

Galaxy 241L+50kW Hybrid Inverter

50kW/241kWh Liquid-Cooling Storage Cabinet



www.ffdpowerng.com

Features

- Liquid Cooling
- Active Balancing
- Seamless On-grid/Off-grid Transition
- PV Max 100kW
- ON/OFF Grid Module
- Easy for Installation
- Easy for Transport

Innovated All-In-One BESS



Smart & Reliable Battery Management

- Active balancing
- Support black start
- Real-time monitoring

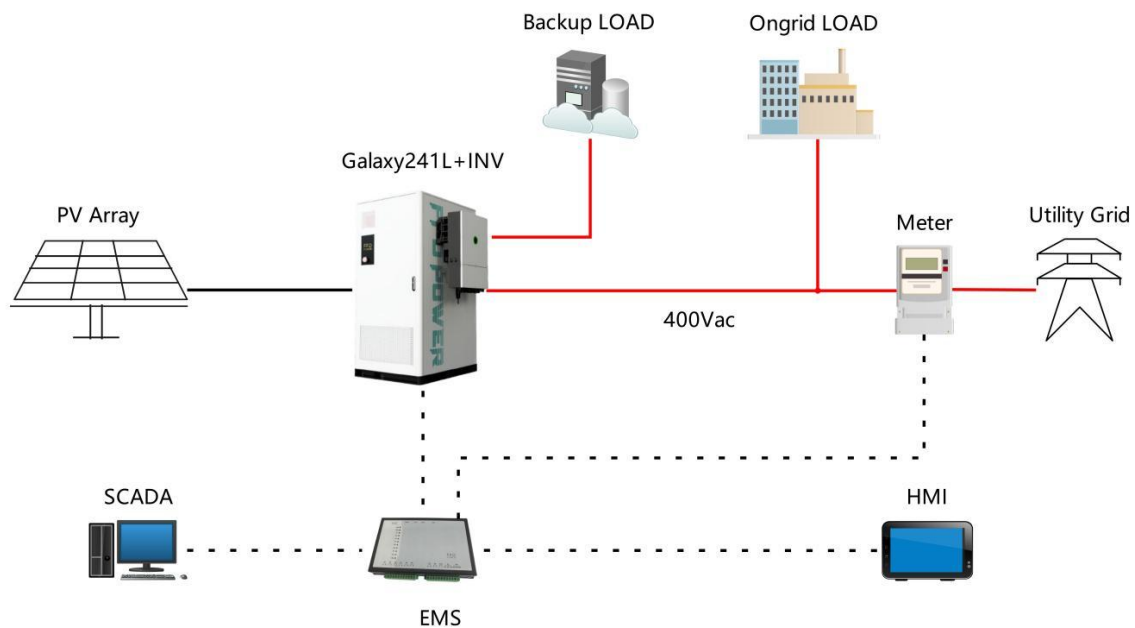
Advanced Thermal & Structural Design

- High-Efficiency liquid cooling system
- Easy transport, loading, and installation
- Aerosol fire suppression integrated
- IP54 protection

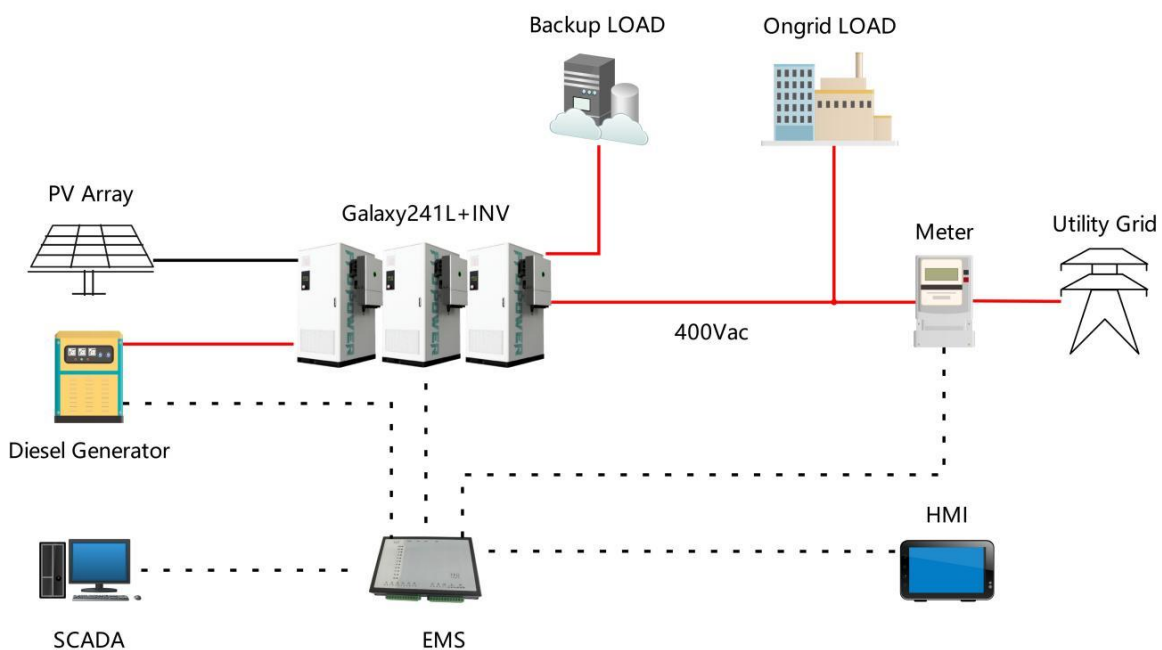
Smart Hybrid Inverter

- Matching high power(210) PV panel
- 6 mppt, support 200% oversizing
- Parallel connection up to 10pcs
- Supports UPS-level on and off-grid switching
- Supports accessing to DG(diesel generator)
- IP 66 protection

Storage Cabinet System Applications



400V BESS Solution for PV Self-Consumption Optimization



Advanced 400V BESS for Microgrid Applications

Battery Cabinet Technical Parameters

Galaxy 241L-AIO-2H Battery Parameter	
Cell Type(Ah)	LFP, 314Ah
Battery Configuration	1P48S*5
Battery At DC Side (kWh)	241 kWh
System Output Voltage Range (V)	672V~840V
Dimensions Of Battery Unit (W *H * D) mm	1510*2230*1335mm
Weight Of Battery Unit (kg)	≈2750kg
Degree Of Protection	IP54
Corrosion Protection Leve	C 3
Relative Humidity	0 ~ 85 % (non-condensing)
Operating Temperature Range	-20°C ~ 60°C (> 45°C derating)
Max. Working Altitude (m)	3000 m
Cooling Concept Of Battery Cabinet	Smart liquid cooling
Fire Safety Equipment	Combustible gas detection and ventilation systems, aerosol fire suppression

50kW Hybrid Inverter Parameters

MODEL	CH2-50K-T6-P
DC Input	
Max. PV Array Power (Wp) @STC	100000
Max. DC Voltage (V)	1000
MPPT Voltage Range (V)	180–850
Rated DC Voltage (V)	600
Start Voltage (V)	200
Max. DC Input Current (A)	6*45
Max. DC Short Circuit Current (A)	6*55
Number of Strings per MPPT	2
Battery Parameters	
Battery Type	LiFePO4
Battery Voltage Range[V]	180 ~ 860
Max.Charging/Discharging Current [A]	150
AC Output (On-Grid)	
Rated AC Power (W)	50000
Max. Apparent Power (VA)	55000
Rated Output Current (A)@230Vac	72.5
Max. Output Current (A)@220V/230V	79.8
Rated AC Voltage/Range (V)	3+N+PE, 380/400
Rated Output Frequency/Range (Hz)	50 Hz: 45–55; 60 Hz: 55–65
Power Factor (cos φ)	0i–1–0c
Total Harmonic Distortion (THDi)	<3%
AC Input (On-Grid)	
Rated AC Voltage (V)	3+N+PE, 380/400/415
Rated Input Frequency (Hz)	50, 60
Max. Input Current (A)	200
AC Input (Generator)	
Max. Input Power (W)	138000
Max. Input Current (A)@230V	200
Rated Input Voltage (v)	3+N+PE, 380/400
Rated Input Frequency/Range (Hz)	50 Hz: 45–55; 60 Hz: 55–65
AC Output (Back-up)	
Max. Output Power (VA)	55000
Peak Output Apparent Power (VA)	75000, 5s
Rated AC Voltage (V)	3+N+PE, 380/400
Rated Output Frequency/Range (Hz)	50 Hz: 45–55; 60 Hz: 55–65
Output THDu (@ Linear Load)	<3%

50kW Hybrid Inverter Parameters

Efficiency	
Max. Efficiency	≥98.0%
Max. Battery to AC Efficiency	96.0%
Protection	
PV Reverse Polarity Protection	Integrated
Anti-islanding Protectio	Integrated
AC Overcurrent Protection	Integrated
AC Short Circuit Protection	Integrated
AC Overvoltage Protection	Integrated
DC switch	Integrated
DC Surge Protection	II
AC Surge Protection	II
AFCI	Integrated
RSD	Optional
General Parameters	
Communication	Wi-Fi/Ethernet/CAN/RS485
Topology	Transformerless
Operating Temperature Range	-40°C to +60°C (45°C to 60°C with derating)
Cooling Method	Smart Fan Cooling
Ambient Humidity	0-100% Non-condensing
Altitude [m]	≤3000
Ingress Protection	IP66
Dimensions [H*W*D] [mm]	630*900*290
Weight [kg]	89
Warranty [Year]	5/10



+86 13377773990



sales@ffdtec.com



@FFD POWER



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www.ffdpower.com



FFD POWER leads the way in manufacturing battery energy storage systems. Concurrently, we offer comprehensive turnkey solutions, encompassing both DC and AC coupled systems. Our solutions cover a spectrum of applications, including energy backup, peak shaving, load shifting, transformer enhancement, and energy arbitrage. Services provided span system design, integration, training, installation, and warranty, offering a complete approach to diverse energy storage needs. With offerings ranging from 5 KWh to 100 MWh, our turnkey solutions signify a holistic solution for various energy storage requirements.

