

C&I PV-BESS-EV CHARGING INTEGRATED SOLUTION

DEYE WINTER MS SERIES



Intelligent Cloud Platform

- Customizable load algorithmic modules
- 24-hour online O&M
- Battery life and safety warning
- Device cloud interconnection



Ultimate Safety

- 3+3 Fire Protection System
- 3+3 Electrical Safety Safeguards
- AC Leakage & DC Insulation Detection
- High-voltage interlocking, preventing loaded arc operation



Versatile Expansion

- PCS/BMS/EMS All-in-one modular design
- Support up to 10 cabinets in parallel
- Support 2/4/6/8-hour energy storage applications
- Higher energy density to reduce footprint
- PV and BESS DC Coupling



Multiple Application Scenarios

- Peak-to-Valley arbitrage/Peak-to-Valley shifting
- Virtual power plant ready
- Off-grid operation (Islands, communication base stations, etc.)

5 Level

Extreme
safety protection

Detection, early warning,
smoke exhaust, fire fighting,
explosion venting

430kWh

2/4/6/8-hour energy
storage system

420kW

DC fast charging
DC coupling for
ESS and charging

Model	MS-L430-2H4 (AC BESS)		MS-L430-4H4 (AC BESS)	
System parameter				
Operating Temperature	-30℃ ~ +55℃			
Storage Temperature	-30℃ ~ +60℃			
Humidity	0 ~ 95% (No condensation)			
Type of cooling	Liquid cooling			
Fire Suppression	Aerosol, Water			
Ingress Protection	IP54			
Anticorrosion grade	≥C4			
Altitude	≤2000m			
Communication	RS485, Modbus TCP, DIDO			
Weight	≤5050kg		≤4900kg	
Dimensions (W × D × H)	2000 × 1350 × 2480mm			
DC Data				
Battery	LiFePO ₄			
Nominal Capacity	280Ah			
Nominal Energy	430.08kWh			
Nominal DC Voltage	768Vd.c.			
DC Voltage Range	648V~876V			
Charge and discharge rate	charge 0.5P, discharge 1P		charge 0.25P, discharge 1P	
AC Data				
Nominal AC Voltage	480V (-10%~+5%)			
Rated Frequency	60Hz (±3Hz)			
Rated Power	250kW		125kW	
Maximun Power	275kW (1.1 times of rated power)		137.5kW (1.1 times of rated power)	
Power Factor	-1 ~ +1			



Model

MS-L430-BC-4 (DC BESS)

System parameter

Operating Temperature	-30°C ~ +55°C
Storage Temperature	-30°C ~ +60°C
Humidity	0 ~ 95% (No condensation)
Type of cooling	Liquid cooling
Fire Suppression	Aerosol, Water
Ingress Protection	IP54
Anticorrosion grade	≥C4
Altitude	≤2000m
Communication	RS485, Modbus TCP, DIDO
Weight	≤4760kg
Dimensions (W × D × H)	2000 × 1350 × 2480mm

DC Data

Battery	LiFePO ₄
Nominal Capacity	280Ah
Nominal Energy	430.08kWh
Nominal DC Voltage	768Vd.c.
DC Voltage Range	636Vd.c ~ 876Vd.c.
Charge and discharge rate	charge 0.5P, discharge 1P

Model

MS-DC480-4 (480kW DC charge power cabinet)

DC Input Data

Input standard	DC+ / DC- / PE
DC input voltage range	200Vdc ~ 850Vdc
DC input current range	≤640A
DC rated input power	420kW @400Vdc≤Vin≤850Vdc

DC Output Data

Dc output voltage range	150vdc~1000vdc
Dc output current range	8 branches, max 250A each

Environmental Conditions

Operating Temperature Range (°C)	-30°C ~ +55°C (derating above 50°C)
Storage Temperature (°C)	-40°C to +60°C
Humidity	≤ 95%RH, no condensation
Cooling	Forced air cooling
Altitude	≤2000m (Derated when higher than 2000m)
IP Rating of Enclosure	≥IP54

Other Parameter

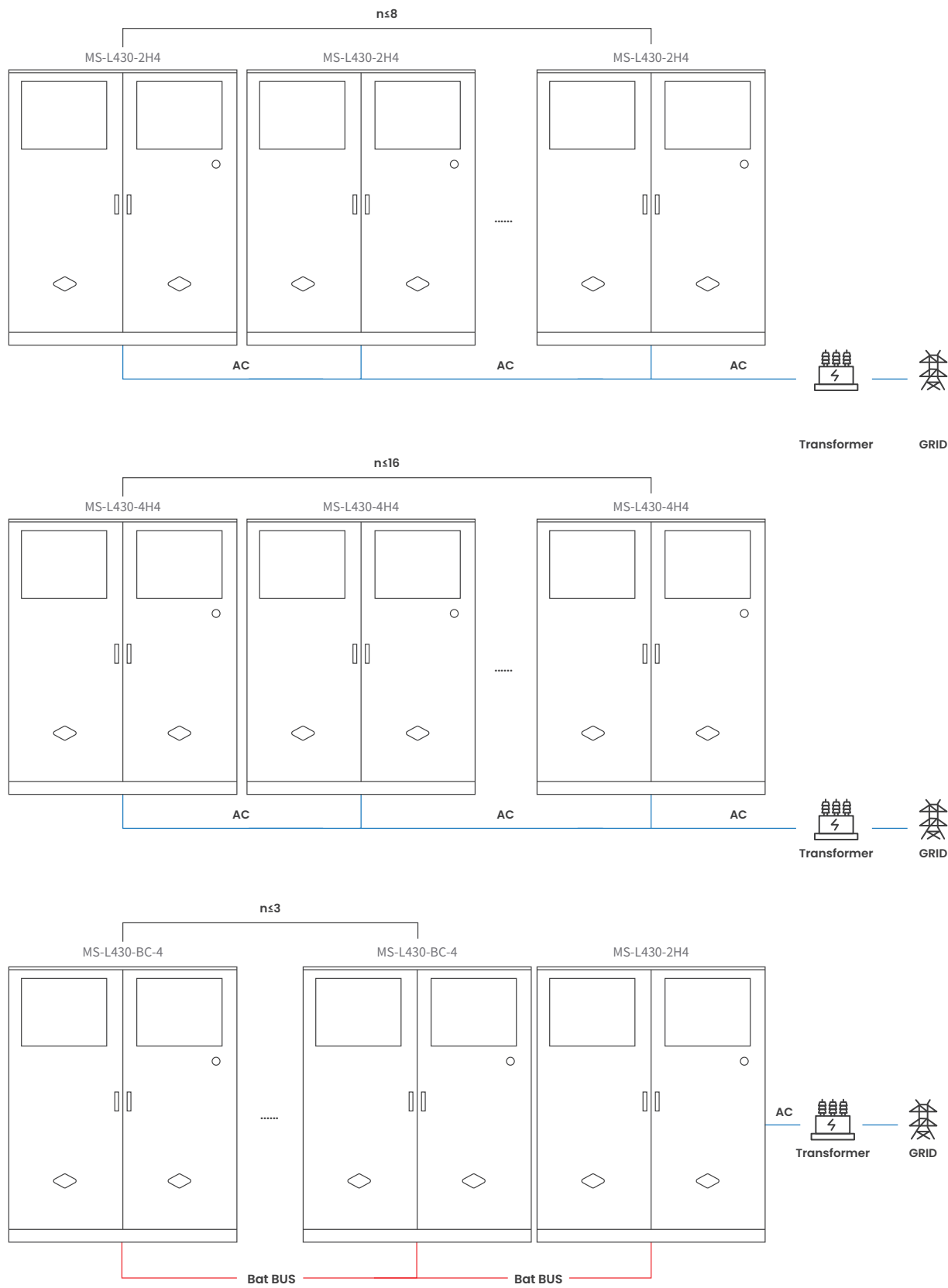
Certification	UL2202, UL2231, UL991, UL1998
Efficiency	≥ 97.5%, @full load
Dimension (W × H × D, mm)	1250 × 2450 × 1000mm
Approximate Weight (kg)	600kg

Model		MS-DCC180-4 (DC charging terminal)
DC Input Data		
DC Input Voltage Range (V)		150Vdc ~ 1000Vdc
Input number		2 DC inputs
DC Output Data		
Output interface		1 pile 2 guns, each gun 180kW charging power, support the US standard CCS1 and Tesla charging standard interface
DC Output range		50Vdc ~ 1000Vdc
Max. Output Power (W)		Single gun Max 180kW @300 ~ 1000Vdc (conventional terminal)
Max. Output Current		Single gun Max. 250A
Environmental Conditions		
Operating Temperature Range (°C)		-30°C ~ +55°C (derating above 50°C)
Storage Temperature (°C)		-40°C ~ +60°C
Humidity		≤ 95%RH, no condensation
Cooling		Natural cooling
Altitude		≤2000m
IP Rating of Enclosure		≥IP54
Other Parameter		
Dimension (W × H × D, mm)		1100 × 2200 × 400mm
Approximate Weight (kg)		280kg



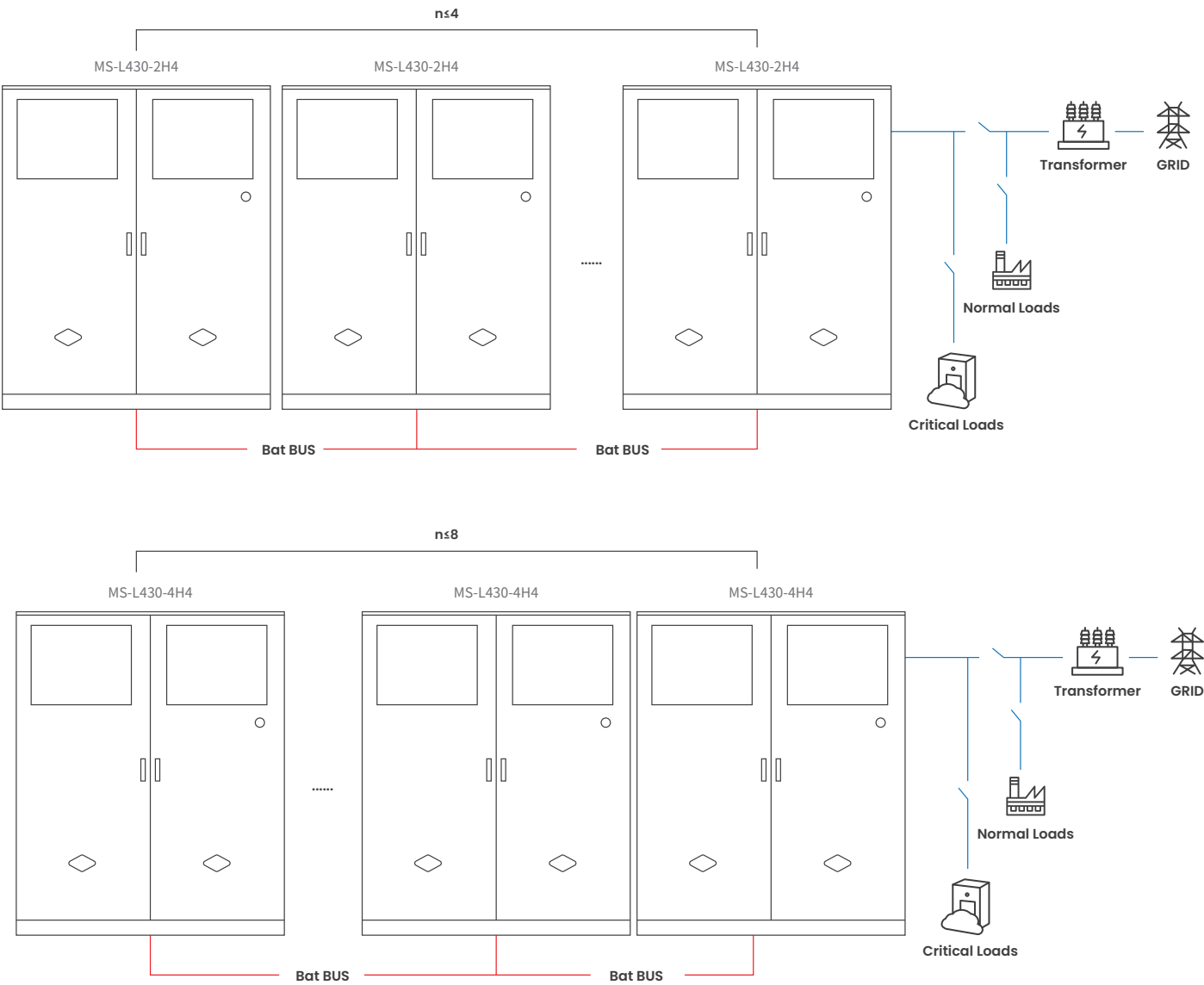
For ESS on-grid application

Support max 8 MS-L430-2H4 parallel (on-grid)



For ESS off-grid application

Support max 8 MS-L430-2H4 parallel (on-grid) , max 4 MS-L430-2H4 parallel(off-grid)



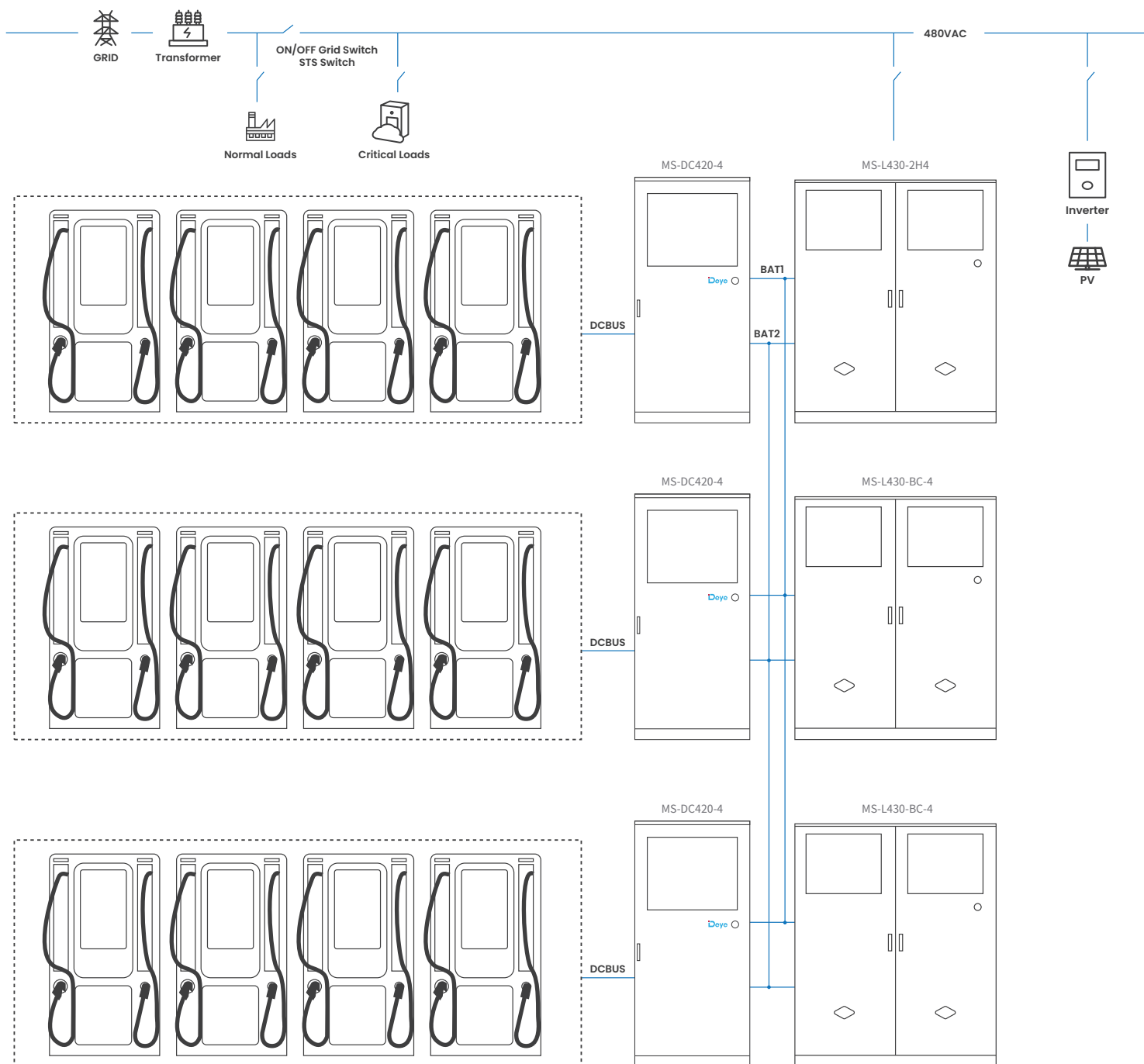
Integrated energy storage and charging application

Support up to four sets of double-gun charging terminals

Split type DC fast charging, With a maximum DC charging power of up to 180kW for a single gun

Supports flexible charging power distribution Adaptable to both TESLA and CCS1 charging interfaces

To solve the problem of insufficient capacity of new energy vehicles to access the distribution grid





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