RW-F10.2





Safer

Cobalt Free Lithium Iron Phosphate (LFP) Battery, safety and long lifespan and high-energy density. Low Voltage safety connection.

♦ High performance

Maximum support 1C charge and 1.2C discharge.

Maximum 6000 cycles at 90% DOD, and 10 years standard warranty.

◆ Reliable

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

◆ Flexible

Modular design, easy to expand, Max. 32 units in parallel, Max. capacity of 326kWh. Suited to residential and commercial applications for increasing the self-consumption ratio.

◆ Convenient

Battery module auto networking(No DIP switch code), easy maintenance, support Deye remotely monitoring and upgrade. Also supports Deye inverters to form a stack all-in-one system.

◆ Eco-Friendly

Use environmental protection materials, the whole module non-toxic, pollution-free.

◆ Two Mounting Methods

Flat design, Wall-mounted with Wall Bracket, Floor Stand with removable base, saving installation space.



Main Parameter	Model		RW-F10.2	
Built-in Circuit Breaker 125A 4P, 60Vdc	Main Parameter			
Nominal Capacity (Ah) 200 Nominal Voltage (V) 51.2 Operating Voltage(V) 43.2 ~ 57.6 Nominal Energy (kWh) 10.2 Usable Energy (kWh) 9.2 (90%DOD) Scalability Max. 32 pcs pack (Max. 326kWh) in parallel Rated DC Power(kW) 6 Max DC Power(kW) 12 Recommend Charge: 100 / Discharge: 100 Charge, Discharge: 200 / Discharge: 240 Discharge: 198 / Discharge: 240 Other Parameter Peak Discharge: 300 (2mins, 25°C) Other Parameter Properties 90% Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 600°760°200(Without hanging board) Weight Approximate(kg) 104 Master LED Indicator SOC state(20% ~ 100%), work state(alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge: 1 ~ 55°C / Discharge: -20°C ~ 55°C Storage Temperature 0°C ~ 35°C Humidity 5% ~ 95% Altitude ≤8000(25°C ± 2°C, 0.5C/0.5C, 90%DOD, 70%EOL) Installation Wall-Mounted, Floor-Moun	Battery Chemistry		LiFePO ₄	
Nominal Voltage (V) 51.2 Operating Voltage(V) 43.2 ~ 57.6 Nominal Energy (kWh) 10.2 Usable Energy (kWh) 9.2 (90%DOD) Scalability Max. 32 pcs pack (Max. 326kWh) in parallel Rated DC Power(kW) 6 Max DC Power(kW) 12 Recommend Charge: 100 / Discharge: 100 Charge, Discharge Recommend Charge: 198 / Discharge: 240 Discharge: 198 / Discharge: 240 Diver Parameter Peak Discharge: 300 (2mins, 25°C) Other Parameter Recommend Depth of Discharge 90% Discharge: 20°C (2mins, 25°C) Other Parameter Recommend Depth of Discharge 90% Discharge: 300 (2mins, 25°C) Obter Parameter SOC state(20% - 100%), work state(alarming, protecting) Weight Approximate(kg) 104 Master LED Indicator SOC state(20% - 100%), work state(alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge: 1 ~ 55°C / Discharge: -20°C ~ 55°C Storage Temperature 0°C ~ 35°C Humidity	Built-in Circuit Breaker		125A 4P, 60Vdc	
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Nominal Energy (kWh) 10.2 Usable Energy (kWh) 9.2 (90%DOD) Scalability Max. 32 pcs pack (Max.326kWh) in parallel Rated DC Power(kW) 6 Max DC Power(kW) 12 Recommend Charge: 100 / Discharge: 100 Charge/Discharge Max. Charge: 198 / Discharge: 240 Current (A) [1] Peak Discharge: 300 (2mins,25°C) Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 600*760*200(Without hanging board) Weight Approximate(kg) 104 Master LED Indicator SOC state(20% ~ 100%), work state(alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge: 1 ~ 55°C / Discharge: -20°C ~ 55°C Storage Temperature 0°C ~ 35°C Humidity 5% ~ 95% Altitude ≤0000(25°C±2°C,0.5C/0.5C,0%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [2] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 0.5C,0.5C, 0.5C,0.5C,0.5C	Nominal Voltage (V)		51.2	
Usable Energy (kWh) 9.2 (90%DOD) Scalability Max. 32 pcs pack (Max.326kWh) in parallel Rated DC Power(kW) 6 Max DC Power(kW) 12 Charge/Discharge Current (A) III Recommend Max. Peak Charge: 100 / Discharge: 240 Peak Discharge: 300 (2mins,25°C) Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 600°760°200(Without hanging board) Weight Approximate(kg) 104 Master LED Indicator SOC state(20% ~ 100%), work state(alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge: 1~55°C / Discharge: -20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤8000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) Instalation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period III 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 0.5C,0.5C,0.5C,0.5C,0.5C,0.5C,0.5C,0.5C,	Operating Voltage(V)		43.2 ~ 57.6	
Scalability Max. 32 pcs pack (Max.326kWh) in parallel Rated DC Power(kW) 6 Max DC Power(kW) 12 Charge: 100 / Discharge: 100 Charge: 100 / Discharge: 100 Charge: 198 / Discharge: 240 Max. Peak Discharge: 300 (2mins,25°C) Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 600°760°200(Without hanging board) Weight Approximate(kg) 104 Master LED Indicator SOC state(20% ~ 100%), work state(alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge: 1~55°C Discharge: -20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤3000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [2] 10 years Energy Throughput 32MWhi(25°C, 0.5C/0.5C, 70%EOL)	Nominal Energy (kWh)		10.2	
Rated DC Power(kW) 6 Max DC Power(kW) 12 Charge/Discharge Current (A) [¹] Recommend Max. Charge: 198 / Discharge: 240 Discharge: 300 (2mins,25°C) Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 600°760°200(Without hanging board) Weight Approximate(kg) 104 Master LED Indicator SOC state(20% ~ 100%), work state(alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge: 1~55°C / Discharge: -20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤3000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [²] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)	Usable Energy (kWh)		9.2 (90%DOD)	
Max DC Power(kW) 12 Charge/Discharge Current (A) [¹¹] Recommend Max. Peak Discharge: 100 / Discharge: 240 Discharge: 198 / Discharge: 240 Discharge: 300 (2mins, 25°C) Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 600°760°200(Without hanging board) Weight Approximate(kg) 104 Master LED Indicator SOC state(20% ~ 100%), work state(alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge: 1~55°C / Discharge: -20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤3000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [²²] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)	Scalability		Max. 32 pcs pack (Max.326kWh) in parallel	
Charge/Discharge Current (A) [¹¹] Recommend Charge: 100 / Discharge: 100 Charge (Discharge) Max. Charge: 198 / Discharge: 240 Peak Discharge: 300 (2mins, 25°C) Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 600°760°200(Without hanging board) Weight Approximate(kg) 104 Master LED Indicator SOC state(20% ~ 100%), work state(alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge: 1~55°C / Discharge: -20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤3000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [²] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)	Rated DC Power(kW)		6	
Charge/Discharge Current (A) [¹¹] Max. Peak Charge: 198 / Discharge: 240 Discharge: 300 (2mins,25°C) Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 600°760°200(Without hanging board) Weight Approximate(kg) 104 Master LED Indicator SOC state(20% ~ 100%), work state(alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge: 1~55°C / Discharge: -20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤3000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [²²] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)	Max DC Power(kW	·)	12	
Current (A) [1] Max. Charge: 198 7 Discharge: 240 Peak Discharge: 300 (2mins, 25°C) Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 600*760*200(Without hanging board) Weight Approximate(kg) 104 Master LED Indicator SOC state(20% ~ 100%), work state(alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge: 1~55°C / Discharge: -20°C ~ 55°C Storage Temperature 0°C ~ 35°C Humidity 5%~95% Altitude ≤3000m Cycle Life ≥6000(25°C ± 2°C, 0.5C/0.5C, 90%DOD, 70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [2] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)		Recommend	Charge: 100 / Discharge: 100	
Peak Discharge: 300 (2mins,25°C) Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 600*760*200(Without hanging board) Weight Approximate(kg) 104 Master LED Indicator SOC state(20% ~ 100%), work state(alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature 0°C ~ 35°C Storage Temperature 0°C ~ 35°C Humidity 5%~95% Altitude ≤3000m Cycle Life ≥6000(25°C ± 2°C,0.5C/0.5C,90%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [²] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)		Max.	Charge: 198 / Discharge: 240	
Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 600°760°200(Without hanging board) Weight Approximate(kg) 104 Master LED Indicator SOC state(20% ~ 100%), work state(alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge: 1~55°C / Discharge: -20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤3000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period ^[2] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)		Peak	Discharge: 300 (2mins,25°C)	
Dimension (W/H/D, mm) 600*760*200(Without hanging board) Weight Approximate(kg) 104 Master LED Indicator SOC state(20% ~ 100%), work state(alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge: 1~55°C / Discharge: -20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤3000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period ^[2] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)	Other Parameter			
Weight Approximate(kg) 104 Master LED Indicator SOC state(20% ~ 100%), work state(alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge: 1~55°C / Discharge: -20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤3000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [2] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)	Recommend Depth of Discharge		90%	
Master LED Indicator SOC state(20% ~ 100%), work state(alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge: 1~55°C / Discharge: -20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤3000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [2] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)	Dimension (W/H/D, mm)		600*760*200(Without hanging board)	
IP Rating of Enclosure IP65 Operating Temperature Charge: 1~55°C / Discharge: -20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤3000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [²] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)	Weight Approximate(kg)		104	
Operating Temperature Charge: 1~55°C / Discharge: -20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤3000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [2] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)	Master LED Indicator		SOC state(20% ~ 100%), work state(alarming, protecting)	
Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤3000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [2] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)	IP Rating of Enclosure		IP65	
Humidity5%~95%Altitude≤3000mCycle Life≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL)InstallationWall-Mounted, Floor-MountedCommunication PortCAN2.0, RS485Warranty Period [2]10 yearsEnergy Throughput32MWh(25°C, 0.5C/0.5C, 70%EOL)	Operating Temperature		Charge: 1∼55°C / Discharge: -20°C∼55°C	
Altitude ≤3000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [2] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)	Storage Temperature		0°C∼35°C	
Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [2] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)	Humidity		5%~95%	
Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [2] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)	Altitude		≤3000m	
Communication PortCAN2.0, RS485Warranty Period [2]10 yearsEnergy Throughput32MWh(25°C, 0.5C/0.5C, 70%EOL)	Cycle Life		≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL)	
Warranty Period [2] 10 years Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)	Installation		Wall-Mounted, Floor-Mounted	
Energy Throughput 32MWh(25°C, 0.5C/0.5C, 70%EOL)	Communication Port		CAN2.0, RS485	
	Warranty Period [2]		10 years	
Certification [3] UN38.3, IEC62619, CE, CEI 0-21, VDE2510-50, CEC	Energy Throughput	t	32MWh(25°C, 0.5C/0.5C, 70%EOL)	
	Certification [3]		UN38.3, IEC62619, CE, CEI 0-21, VDE2510-50, CEC	

^[1] The current is affected by temperature and SOC.

Introduction

This series lithium iron phosphate battery is one of new energy storage products developed and produced by Deye, it can be used to support reliable power for various types of equipment and systems.

This series is especially suitable for application scene of high power, limited installation space, restricted load-bearing and long cycle life.

This series has built-in BMS battery management system, which can manage and monitor cells information including voltage, current and temperature. What's more, BMS can balance cells charging to extend cycle life. Multiple batteries can connect in parallel for larger capacity and longer power supporting.

^[2] Conditions apply, refer to Deye Warranty Letter.

^[3] Made in China



System Topology Reference

