



⚡ Low Voltage
RW-F5.3-2H3

All-in-one Energy Storage System



All-in-one design, integrated 3kW hybrid inverter and 5.3kWh LFP battery, safety and long lifespan.



Comfortable and easy control via App, PC or Touch-Display.



Leading smart application: peak-shaving, smart load, AC couple etc.



Flat design, wall-mounted, saving installation space, quick and easy installation.



Fast switching time of 4ms, ensuring your energy security.



Easy to expand, support multiple parallel, Max.16 units (48kW/84.8kWh). Also support expansion of Deye 5.3kWh battery, Max. 31 batteries expansion, Max. capacity of 164.3kWh.



Built-in Intelligent BMS, providing complete protection. Natural cooling, IP65, wide temperature range: -20°C to 55°C.

Model		RW-F5.3-2H3
AC Technical Specification		
Nominal Input/Output Power/UPS Power	3,000/3,000W	
AC Input/Output Frequency and Voltage	50Hz (45Hz ~ 55Hz), L/N (PE), 220/230 Vac	
Grid Type	Single phase	
Peak Power (off grid)	2 time of rated power, 10s	
Power Factor Adjustment Range	0.8 leading to 0.8 lagging	
Power Factor	1	
DC injection current	THD<3% (Linear load<1.5%) mA	
DC Technical Specification		
Max. PV Input Power	3,900W	
Max. PV Input Current	15A	
Rated PV Input Voltage	300 (125 ~ 450) Vdc	
Start Up DC Voltage	125Vdc	
MPPT Voltage Raneg	150 ~ 425Vdc	
Max. PV Short-circuit Current	18A	
Number of MPPT	1	
Battery Chemistry	LiFePO ₄	
Battery Nominal Voltage	51.2V	
Battery Energy Configuration	5.32kWh	
Max. Charging/Discharging Current	75A	
Battery Operating Voltage	43.2V ~ 57.6V	
Battery Cycle Life	≥6,000 (@25°C±2°C, 0.5C/1C, 70%EOL)	
Other Technical Specification		
Dimension (W × D × H)	600 × 200 × 700mm	
Weight Appr.	76.5kg	
Operating Temperature Range	Inverter: -40°C ~ 60°C (>45°C derating), Battery Charge: 0 ~ 55°C/Discharge: -20°C ~ 55°C	
Display	LCD	
Relative Humidity	15% ~ 85% (No Condensing)	
Safety EMC/Standard	IEC62619, UN38.3, IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2, IEC/EN 61000-6-3, IEC/EN 61000-6-4	
Grid Regulation	VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150	
Max. Efficiency	97.60%	
Max. charging/discharging efficiency	95.50%	
IP Rating of Enclosure	IP65	
Installation Style	Wall-Mounted	
Warranty	10 years	