DATASHEET

INVERGY
UPGRADING POWER FOR BETTER FUTURE

General Specification	INV-ESS-512-100 AH	INV-ESS-665-100 AH
Product Type	Rechargeable Li-ion Battery	
Model Number	512 V/100 Ah	INV BESS 665.6 V/100 Ah
Rated Voltage (V)	512 V	665.6 V
Rated Capacity (Ah)	100 Ah	
Rated Energy (kWh)	51.2 kWh	66.56 kWh
Charge-Discharge Rate (C)	0.5 C	
Depth of Discharge (%)	80%	
Operating Temperature (°C)	-20 to 60 °C	
Warranty	5 Years (0.5C Charge/ Discharge, @80% DoD, @25 °C)	
Cooling method	Forced Air Cooling (Fans on each pack)	
Electrical Characteristics		
Max. Charge Voltage (V)	584 V	759.2 V
Min. Discharge Voltage (V)	448 V	520 V
Max Continuous Charge Current (A)	50 A	
Max. Continuous Discharge (A)		50 A
Operating Voltage Range (V)	584 V - 448 V ± 0.5	520 V - 759.2 V ± 0.5
Charge Temp (°C)	(<85 % RH)	
Discharge Temp (°C)	-20 to 60 °C (<85 % RH)	
Protection Feature		
Over Temp Protection	Yes	
Overcharge Protection	Yes	
Overdischarge Protection	Yes	
Short Circuit Protection	Yes	
Cell Specification		
Cell Type	LFP Prismatic	
Cell Model	3.2 V 100 Ah	
Nominal Voltage (V)	3.2 V	
Rated Capacity (Ah)	100 Ah	
Voltage at End of Charge (V)	3.65 V	
Voltage at End of Discharge (V)	2.5 V	
Max Charge Rate (C)	0.5C	
Max Discharge Rate (C)	0.5C	
Cell Weight (kg)	2.3 kg	
Pack Specification		
Pack configuration	16S1P	
Pack Nominal Voltage (V)	51.2V	
Pack Capacity (Ah)	100 Ah	
Pack Energy (kWh)	5.12 kWh	
Rack Specification		
Total Packs	10 Packs	13 Packs
Rack Nominal Voltage (V)	512 V	665.6 V
Rack Capacity (Ah)	100 Ah	
Rack Energy (kWh)	51.2 kWh	66.56 kWh
Cabinet Specification		
No of Racks	1	
Features		
Battery Management System (BMS)	Cell-Level Monitoring: Manages voltage, current and temperature for every cell/module. State of Health (SOH): Estimates and reports the degradation status. Safety Logic: Executes emergency shutdown on over-current, over- temperature or fault detection.	
Enclosure & Protection	IP Rating: IP55 (for outdoor environmental protection). Integrated Thermal Management: Ensure cells operate within the optimal temperature.	
Safety & Protection	Over Temperature, Overcharge, Overdischarge & Short Circuit protection.	
Control & Communication	Monitoring Communication: Standard industrial protocols (eg. Modbus TCP/IP , RS485, CAN)	