PYLONTECH
Cube the force

Optimus all-in-one ESS

KEY FEATURES

High Integration
Highly integrated ESS with outdoors cabinet design provides high protection class

Safe and Reliable
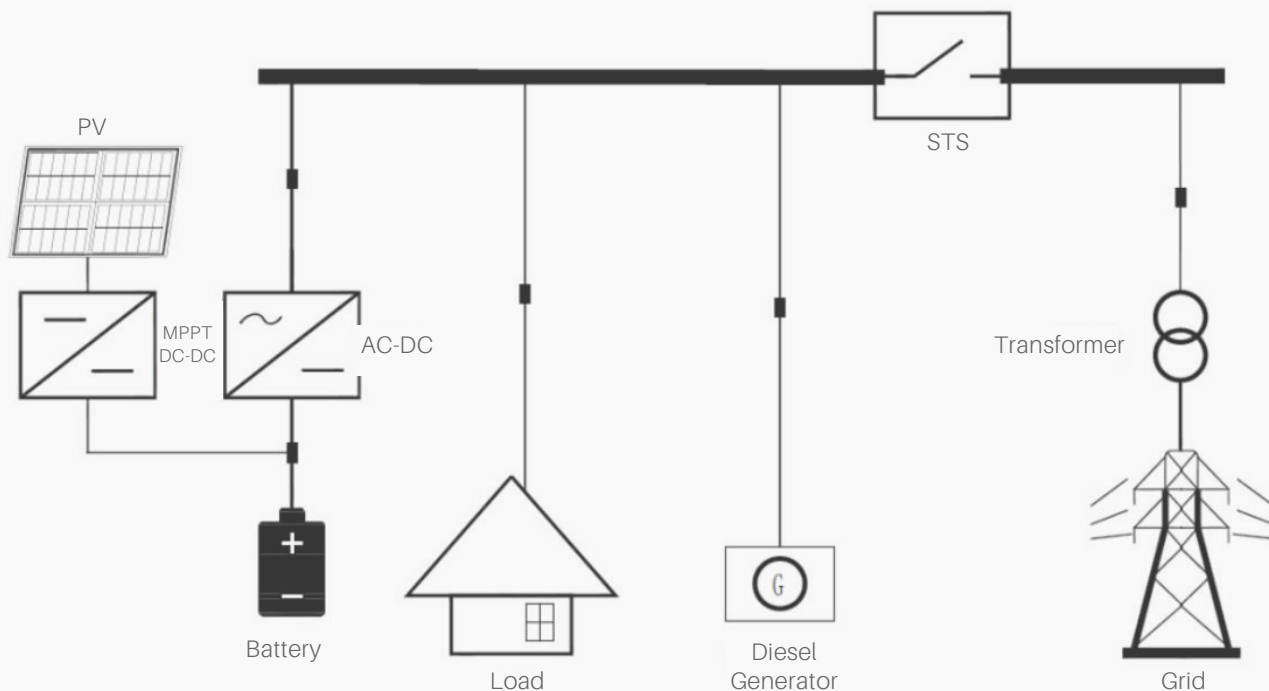Three level BMS structure for good cooperation and better operation performance

Flexible
Supports system parallel connection and easy for expansion

Pre-Engineered System
Easy for on-site installation and save the cost

DIAGRAM

PV

MPPT DC-DC

AC-DC

STS

Transformer

Battery

Load

Diesel Generator

Grid

Outdoor Cabinet ESS for micro-grid island, hotel, fram... Applications
PCS Power optional power range: 30~200KW
Battery optional capacity range:100~400KWh
Be suitable for 2~4 hours back up

SPECIFICATION

System	Optimus all-in-one ESS
Battery Data	
Battery Type	Li-ion (LFP)
Nominal Capacity (kWh)	107
Battery Item	Powercube-M2A-180/M3A00
Battery Module Qty.	19
DC Voltage Range(V)	661~820
Max. Operation Current (A)	148
Efficiency	95%
PCS DC/AC Data On-grid Mode	
Rated AC Power (KW)	62.5 (expandable to 3*62.5)
Rated AC Output Voltage(V)	400
Rated AC Output Frequency (Hz)	50/60
Max. AC Current(A)	95
Overload Capacity	110% 15mins; 120% 1mins
AC PF	1（leading）~1（lagging）
THDi	≤3%
Isolation Type	Non-isolation
Peak Efficiency	99%
PCS DC/AC Data Off-grid Mode	
Output voltage accuracy	≤1%
AC PF	>0.7
Output voltage distortion factor	<3%
PV DC/DC Data Parameter	
Rated Power(kW)	30 (expandable to 6*30)
PV Input Voltage(Vdc)	100 – 1000 (full power from 300)
Max. current(A)	100
Max. Efficiency(%)	95.5%

SPECIFICATION

System Type	Optimus all-in-one ESS
General Data	
Dimension(W*H*D mm)	1200*2100*1000
Weight(Kg)	500
Working Temperature Range (℃)	-30~60
Protection Class	IP65(battery room)+IP54(PCS room)
Altitude	3000
Humidity	0~95%
Fire Extinguishing	FM200
Air Conditioner	3kW
Anti-Corrosion	C3 (Optional upgrade to C5)
Authentication level	CE/IEC62619/UN38.3/UN3536
Operation Mode	
On/off-grid Switch	Optional STS module, switching time<20ms
EMS	10 inch LCD Touch Panel
	Self-Consumption; Micro-grid control; Demand response; Remote Control; Time of use;
Communication	
Communication Type:	Modbus TCP/IP

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