

RESIDENTIAL ESS SOLUTION ALL-IN-ONE ENERGY STORAGE SYSTEM

DEYE SPRING RW SERIES



Enhanced Reliability

- Built-in Intelligent BMS, providing complete protection
- Natural cooling, IP65, wide temperature range: -10 °C to 55 °C



Smart Application

- Peak-shaving, smart load, AC couple etc.
- Fast switching time of 4ms, ensuring your energy security



Flexible Expansion

- Max.16 units in parallel (80kW/84.8kWh) Support expansion of Deye 5.3kWh LV battery, Max. capacity of 164.3kWh



All-in-One Design

- Integrated 5kW hybrid inverter and 5.3kWh LFP battery, safety and long lifespan



Easy Installation

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



Intelligent Control

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

≥6000

Cycles

4ms

Fast Switching Time

70%

EOL

IP65

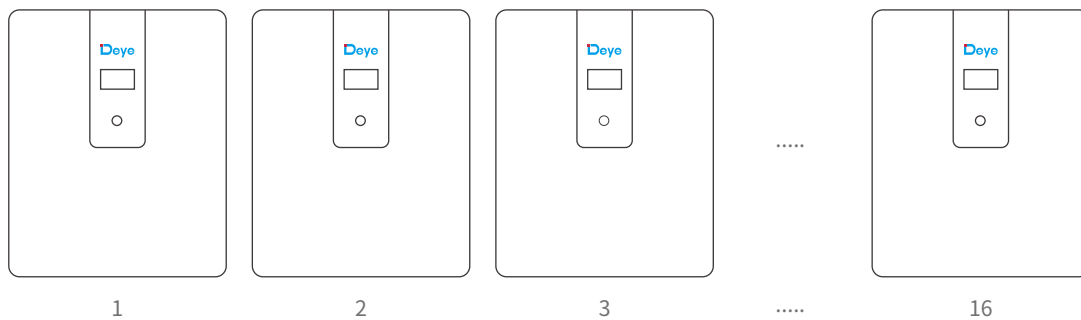
Rated for indoor and outdoor use

Model	RW-F5.3-1H3
AC Technical Specification	
Rated AC Input / Output Active Power (W)	5000 / 5000
Max AC Input / Output Apparent Power (VA)	5500
Peak Power (off grid)	2 time of rated power, 10s
AC Output Rated Current (A)	22.8 / 21.8
Max. AC Current (A)	25 / 24
Max Continuous AC Passthrough (grid to load) (A)	35
Rated Input / Output Voltage / Range (V)	220V / 230, 0.85Un-1.1Un
Rated Input / Output Grid Frequency/Range (Hz)	50Hz / 45Hz - 55Hz, 60Hz / 55Hz - 65Hz
Grid Connection Form	L+N+PE
Power Factor	0.8 leading to 0.8 lagging
Total Harmonic Distortion (THDi)	<3% (of nominal power)
DC injection current (mA)	<0.5% In
DC Technical Specification	
Max. PV Access Power (W)	10000
Max. PV Input Power (W)	8000
Max. PV Input Voltage (Vdc)	500
Start Up PV Voltage (Vdc)	125
MPPT Voltage Range (Vdc)	150 ~ 425
Full Load MPPT Voltage Range (Vdc)	300 ~ 425
Rated PV Input Voltage (Vdc)	370
Max. Operating PV Input Current (A)	18+18
Max. PV Input Short-circuit Current (A)	27+27
Number of MPP Trackers	2
No. of Strings Per MPP Tracker	1 + 1
Battery Chemistry	LiFePO ₄
Battery Nominal Voltage (V)	51.2
Battery Energy Configuration (kWh)	5.32
Max. Charging / Discharging Current (A)	100
Battery Operating Voltage (V)	44.8 ~ 57.6
Battery Cycle Life	≥6000 (@25°C±2°C, 0.5C / 0.5C, 70%EOL)
Other Technical Specification	
Dimension (W × D × H, mm)	616 × 191 × 690 (Excluding connectors and brackets)
Weight Appr. (kg)	71
IP Rating of Enclosure	IP65
Operating Temperature Range (°C)	-10°C ~ 55°C
Permissible Ambient Humidity	0~100%
Inverter Topology	Non-Isolated
Over Voltage Category	OVC II (DC), OVC III (AC)
Type Of Cooling	Natural Cooling
Noise (dB)	<30
Display	Touch LCD
Monitor Mode	WIFI, Bluetooth
Installation Style	Wall-Mounted, Floor-Mounted
Max. Efficiency	97%
Max. charging / discharging Efficiency	95.5%
MPPT Efficiency	>99%
Safety EMC / Standard	IEC / EN 61000-6-1 / 2 / 3 / 4, IEC / EN 62109-1, IEC / EN 62109-2
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105
Certification	UN38.3, IEC62619
Warranty	5/10 years (the Warranty Period Depends the Final Installation Site. More Info Please Refer to Warranty Policy)

Residential ESS Solution

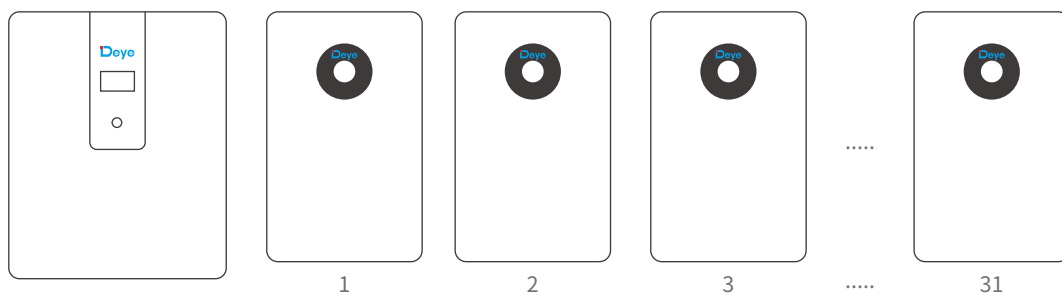
Maximum support for 16 units in parallel

RW-F5.3-1H3 80kW/84.8kWh

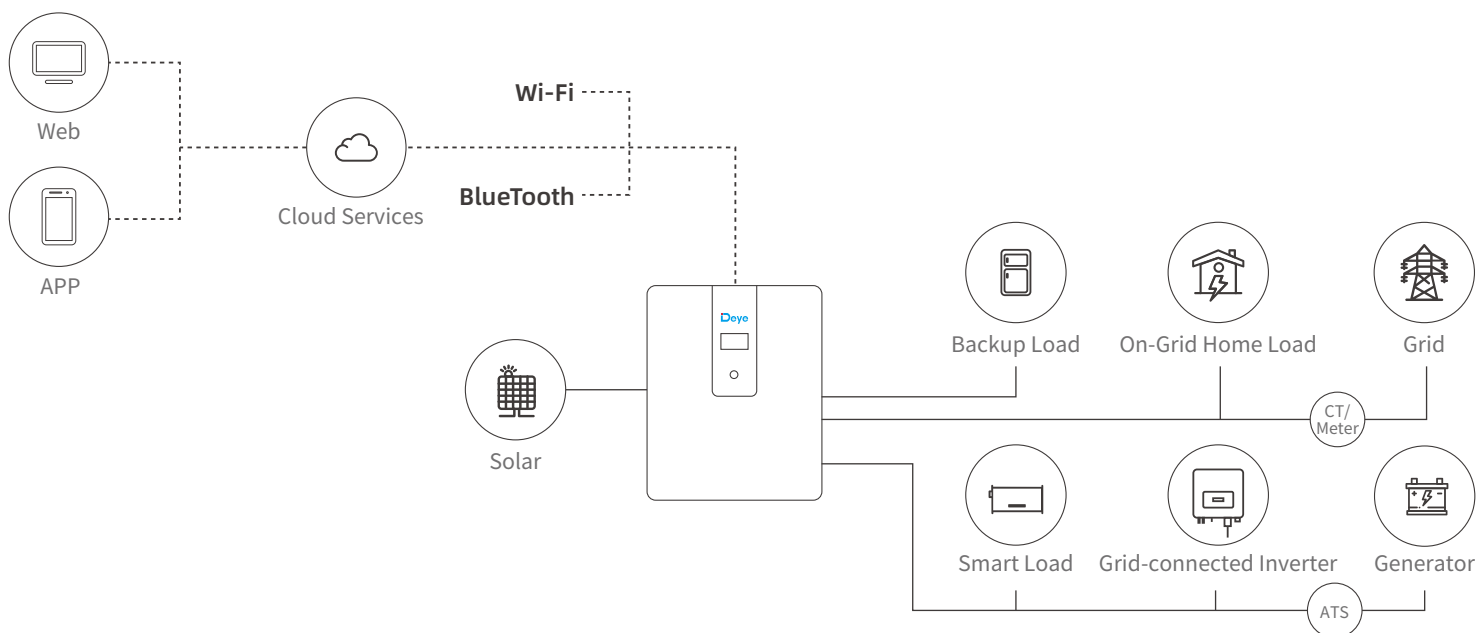


Maximum support for 31 Deye RW-L5.3/L5.1 in parallel

RW-L5.3 and RW-F5.3-1H3 164.3kWh



System Application Topology Diagram





To Make ESS Better



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