

C&I Energy Storage System

30k/100kWh-120kWh

Diesel-PV-ESS



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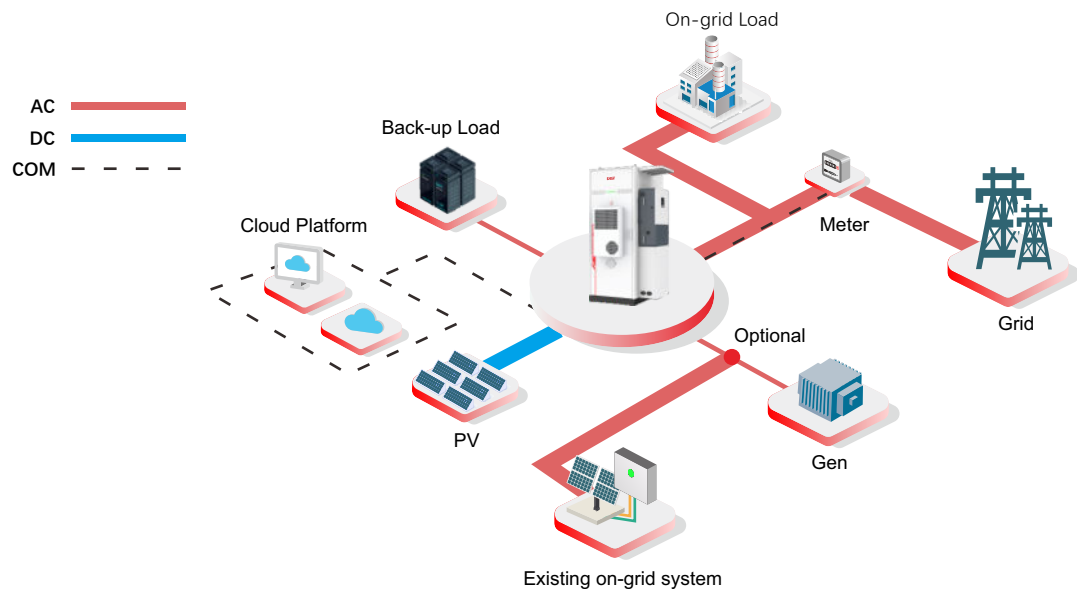
4 independent MPPT, wide 150~850V PV voltage range for higher yield
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Max. 2×100A charge/discharge, compatible with genset, up to 8 units parallel
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<20ms UPS-level switching, AC coupling ready for system retrofit
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Full aluminum IP66 enclosure, stable operation under harsh environments

Typical application



Specification

MODEL	30kW-100kWh	30kW-120kWh
System		
Rated energy capacity	100kWh	120kWh
Rated system power	30kW	
On-grid and off-grid switching time	<20ms	
Max. conversion efficiency	98.00%	
European/MPPT efficiency	97%/99.9%	
IP rating	Battery cabinet(IP54), Inverter(IP66)	
Operating temperature	-25~+60°C(>45°C linear derating to 60%)	
Relative humidity	<95%(non-condensing)	
Altitude	<4000m	
Cooling method	Air cooling	
Noise	<65dB	
Fire protection system	cabinet level gas fire-fighting(perfluorohexanone)/aerosol+water fire-fighting	
Wired/ wireless communication	RS485/WiFi/Bluetooth/LAN/CAN/DRM/Meter	
Human-computer interaction	LED+APP	
Standards	UL 1741-2021(UL1741SB), CSA C22.2 No 107.1-16, IEEE Std C37.90.2-2004, IEEE C62.45-2002, IEEE Std C62.41.2-2002, IEEE Std C37.90.1-2024, UL 1741-2021(UL1741SA), CSA C22.2 No 107.1-16, IEEE 1547-2018 & 1547a-2020 & 1547.1-2020(SRD V2.0), UL 1741 CRD-PCS, UL1699B, CEC, SGIP, CSIP	
Dimensions(W×H×D)(mm)	800x2100x1200	
Weight(kg)	≤1300	
Battery		
Cell	314Ah	
Configuration	1P100S	1P120S
Rated energy	100kWh	120kWh
Rated voltage	320Vdc	384Vdc
Voltage range	280~365Vdc	336~438Vdc
Inverter		
Inverter model	ESH30K3PHVG1-LA	
PV parameters		
Max. input power	60kW	
Max. input voltage	1000Vdc	
Input voltage range	150~950V	
Starting voltage	200Vdc	
Max. input current per string	8×20A	
Max. short-circuit current per string	8×30A	
MPPT voltage range	150~850Vdc	
MPPT quantity/ strings per MPPT	4/2+2+2+2	
Grid parameters		
Rated input/output power	30kW	
Voltage range	120/208V, 3L+N+PE	
Rated input current	83.3A	
Rated output current	83.3A	
Power factor	>0.99(0.8 leading~0.8 lagging)	
THDi	<3%@rated power	
Diesel engine parameters		
Rated power	30kW	
Voltage range	104~127V(L-N)/208~254V(L-L)	
Rated current	83.3A	
Backup parameters		
Rated power	30kW	
Rated voltage	120/208V, 3L+N+PE	
Rated frequency	50Hz/60Hz	
Rated current	83.3A	