

YOU HAVE THE POWER



Room 209, Building 1, Lejiahui Business Plaza, High-tech Zone,
Suzhou City, Jiangsu Province China

+86 (0) 512 65100899

info@johnrayenergy.com

📍 China 📍 Thailand 📍 Spain



www.johnrayenergy.com



COPYRIGHT @ SUZHOU JOHN RAY SOLAR ENERGY CO., LTD. 2023. ALL RIGHTS RESERVED

JOHN RAY-202307-EN-THE TECHNICAL PARAMETERS MAY BE CHANGED, AND THE FINAL INTERPRETATION RIGHTS FOR THIS PRINTING BELONG TO JOHN RAY



2023 CATALOGUE

COMPANY PROFILE



Established in 2019, JOHNRAY SOLAR ENERGY has been a dedicated provider of PV inverters and energy storage batteries. With all the mainstream certifications covered (e.g. CE, TUV, UL), you can rest assured of our professional manufacturing ability.

Committed to 'glocalization', JOHNRAY has set up representatives in multiple countries (e.g. Spain, America and Thailand), to provide localized service support. Worldwide distributors help deliver our products to residential, commercial and industrial (C&I) end-users.

Our mission is to become a world-leading brand for solar energy, enabling our customers and the next generation to enjoy a clean and sustainable future. You have the power!



BEST QUALITY

High technology and constant innovation.



OEM/ODM

Design and customization department.



GLOBAL NETWORK

International service and warehouses.



DIRECT ATTENTION

24-hour sales and after-sales service.



GLOBAL INSTITUTIONS



Johnray Solar Energy Suzhou

Room 209, Building 1, Lejiahui Business Plaza, New District, Jiangsu Province, P.R China

Tel: +86 (0)512 65100899

Email: info@johnrayenergy.com



Johnray Solar Energy Spain

C/ Camino de Alcazar, nave 14 13700, Tomelloso Ciudad Real, España

Tel: +34 678 18 26 56 / +34 675 18 27 68

Email: info@johnrayenergy.com



Johnray Solar Energy Thailand

100 moo7 Tambon Lahan Amphoe Bang Bua Thong Chang Wat 11110 Nonthaburi, Thailand

Tel: +66 0943909991

Email: info@johnrayenergy.com



JRW48100
Wall Mounted
LiFePO4 Battery
 5.12kWh



Max.8 modules in Parallel



Long life cycle



Battery Management System

JRW48100 Wall Mounted LiFePO4 Battery

DATASHEET

- LFP (LiFePO4) chemistry.
- Residential and small commercial application.
- Wall mounted, free stand and rack mounted installation.
- Supports up to 8 modules in parallel.



Model	JRW48100
Nominal Energy:	5.12 kWh
Nominal Voltage:	51.2 V
Operating Voltage Range:	43.2-57.6 V
Nominal Capacity:	100 Ah
Max. Charge/Discharge Current:	50/70 A
Max. Output Power:	3584 W
Module Connection:	1-8 in Parallel
Charge/Discharge Temperature:	0-55°C / -10-55°C
Recommended DOD:	85%
Cycle Life:	>6000 Cycles (85% DOD / 25°C@0.5C)
Communication:	CAN / RS485
Certifications:	CE, CB, RoHS, IEC, IEC62619, IEC61000, UN38.3
Dimensions (WxHxD):	585x178x470 mm
Weight:	50±1kg





L5100
Wall Mounted LiFePO4 Battery
 5.12kWh



Max.16 modules in Parallel



Plug and play



High usable power capacity

L5100 Wall Mounted LiFePO4 Battery

DATASHEET

- LFP (LiFePO4) chemistry.
- Residential and small commercial application.
- Wall mounted, free stand and rack mounted installation.
- Supports up to 16 modules in parallel.



Model	L5100
Nominal Energy:	5.12 kWh
Nominal Voltage:	51.2 V
Operating Voltage Range:	43.2~57.6 V
Nominal Capacity:	100 Ah
Max. Charge/Discharge Current:	50 A/70 A
Max. Output Power:	3584 W
Module Connection:	1~16 in Parallel
Charge/Discharge Temperature:	0~55°C / -10~55°C
Recommended DOD:	85%
Cycle Life:	>6000 Cycles (85% DOD / 25°C @ 0.5C)
Communication:	RS485
Certifications:	Reach, CE, CB, RoHS, IEC62619, IEC61000, UN38.3
Dimensions (WxHxD):	580 x 440 x 130 mm
Weight:	50±1 kg





JRH25-S4~S10

Stackable LiFePO4 Battery

10.24kWh / 12.80kWh / 15.36kWh / 17.92kWh / 20.48kWh / 23.04kWh / 25.60kWh



Max.10 modules in series

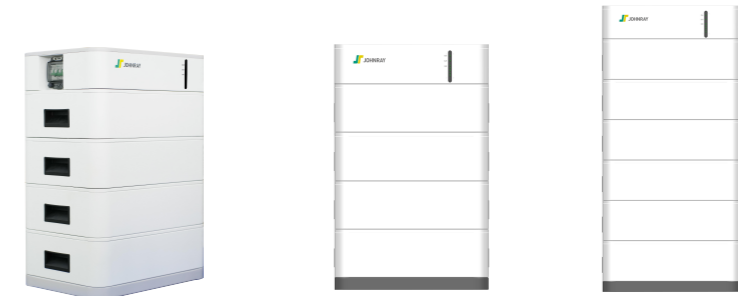


Plug and play



High usable power capacity

- LFP (LiFePO4) chemistry.
- Residential and commercial application.
- Stackable installation.
- Flexible voltage and energy configurations.



Model	JRH25-S4	JRH25-S5	JRH25-S6	JRH25-S7	JRH25-S8	JRH25-S9	JRH25-S10
Nominal Energy:	10.24 kWh	12.80 kWh	15.36 kWh	17.92 kWh	20.48 kWh	23.04 kWh	25.60 kWh
Nominal Voltage:	204.8 V	256.0 V	307.2 V	358.4 V	409.6 V	460.8 V	512.0 V
Nominal Capacity:	50 Ah						
Modules:	4 + PDU	5 + PDU	6 + PDU	7 + PDU	8 + PDU	9 + PDU	10 + PDU
Connection:	1P64S	1P80S	1P96S	1P112S	1P128S	1P144S	1P160S
Operating Voltage Range:	172.8~230.4 V	216.0~288.0 V	259.2~345.6 V	302.4~403.2 V	345.6~460.8 V	388.8~518.4 V	432.0~576.0 V
Max. Charge/Discharge Current:	26 A/35 A						
Charge/Discharge Temperature:	0~55°C / -10~55°C						
Cooling Method:	Natural Cooling						
Recommended DOD:	85%						
Cycle Life:	>6000 Cycles (85% DOD / 25°C @ 0.5C)						
Communication:	CAN						
Certifications:	Reach, CE, CB, RoHS, IEC62477, IEC61000, IEC62619, UN38.3						
Dimensions (WxHxD):	504x 350 x (737.5 / 882.5 / 1027.5 / 1172.5 / 1317.5 / 1462.5 / 1607.5)mm						
Weight:	123±1kg	148±1kg	175±1kg	201±1kg	227±1kg	254±1kg	280±1kg





JRH51-S4~S10

**Stackable
LiFePO4 Battery**

20.48kWh / 25.60kWh / 30.72kWh / 35.84kWh /
40.96kWh / 46.08kWh / 51.2kWh



Max.10 modules in series



Plug and play



High usable power capacity

JRH51-S4~S10 Stackable LiFePO4 Battery

DATASHEET

- LFP (LiFePO4) chemistry.
- Residential and commercial application.
- Stackable installation.
- Flexible voltage and energy configurations.



Model	JRH51-S4	JRH51-S5	JRH51-S6	JRH51-S7	JRH51-S8	JRH51-S9	JRH51-S10
Nominal Energy:	20.48 kWh	25.60 kWh	30.72 kWh	35.84 kWh	40.96 kWh	46.08 kWh	51.2 kWh
Nominal Voltage:	204.8 V	256.0 V	307.2 V	358.4 V	409.6 V	460.8 V	512.0 V
Nominal Capacity:	100 Ah						
Modules:	4 + PDU	5 + PDU	6 + PDU	7 + PDU	8 + PDU	9 + PDU	10 + PDU
Connection:	1P64S	1P80S	1P96S	1P112S	1P128S	1P144S	1P160S
Operating Voltage Range:	172.8~230.4 V	216.0~288.0 V	259.2~345.6 V	302.4~403.2 V	345.6~460.8 V	388.8~518.4 V	432.0~576.0 V
Max. Charge/Discharge Current:	50 A/60 A						
Charge/Discharge Temperature:	0~55°C / -10~55°C						
Cooling Method:	Natural Cooling						
Recommended DOD:	85%						
Cycle Life:	>6000 Cycles (85% DOD / 25°C @ 0.5C)						
Communication:	CAN						
Certifications:	Reach, CE, CB, RoHS, IEC62477, IEC61000, IEC62619, UN38.3						
Dimensions (WxHxD):	554 x 440 x (650 / 780 / 910 / 1040 / 1170 / 1300 / 1430)mm						
Weight:	192.7±1 kg	237.65±1 kg	282.6±1 kg	327.55±1kg	372.5±1kg	417.45±1kg	462.4±1kg





JH-3~6K-ML

Single Phase Hybrid Solar Inverter

3kW / 3.6kW / 4kW / 5kW / 6kW



Max.3 PCS in Parallel



Mobile phone control



Less than 25 dB

Model	JH-3K-ML	JH-3.6K-ML	JH-4K-ML	JH-5K-ML	JH-6K-ML
Input (PV)					
Max. Input Power:	7 kW	7 kW	9 kW	9 kW	9 kW
Voltage Range:	80~550 V				
Starting Voltage / Min. Operating Voltage:	100 V / 80 V				
MPPT Voltage Range:	90~550 V				
Number of MPPT / Strings:	2/2				
Max. Current per MPPT:	15 A				
Output (AC)					
Rated Output Power:	3 kW	3.6 kW	4 kW	5 kW	6 kW
Max. Output Power:	3.3 kVA	4 kVA	4.4 kVA	5.5 kVA	6.6 kVA
Rated Output Current:	13 A	15.6 A	18 A	22 A	26 A
Max. Output Current:	14 A	17 A	19 A	24 A	29 A
Rated output AC voltage/range:	230 V/180~280 V				
Rated Frequency:	50/60 Hz (±5Hz)				
Power Factor:	-0.8~+0.8 (adjustable)				
THDi:	<3%				
Output (Back-up)					
Peak Output Apparent Power:	4 kVA	4.6 kVA	5 kVA	6 kVA	7 kVA
Rated Output Power:	3 kVA	3.6 kVA	4 kVA	5 kVA	6 kVA
Rated Output Voltage:	208V, 220V, 230V, 240V				
Rated Frequency:	50/60 Hz				
Automatic Switch Time:	<10 ms				
Battery					
Battery Type:	Lithium / Lead-acid				
Battery Voltage Range:	42~59 V				
Charge/Discharge Current:	80 A	80 A	100 A	100 A	100 A
General Data					
Max. DC Efficiency:	98%				
European Efficiency:	97.5%				
Battery Charge/Discharge Efficiency:	94%				
Protection:	Insulation impedance, Anti-islanding, PV reverse polarity, RCD detection, Output over voltage, Output over current				
Display & Communication Interfaces:	LCD, WiFi, 4G, USB, CAN, RS485				
Operation Temperature:	-25~60°C				
Cooling Method:	Natural Cooling				
Ingress Protection Rating:	IP65				
Noise Emission:	<25 dB				
Max. Operating Altitude:	4000 m				
Topology:	Transformerless				
Standby Power Consumption:	<3 W				
Certifications:	CE, G83/G59, G98/G99, VDE0126-1-1, AS4777, AS/NZS3100, CEI 0-21, VDE-AR-N4105				
Warranty:	5 years (standard) / 10 years (optional)				
Dimensions (WxHxD):	375x365x240 mm				
Weight:	20 kg				





JH-3~10K-TH

Three Phase Hybrid Solar Inverter

3kW / 4kW / 5kW / 6kW / 8kW / 10kW



200% unbalance Load



Touch Buttons



UPS switch time < 10ms

Model	JH-3K-TH	JH-4K-TH	JH-5K-TH	JH-6K-TH	JH-8K-TH	JH-10K-TH
Input (PV)						
Max. Input Power:	5 kW	6 kW	7.5 kW	9 kW	12 kW	15 kW
Rated Voltage:	620 V					
DC Input Voltage Range:	150~1000 V					
MPPT Voltage Range:	150~850 V					
Number of MPPT / Strings:	2 / 2					
Max. Input / Short Current :	20 A x2 / 30 A x2					
Output (AC)						
Rated Output Power:	3 kVA	4 kVA	5 kVA	6 kVA	8 kVA	10 kVA
Max. AC Input Power:	4.5 kVA	6 kVA	7.5 kVA	9 kVA	12 kVA	15 kVA
Max. Output Current:	5.3 A	7 A	8.5 A	10.5 A	13.5 A	17 A
Rated Output Voltage:	230/400 V					
Rated Frequency:	50/60 Hz					
Power Factor:	1 (-0.8-0.8)					
THDi:	<3%					
Output (Back-up)						
Rated Output Power:	3 kVA	4 kVA	5 kVA	6 kVA	8 kVA	10 kVA
Rated Output Current:	4.4 A	5.8 A	7.3 A	8.7 A	11.6 A	14.5 A
Rated Output Voltage:	230/400 V					
Peak Output Apparent Power:	3.3 kVA, 60s	4.4 kVA, 60s	5.5 kVA, 60s	6.6 kVA, 60s	8.8 kVA, 60s	11 kVA, 60s
Rated Frequency:	50/60 Hz					
Automatic Switch Time:	<10 ms					
Battery						
Battery Type:	Lithium / Lead-acid					
Battery Voltage Range:	150~800 V					
Charge/Discharge Current:	30 A					
General Data						
European Efficiency:	97.5%					
Max. DC Efficiency:	98%			98.2%		
Battery Charge/Discharge Efficiency:	98%					
Protection:	Reverse Polarity, Over Current/Voltage, Anti-islanding, AC Short-circuit, Leakage Current Detection, Ground Fault Monitoring, Grid Monitoring					
Display & Communication Interfaces:	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G					
Operation Temperature:	-25~60°C					
Cooling Method:	Natural Cooling				Smart Cooling	
Ingress Protection Rating:	IP65					
Noise Emission:	<30 dB					
Max. Operating Altitude:	4000 m					
Topology:	Transformerless					
Standby Power Consumption:	<5 W					
Certifications:	NR597, G98/G99, EN50549-1, C10/C11, AS 4777, VDE-AR-N4105, VDE0126, IEC62040, IEC62109-1, IEC62109-2, EN61000-6-2, EN61000-6-3					
Warranty:	5 years (standard) / 10 years (optional)					
Dimensions (WxD):	370x497x196 mm					
Weight:	20.8 kg					





JH-12~30K-TH

Three Phase Hybrid Solar Inverter

12kW / 15kW / 17kW / 20kW / 25kW / 30kW



200% unbalance Load



Touch Buttons



UPS switch time < 10ms

Model	JH-12K-TH	JH-15K-TH	JH-17K-TH	JH-20K-TH	JH-25K-TH	JH-30K-TH
Input (PV)						
Max. Input Power:	18 kW	22.5 kW	25.5 kW	30 kW	37.5 kW	45 kW
Rated Voltage:	620 V					
Starting Voltage:	160 V					
DC Input Voltage Range:	150~1000 V					
MPPT Voltage Range:	150~850 V					
Number of MPPT / Strings:	2 / 2	2 / 3	2 / 4	2 / 4		
Max. Input / Short Current :	20 A / 30 A	20+32 / 30+48 A	32 A / 48 A	40 A / 60 A		
Output (AC)						
Rated Output Power:	12 kVA	15 kVA	17 kVA	20 kVA	25 kVA	30 kVA
Max. AC Input Power:	18 kVA	22.5 kVA	25.5 kVA	30 kVA	37.5 kVA	45 kVA
Max. Output Current:	21.5 A	27 A	30 A	32 A	40 A	48 A
Rated Output Voltage:	230/400 V					
Rated Frequency:	50/60 Hz					
Power Factor:	-0.8~+0.8					
THDi:	<3%					
Output (Back-up)						
Rated Output Power:	12 kVA	15 kVA	17 kVA	20 kVA	25 kVA	30 kVA
Rated Output Current:	17.4 A	21.8 A	24.8 A	29 A	36.3 A	43.5 A
Rated Output Voltage:	230/400 V					
Peak Output Apparent Power:	13.2 kVA, 60s	16.5 kVA, 60s	18.7 kVA, 60s	22 kVA, 60s	27.5 kVA, 60s	33 kVA, 60s
Rated Frequency:	50/60 Hz					
Automatic Switch Time:	<10 ms					
THDv:	<3%					
Battery						
Battery Type:	Lithium / Lead-acid					
Battery Voltage Range:	150~800 V					
Charge/Discharge Current:	30 A	50 A			60 A	
General Data						
Max. DC Efficiency:	98.3%			98.5%		
European Efficiency:	97.5%	97.8%		98%	98.1%	
Battery Charge/Discharge Efficiency:	98%					
Protection:	Reverse Polarity, Over Current/Voltage, Anti-islanding, AC Short-circuit, Leakage Current Detection, Ground Fault Monitoring, Grid Monitoring					
Display & Communication Interfaces:	LCD, LED, CAN, RS485, WiFi, GPRS, 4G					
Operation Temperature:	-25~60°C					
Cooling Method:	Smart Cooling					
Ingress Protection Rating:	IP65					
Noise Emission:	<30 dB			<40 dB		
Max. Operating Altitude:	4000 m					
Topology:	Transformerless					
Standby Power Consumption:	<5 W					
Certifications:	NR597, G98/G99, EN50549-1, C10/C11, AS 4777, VDE-AR-N4105, VDE0126, IEC62040, IEC62109-1, IEC62109-2, EN61000-6-2, EN61000-6-3					
Warranty:	5 years (standard) / 10 years (optional)					
Dimensions (WxHxD):	370x497x192 mm			558x535x260 mm		
Weight:	20.8 kg	29 kg			36 kg	

