IEC 61000-6-4:2019、IEC 62477-1:2012/AMD1:2016、EN 62477-1:2012/A1:2017、VDE-AR-N 4105:2018-11、DIN VDE V 0124-100(VDE V 0124-100):2020-06、EN 50549-1: 2019;
Module Certifications：GB/T36276-2018、IEC61629、UN38.3、EMC;
Battery Certifications：UL1973、UL9540A、IEC61629、UN38.3、GB/T36276-2018、ROHS、MSDS.

Model	THESS-30-114 THESS-30-129 THESS-30-143 THESS-30-157	THESS-60-114 THESS-60-129 THESS-60-143 THESS-60-157	THESS-90-258 THESS-90-286 THESS-90-315	THESS-120-286 THESS-120-315	THESS-150-315 THESS-150-387 THESS-150-430 THESS-150-473
AC（Grid tied）					
Apparent Power	33kVA	66kVA	100kVA	132kVA	165kVA
Rated Power	30kW	60kW	90kW	120kW	150kW
Rated Voltage	400V				
Rated Current	43A	87A	130A	173A	217A
Voltage Range	360V ~ 440V				
Frequency	50/60Hz				
THDI	＜3%				
Power Factor	-0.9 leading ~ 0.9 lagging				
Wire Connection	3 / N / PE				
AC input	33kVA	66kVA	100kVA	132kVA	165kVA
AC（Off-grid）					
Apparent Power	33kVA	66kVA	100kVA	132kVA	165kVA
Rated Power	30kW	60kW	90kW	120kW	150kW
Rated Voltage	400V				
Rated Current	43A	87A	130A	173A	217A
THDU	⩽2%				
Frequency	50/60Hz				
Overload Capability	110% for long-term; 120% for 1min				
DC（Battery and PV）					
Max. PV Open-circuit Voltage	1000V DC				
Rated PV Power	30kWp	60kWp	90kWp	120kWp	150kWp
Max. PV Power	1.1~1.4 times rated				
PV Voltage Range	400~750V DC	400~750V DC	400~750V DC	500~750V DC	500~750V DC
Max. PV Current	100A	200A	200A×2	200A×2	200A×3
PV MPPT NO.	1	1/2	2/3	2/4	3/5
Battery Voltage Range	352V ~ 600V				
Available Battery Capacity	114.69kWh 129.02kWh 143.36kWh 157.70kWh	114.69kWh 129.02kWh 143.36kWh 157.70kWh	258.05kWh 286.72kWh 315.39kWh (三种规格电池容量可任意配置。)	286.72kWh 315.39kWh	315.00kWh 387.07kWh 430.08kWh 473.09kWh
Max. Charge Power	33kW	66kW	100kW	132kW	165kW
Max. Discharge Power	33kW	66kW	100kW	132kW	165kW
Max. Charge Current	100A	154A	300A	308A	462A
Max. Discharge Curretn	100A	154A	300A	308A	462A
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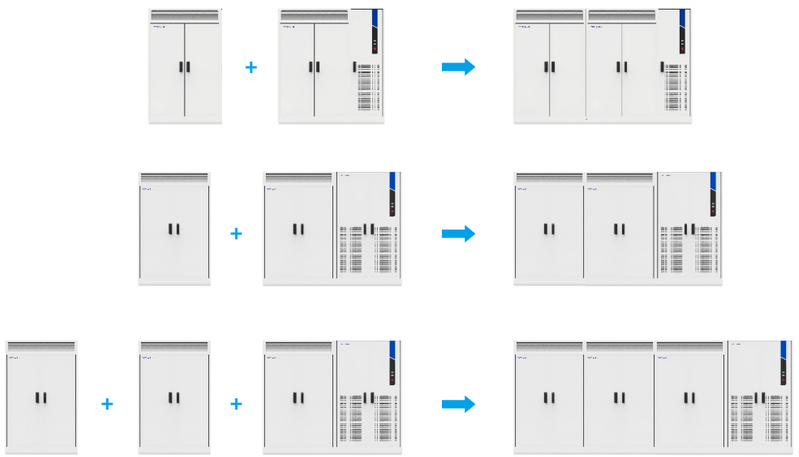
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Tecloman Energy Storage **Add:** Muehldorfstrasse 8,81671 Munich, Germany/ Web: www.tecloman.com

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Basic Parameters					
On/off grid switch function	Assorting				
On/off grid switch time	⩽10ms				
Noise Level	＜75dB(A)@1m				
IP protection level	IP54				
Fire protection	Aerosols				
Operating Temperature	-25℃ ~ +55℃				
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%，without condensation				
Max. Altitude	⩽3000m（＞3000m derating）				
Dimensions（W×D×H）	1985×1000×2190mm		3964×1000×2190mm		5314×1000×2190mm
Weight	1948kg 2059kg 2170kg 2281kg	1978kg 2089kg 2200kg 2311kg	3858kg 4060kg 4282kg	4320kg 4542kg	4572kg 5847kg 6180kg 6513kg
Communication					
HMI	Touch Screen				
Communication	RS485 / CAN / LAN				

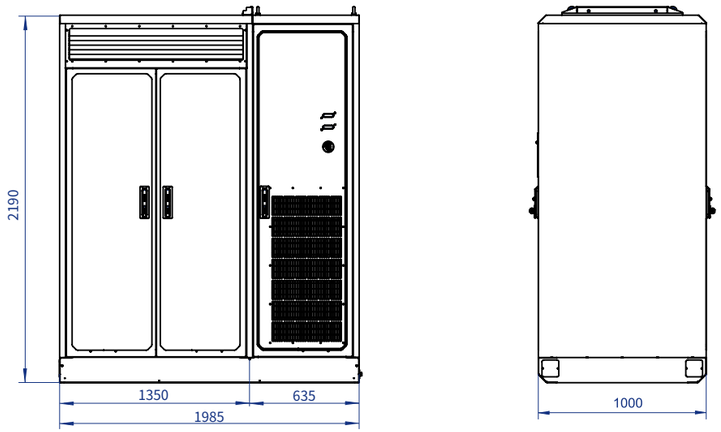
Note：* Battery energy capacity can be added multiply.
* The system supports inverter parallel operation, please contact manufacturer for details.

Combination Parallel

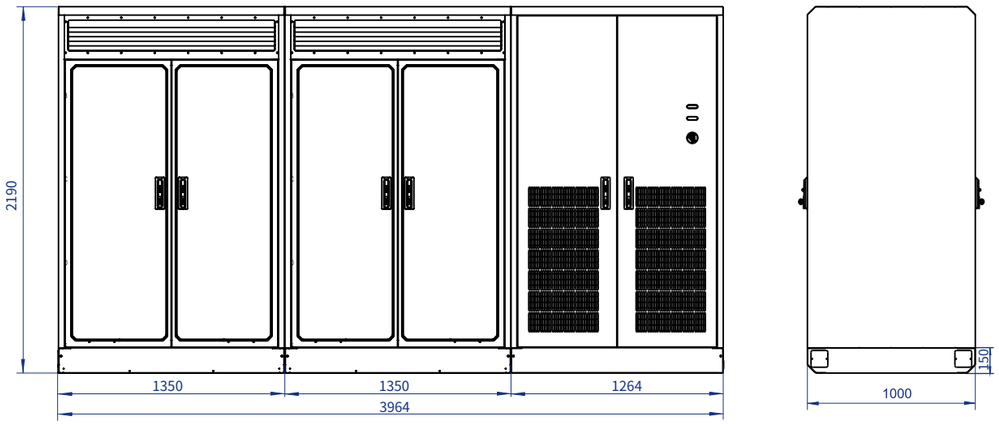


Product Dimensions

THESS-30-114：



THESS-150-315：



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