RW-M6.1







Safer

Cobalt Free Lithium Iron Phosphate (LFP) Battery, safety and long lifespan, high efficiency and high-power density. Intelligent BMS, providing complete protection.

Reliable

Support high discharge power. IP65, natural cooling, wide temperature range: -20°C to 55°C.

• Flexible

Modular design, easy to expand, Max. 32 units in parallel, Max. capacity of 196kWh. Suited to residential and commercial applications for increasing the self-consumption ratio.

Convenient

Battery module auto networking, Automatic IP addressing, easy maintenance, remotely monitoring and upgrade, support USB drive upgrade the firmware.

Eco-Friendly

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

Wall-Mounted

Flat design, wall-mounted, saving installation space.

Technical Data _____

| Main Parameter Battery Chemistry LiFePO4 Capacity (Ah) 120 Scalability Max.32 pcs in Parallel(196kWh) Nominal Voltage (V) 51.2 Operating Voltage(V) 43.2–57.6 Energy (kWh) 6.14 Usable Energy (kWh) (I) 5.53 Charge/Discharge (Current (A)) Recommend (I2) Charge/Discharge (Current (A)) Max. (I2) Peak(2mins,25°C) 150 Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 460*720*143(Depth of 160mm With Hanging Board) Weight Approximate(kg) 55 Master LED Indicator 5LED(SOC:20%–SOC100%),3LED (working, alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge:0~55°C / Discharge:20°C~55°C Storage Temperature 0°C~35°C Humidity 5%-95% Altitude ≤2000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 | Model | | RW-M6.1 | |
|---|------------------------------|------------------|--|--|
| Capacity (Ah) 120 Scalability Max.32 pcs in Parallel (196kWh) Nominal Voltage (V) 51.2 Operating Voltage(V) 43.2-57.6 Energy (kWh) 6.14 Usable Energy (kWh) (I) 5.53 Charge/Discharge 60 Charge/Discharge 60 Current (A) Peak(Zmins,25°C) 100 Peak(Zmins,25°C) 150 Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 460°720°143(Depth of 160mm With Hanging Board) Weight Approximate(kg) 55 Master LED Indicator 5LED(SOC:20%~SOC100%),3LED (working, alarming, protecting) IP Rating of Enclosure Charge:0~55°C / Discharge: 20°C~55°C Storage Temperature Charge:0~55°C / Discharge: 20°C~55°C Storage Temperature 0°C~35°C Humidity 5%-95% Altitude \$6000(25°C±2°C,0.5C/0.5C/0.5C,70 | Main Parameter | | | |
| Scalability Max.32 pcs in Parallel(196kWh) Nominal Voltage (V) 51.2 Operating Voltage(V) 43.2–57.6 Energy (kWh) 6.14 Usable Energy (kWh) ^[1] 5.53 Charge/Discharge (Current (A)) Recommend ^[2] (Max. ^[2] (Pak(2mins,25°C)) Peak(2mins,25°C) 150 Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 460°720°143(Depth of 160mm With Hanging Board) Weight Approximate(kg) 55 Master LED Indicator \$LED(SOC:20%~SOC100%),3LED (working, alarming, protecting) IP Rating of Enclosure Ple5 Operating Temperature Charge:0~55°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,70%EOL) Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period ^[3] 10 years | Battery Chemistry | | LiFePO4 | |
| Nominal Voltage (∨) 51.2 Operating Voltage(∨) 43.2–57.6 Energy (kWh) 6.14 Usable Energy (kWh) (¹¹) 5.53 Charge/Discharge (urrent (A)) Recommend [²] 60 Other Parameter 100 Recommend Deptor of Discharge 90% Dimension (WH/D, m) 460*720*143(Depth of 160mm With Hanging Board) Weight Approximate(kg) 55 Master LED Indicator 51ED(SOC:20%~SOC100%),3LED (working, alarming, protecting) IP Rating of Encloser 1P65 Operating Temperature Charge:0°55°C / Discharge:20°C~55°C Storage Temperature 6000(25°C±2°C,0.5C/0.5C,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [³] 200MYh@70%EOL | Capacity (Ah) | | 120 | |
| Coperating Voltage(V) 43.2-57.6 Energy (kWh) 6.14 Usable Energy (kWh) ¹¹ 5.53 Charge/Discharge Current (A) Recommend ¹² / _{Peak(2mins,25°C)} 60 Other Parameter Max. ¹² / _{Peak(2mins,25°C)} 150 Other Parameter Recommend Depth of Discharge 90% Dimension (W;H/D, mm) 460°720°143(Depth of 160mm With Hanging Board) Weight Approximate(kg) 55 Master LED Indicator 5LED(SOC:20%~SOC100%),3LED (working, alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge:0~55°C / Discharge:-20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤2000m Cycle Life ≤6000(25°C±2°C,0.5C/0.5C,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [8] 10 years Energy Throughput [8] 2000Mh@70%EOL | Scalability | | Max.32 pcs in Parallel(196kWh) | |
| Energy (kWh) 1 | Nominal Voltage (V) | | 51.2 | |
| Usable Energy (kWh) ¹¹ 5.53 Charge/Discharge Current (A) Recommend ²¹ 60 Max. ²² 100 Peak(2mins,25°C) 150 Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 460°720°143(Depth of 160mm With Hanging Board) Weight Approximate(kg) 55 Master LED Indicator 5LED(SOC:20%~SOC100%),3LED (working, alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge:0~55°C / Discharge:-20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤2000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [8] 10 years Energy Throughput [3] 20MWh@70%EOL | Operating Voltage(V) | | 43.2~57.6 | |
| Charge/Discharge Current (A) Recommend □ Max. □ 100 Peak(2mins,25°C) 150 Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 460°720°143(Depth of 160mm With Hanging Board) Weight Approximate(kg) 55 Master LED Indicator 5LED(SOC:20%~SOC100%),3LED (working, alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge:0~55°C / Discharge:-20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤2000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [□] 10 years Energy Throughput [□] 200MWh@70%EOL | Energy (kWh) | | 6.14 | |
| Charge/Discharge Current (A) Max. I²I 100 Peak(2mins,25°C) 150 Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 460°720°143(Depth of 160mm With Hanging Board) Weight Approximate (kg) 55 Master LED Indicator 5LED(SOC:20%~SOC100%),3LED (working, alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge:0~55°C / Discharge:-20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤2000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [3] 10 years Energy Throughput [3] 20MWh@70%EOL | Usable Energy (kWh) [1] | | 5.53 | |
| Current (A) Max. ** Into Colspan="2">Into Colspan="2">Into Colspan="2">Into Colspan="2">Into Colspan="2">Into Colspan="2">Into Colspan="2">Into Colspan="2">Into Colspan="2">Into Colspan="2" Into Colspan="2">Into Colspan="2" Into C | | Recommend [2] | 60 | |
| Deak(zmins,25°C) 150 Other Parameter Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 460*720*143(Depth of 160mm With Hanging Board) Weight Approximate(kg) 55 Master LED Indicator 5LED(SOC:20%~SOC100%),3LED (working, alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge:0~55°C / Discharge:-20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤2000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [³] 10 years Energy Throughput [³] 20MWh@70%EOL | | Max. [2] | 100 | |
| Recommend Depth of Discharge 90% Dimension (W/H/D, mm) 460*720*143(Depth of 160mm With Hanging Board) Weight Approximate(kg) 55 Master LED Indicator 5LED(SOC:20%~SOC100%),3LED (working, alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge:0~55°C / Discharge:-20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤2000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [3] 10 years Energy Throughput [3] 20MWh@70%EOL | | Peak(2mins,25°C) | 150 | |
| Dimension (W/H/D, mm) 460°720°143(Depth of 160mm With Hanging Board) Weight Approximate(kg) 55 Master LED Indicator 5LED(SOC:20%~SOC100%),3LED (working, alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge:0~55°C / Discharge:-20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤2000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C/0.5C,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period ^[3] 10 years Energy Throughput ^[3] 20MWh@70%EOL | Other Parameter | | | |
| Weight Approximate(kg)55Master LED Indicator5LED(SOC:20%~SOC100%),3LED (working, alarming, protecting)IP Rating of EnclosureIP65Operating TemperatureCharge:0~55°C / Discharge:-20°C~55°CStorage Temperature0°C~35°CHumidity5%~95%Altitude≤2000mCycle Life≥6000(25°C±2°C,0.5C/0.5C,70%EOL)InstallationWall-Mounted, Floor-MountedCommunication PortCAN2.0, RS485Warranty Period [3]10 yearsEnergy Throughput [3]20MWh@70%EOL | Recommend Depth of Discharge | | 90% | |
| Master LED Indicator 5LED(SOC:20%~SOC100%),3LED (working, alarming, protecting) IP Rating of Enclosure IP65 Operating Temperature Charge:0~55°C / Discharge:-20°C~55°C Storage Temperature 0°C~35°C Humidity 5%-95% Altitude ≤2000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [3] 10 years Energy Throughput [3] 20MWh@70%EOL | Dimension (W/H/D, mm) | | 460*720*143(Depth of 160mm With Hanging Board) | |
| IP Rating of Enclosure IP65 Operating Temperature Charge:0~55°C / Discharge:-20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤2000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [³] 10 years Energy Throughput [³] 20MWh@70%EOL | Weight Approximate(kg) | | 55 | |
| Operating Temperature Charge:0~55°C / Discharge:-20°C~55°C Storage Temperature 0°C~35°C Humidity 5%~95% Altitude ≤2000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [3] 10 years Energy Throughput [3] 20MWh@70%EOL | Master LED Indicator | | 5LED(SOC:20%~SOC100%),3LED (working, alarming, protecting) | |
| Storage Temperature0°C~35°CHumidity5%~95%Altitude≤2000mCycle Life≥6000(25°C±2°C,0.5C/0.5C,70%EOL)InstallationWall-Mounted, Floor-MountedCommunication PortCAN2.0, RS485Warranty Period [3]10 yearsEnergy Throughput [3]20MWh@70%EOL | IP Rating of Enclosure | | IP65 | |
| Humidity5%~95%Altitude≤2000mCycle Life≥6000(25°C±2°C,0.5C/0.5C,70%EOL)InstallationWall-Mounted, Floor-MountedCommunication PortCAN2.0, RS485Warranty Period [3]10 yearsEnergy Throughput [3]20MWh@70%EOL | Operating Temperature | | Charge:0∼55°C / Discharge:-20°C∼55°C | |
| Altitude ≤2000m Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [3] 10 years Energy Throughput [3] 20MWh@70%EOL | Storage Temperature | | 0°C∼35°C | |
| Cycle Life ≥6000(25°C±2°C,0.5C/0.5C,70%EOL) Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period ^[3] 10 years Energy Throughput ^[3] 20MWh@70%EOL | Humidity | | 5%~95% | |
| Installation Wall-Mounted, Floor-Mounted Communication Port CAN2.0, RS485 Warranty Period [3] 10 years Energy Throughput [3] 20MWh@70%EOL | Altitude | | ≤2000m | |
| Communication PortCAN2.0, RS485Warranty Period [3]10 yearsEnergy Throughput [3]20MWh@70%EOL | Cycle Life | | ≥6000(25°C±2°C,0.5C/0.5C,70%EOL) | |
| Warranty Period [3] 10 years Energy Throughput [3] 20MWh@70%EOL | Installation | | Wall-Mounted, Floor-Mounted | |
| Energy Throughput [3] 20MWh@70%EOL | Communication Port | | CAN2.0, RS485 | |
| | Warranty Period [3] | | 10 years | |
| Contification LINIS 2 LII 1072 ECC IECESCIO CE CELO 21 | Energy Throughput [3] | | 20MWh@70%EOL | |
| ON30.3, UL 1973, FOC, 1EC02019, CE, CEI U-21 | Certification | | UN38.3, UL1973, FCC, IEC62619, CE, CEI 0-21 | |

^[1] DC Usable Energy, test conditions: 90% DOD, 0.5C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.

Introduction

This series lithium ion battery is one of new energy storage products developed and produced by Solarker, it can be used to support reliable power forvarious 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 and discharging to extend cycle life. Multiple batteries can connect in parallel to expand capacity and power in parallel for larger capacity and longer power supporting duration requirements.



 $[\]ensuremath{[2]}$ The current is affected by temperature and SOC.

^[3] The warranty is due whichever reached first of warranty period or life cycle power.

Battery Pack Accessories _____

| Model | Accessories Parts Description | Remark |
|----------------|-------------------------------------|---|
| RW-M6.1-Hboard | Battery Hanging Board (Config Free) | Used for battery fixing on the wall |
| WT-CCable | Communication Cable (Config Free) | Battery communication cable connect with hybrid inverter |
| RW-M6.1-PCable | DC Power Cable (Optional) | Battery power cable connect with hybrid inverter |
| RW-M6.1-BCable | Battery Parallel Cable (Optional) | Battery power and communication parallel connection cable |
| RW-M6.1-Base | Battery Support Base (Optional) | The Support Base for Battery Floor-mounted |



Model: RW-M6.1-Hboard

Details: 3kg(Appr.)





Model: WT-CCable

Details: 3m RJ45 communication cable, one end has a waterproof terminal



Model: RW-M6.1-PCable

Details: Pair of 4AWG DC power cable connect with hybrid inverter, one end has a waterproof terminal. The cable length can be customized based on customer requirements, default length is 2000mm.



Model: RW-M6.1-BCable

Details: Pair of 4AWG Battery power cable and RJ45 communication cable for battery parallel. The cable length can be customized based on customer requirements, default length is 600mm.



Model: RW-M6.1-Base

Details: Pair of battery support base. The Support Base for Battery Floor-mounted