

# Lead Acid Replacement Lithium Battery



**MARSRIVA** Lithium-ion Battery 12.8V 102Ah  
MR-LFP12-100-LAR (V2)

Battery Type	BYD LFP04 Battery (Grade A)
Nominal Voltage	12.8V
Storage Capacity	130kWh
Rec. Charging Voltage	14.0-14.6V
Rec. Cut-off Voltage	10.8V
Charging Current	Std. 100A; Max. 105A
Discharging Current	Std. 100A; Max. 105A
Battery Arrangement	Up to 4pcs in series, 16pcs in parallel
Communication	Bluetooth
Cycle Life	≥5000@25°C, 70% EOL
Recommend Charging Temperature	0°C to 55°C
Recommend Discharging Temperature	-20°C to 60°C
MARSRIVA Technology Co., Ltd.	Website: <a href="http://www.marsriva.com">www.marsriva.com</a>

**CAUTION!**

- Do not short circuit
- Do not crush
- Do not heat or incinerate
- Do not immerse in any liquid
- Only use approved LFP04 charger
- Recharge every 3 months

CE FC RoHS

Marsriva provides design with overcharge, overdischarge, and short-circuit protection.

Made in China

Marsriva Technology Co., Ltd.

[www.marsriva.com](http://www.marsriva.com)



# CONTENTS

MR-LFP12-8-LAR .....	01
MR-LFP12-9-LAR .....	02
MR-LBP12-100-LAR .....	03
MR-LBP12-200-LAR .....	04
MR-LBP12-314-LAR .....	05
Terminal Type .....	06

# Lead Acid Replacement Lithium Battery

## MR-LFP12-8-LAR



## SPECIFICATIONS

Model	MR-LFP12-8-LAR
Battery Type	LiFePO4 Battery (Grade A)
Nominal Voltage	12.8V
Nominal Capacity	8Ah
Nominal Electricity	102.4Wh
Constant Charge Voltage	14.2V-14.6V
Floating Charge Voltage	13.8V
Discharge Cut-off Voltage	10.8V
Charge Current	Std. 4A; Max. 8A
Discharge Current	Std. 8A; Max. 10A
Series/Parallel Capability	Series: Up to 2pcs; Parallel: Up to 2 groups
Cycle Life	6000+ Cycles @ 0.5C, 80% DOD
Protection Level	IP65
Connector Type	F2
Self Discharge	< 3% per month
Charge Temperature	Charge: 0°C to 50°C
Discharge Temperature	Discharge: -20°C to 55°C
Storage Environment	Temperature: -20°C to 45°C; Humidity: 5%~95%(Non-condensing)
Dimension, W*D*H	151 * 65 * 94mm
Weight	Approx. 1.0kg

All above information shall be changed without prior notice, MARSRIVA reserves the right to explain and update the latest information.

# Lead Acid Replacement Lithium Battery

## MR-LFP12-9-LAR



## SPECIFICATIONS

Model	MR-LFP12-9-LAR
Battery Type	LiFePO4 Battery (Grade A)
Nominal Voltage	12.8V
Nominal Capacity	9Ah
Nominal Electricity	115.2Wh
Constant Charge Voltage	14.2V-14.6V
Floating Charge Voltage	13.8V
Discharge Cut-off Voltage	10.8V
Charge Current	Std. 4.5A; Max. 9A
Discharge Current	Std. 9A; Max. 10A
Series/Parallel Capability	Series: Up to 2pcs; Parallel: Up to 2 groups
Cycle Life	6000+ Cycles @ 0.5C, 80% DOD
Protection Level	IP65
Connector Type	F2
Self Discharge	< 3% per month
Charge Temperature	Charge: 0°C to 50°C
Discharge Temperature	Discharge: -20°C to 55°C
Storage Environment	Temperature: -20°C to 45°C; Humidity: 5%~95%(Non-condensing)
Dimension (W*D*H)	151 * 65 * 94mm
Weight	Approx. 1.0kg

All above information shall be changed without prior notice, MARSRIVA reserves the right to explain and update the latest information.

# Lead Acid Replacement Lithium Battery

## MR-LBP12-100-LAR



### SPECIFICATIONS

Model	MR-LBP12-100-LAR
Battery Type	LiFePO4 Battery (Grade A)
Nominal Voltage	12.8V
Nominal Capacity	100Ah
Nominal Energy	1.28kWh
Constant Charge Voltage	14.2V-14.6V
Floating Charge Voltage	13.8V
Discharge Cut-off Voltage	10.8V
Charge Current	Max.100A, Rec.20A
Discharge Current	Max. 100A
Series/Parallel Capability	Series: Up to 4pcs; Parallel: Up to 4 groups
Cycle Life	≥6000 Cycles to 70% EOL @25°C
Communication	Bluetooth module for APP
Connector Type	M8
Self Discharge	< 3% per month
Charge Temperature	Charge: 0°C to 50°C
Discharge Temperature	Discharge: -20°C to 55°C
Storage Environment	Temperature: -20°C to 45°C; Humidity: 5%~95%(Non-condensing)
Dimension (W*D*H)	329 * 172 * 219mm
Weight	10.5kg

All above information shall be changed without prior notice, MARSRIVA reserves the right to explain and update the latest information.

# Lead Acid Replacement Lithium Battery

## MR-LBP12-200-LAR



### SPECIFICATIONS

Model	MR-LBP12-200-LAR
Battery Type	LiFePO4 Battery (Grade A)
Nominal Voltage	12.8V
Nominal Capacity	200Ah
Nominal Energy	2.56kWh
Constant Charge Voltage	14.2V-14.6V
Floating Charge Voltage	13.8V
Discharge Cut-off Voltage	10.8V
Charge Current	Max.100A, Rec.40A
Discharge Current	Max. 100A
Series/Parallel Capability	Series: Up to 4pcs; Parallel: Up to 4 groups
Cycle Life	≥6000 Cycles to 70% EOL @25°C
Communication	Bluetooth module for APP
Connector Type	M8
Self Discharge	< 3% per month
Charge Temperature	Charge: 0°C to 50°C
Discharge Temperature	Discharge: -20°C to 55°C
Storage Environment	Temperature: -20°C to 45°C; Humidity: 5%~95%(Non-condensing)
Dimension (W*D*H)	485 * 172 * 240mm
Weight	20.5kg

All above information shall be changed without prior notice, MARSRIVA reserves the right to explain and update the latest information.

# Lead Acid Replacement Lithium Battery

## MR-LBP12-314-LAR



### SPECIFICATIONS

Model	MR-LBP12-314-LAR
Battery Type	LiFePO4 Battery (Grade A)
Nominal Voltage	12.8V
Nominal Capacity	314Ah
Nominal Energy	4.02kWh
Constant Charge Voltage	14.2V-14.6V
Floating Charge Voltage	13.8V
Discharge Cut-off Voltage	10.8V
Charge Current	Max.100A
Discharge Current	Max. 100A
Series/Parallel Capability	Series: Up to 4pcs; Parallel: Up to 4 groups
Cycle Life	≥6000 Cycles to 70% EOL @25°C
Communication	Bluetooth module for APP
Connector Type	M8
Self Discharge	< 3% per month
Charge Temperature	Charge: 0°C to 50°C
Discharge Temperature	Discharge: -20°C to 55°C
Storage Environment	Temperature: -20°C to 45°C; Humidity: 5%~95%(Non-condensing)
Dimension (W*D*H)	520* 268 * 255mm
Weight	30kg

All above information shall be changed without prior notice, MARSRIVA reserves the right to explain and update the latest information.

# TERMINAL TYPE

F1



L4.75mm × 0.8mm

F2



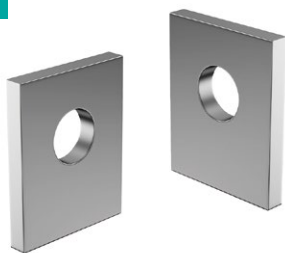
L6.35mm × 0.8mm

F3



L6.35mm × 0.8mm

F16



H25mm × 3mm

L1



H15mm × 2mm

M5



Φ12mm × H16mm

M6-1220



Φ12mm × H20mm

M6-1420



Φ14mm × H20mm

M6-1620



Φ16mm × H20mm

M6-1820



Φ18mm × H20mm

M6-2020



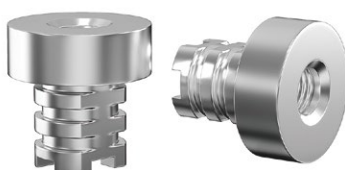
Φ20mm × H20mm

M8-1620



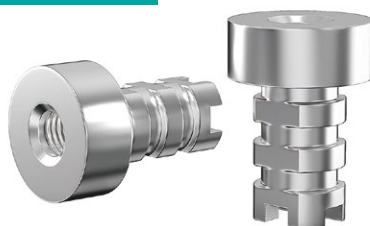
Φ16mm × H20mm

M8-2020



Φ20mm × H20mm

M8-2028



Φ20mm × H28mm

M8-1644



Φ16mm × H44mm