

SOLVA AC418



Integrated
PCS



Integrated
Liquid Cooling



Modular Pack
Architecture



Built-in
Fire Suppression

DC-SIDE PARAMETERS

Cell Capacity [Ah]	314
Battery Chemistry	Lithium Iron Phosphate (LiFePO4)
Total Energy Capacity [kWh]	418
System Depth of Discharge [%]	90
Cycle Life	≥8000 cycles
Nominal Voltage [V]	1331.2
Max/Min. Operating Voltage [V]	1497.6/1164.8
Max. Charge/Discharge Rate	0.5P
Cell Configuration	1P52S per module, 8 modules per pack
Battery Pack Thermal Management System	Liquid Heating and Cooling

AC CONNECTION PARAMETERS

Integrated PCS rated power [kW]	215
System Output AC Voltage [V]	690 (-15% to +15%)
Rated Frequency [Hz]	50/60
AC Connection Method	(3P+N+PE) Three-Phase, Four-Wire System
Power Factor Range	Adjustable from 0.99 leading to 0.99 lagging
Total Current Harmonic Distortion (THD-I) [%]	<3 (at Rated Power)
Isolation Type	Non-isolated
AC Cable Entry	Bottom Entry

LIQUID THERMAL MANAGEMENT

Power Supply	1/PE AC 220V 50/60Hz
Cooling Capacity [kW]	8
Heating Capacity [kW]	2

SYSTEM PARAMETERS

System Total Efficiency [%]	89%
Dimensions (H×W×D) ±5 [mm]	2550x1350x1350
Weight [Tons]	4.3
Ingress Protection	IP55
Corrosion Protection Class	C4 (C5 optional)
Inverter Thermal Management System	Intelligent Air Cooling
Monitoring and Control	Built-in Cabinet Monitoring System (CMS) interfaces with site EMS for coordinated control, monitoring, and logging of BMS, PCS, and thermal systems. Includes local data storage and cloud synchronisation for remote access.
Communication Interface	RS485 (EMS), CAN (BMS), LAN (Network)
Parallel Configuration	On-Grid mode supports up to 20 cabinets in parallel. Off-Grid mode supports up to 8 cabinets in parallel.
Protection	AC overcurrent protection, AC overvoltage protection, AC short-circuit protection, anti-islanding protection, reverse polarity protection (DC side)
Fire Suppression System	Aerosol and fire hose adaptor for full water flooding

ENVIRONMENTAL PARAMETERS

Operating Temperature [°C]	Charging: 0 to 55; Discharging: -20 to 55
Operating Humidity [%]	≤95
Max. Operating Altitude [m]	Full load up to 2000m; above that, derate 10% per 1000m up to 4000m

GENERAL DATA

Standards & Certifications	UN38.3 (optional version with: IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4)
Standard Warranty	5 years (Warranty extension available)

Note: Images shown are representative only; actual appearance may vary by configuration.

Speak to Our Team

Contact us for project enquiries, technical guidance or additional product information.

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