

SAGA
LITHIUM
BATTERIES

Alexa

ALWAYS AHEAD

KEEP FAST AND RACE ON!

**PRODUCT
CATALOGUE**

SAGA
LITHIUM
BATTERIES

KEEP FAST AND RACE ON
WITH **Alexa** **ION**

INTRODUCTION

MTM Traders is a vital and forward-looking division of ACM Group of Industries, playing a key role in the company's mission to power progress through innovation. Specializing in the trading of premium-quality solar panels, inverters, and UPS systems, MTM Traders has earned a reputation for delivering reliable, energy-efficient solutions across Pakistan. Now, stepping into the future, MTM Traders proudly introduces cutting-edge Lithium-Ion Phosphate (LiFePO₄) batteries to the Pakistani market.

OVERVIEW

Lithium-Ion Phosphate batteries represent a major breakthrough in modern battery technology. As a standout member of the lithium battery family, LiFePO₄ batteries are globally recognized for their unmatched safety, extended lifespan, and superior performance. Their stable chemical structure reduces the risk of overheating and combustion, making them a safer alternative for both residential and industrial applications. With longer cycle life, higher thermal stability, and rapid charging capabilities, LiFePO₄ batteries are revolutionizing energy storage solutions—powering the future of solar, EV, and backup power systems around the world.





SG-LFP48100W

51.2V100AH Wall Mount

A smart wall mounted Household Energy Storage System with a sleek and space-saving solution for your energy storage needs. With its compact design and easy installation, it seamlessly blends into any environment.

Whether at your Home, Office, Commercial & Industrial space, our wall-mounted unit provides reliable and efficient energy storage, empowering you to optimize energy usage and reduce waste.

Its design enables parallel installation to meet extended power backups.



Multipurpose Lithium-ion Battery

SG-LFP48100W

51.2V100AH Wall Mount

Product Features:

- Built-in intelligent BMS with charge/discharge current limitations
- Automatic protection for overcharge/discharge and temperature conditions
- Compatible with standard rectifiers/inverters/UPS
- High reliability design
- Excellent battery life

Product Application:



General Specification

Model	SG-LFP48100W
Nominal Voltage	51.2V
Nominal Capacity	100Ah
Battery Energy	5120Wh
Charge Voltage	57.6~58.4V
Discharge Voltage	43.2 V
Nominal Charge/Discharge Current	50A (0.5C)
Nominal Charge/Discharge Power	2560W
Max Charge/Discharge Current	100A (1C)
Max Charge/Discharge Power	5120W

Communication

Display	SOC status indicator, LED indicator
Communication	RS485, CAN

General Specification

Dimension (WxDxH mm)	520 x 141.5 x 470 (mm)
Weight (Kg)	47kg Approx.
Installation	Wall Mounted
Charge Temperature	0°C ~ 55°C
Discharge Temperature	-20°C ~ 60°C
Storage Temperature	-20°C ~ 60°C
Operating/Storage/humidity	5% - 95%RH
Max Operating Altitude	<4000m
IP Rating	IP65
Cell Type	LiFePO ₄ , Lithium Iron Phosphate
Cycle life	6000 Cycles @ 80% DOD / 25°C / 0.5C
Cell Configuration	1P16S
Scalability	Max 15 batteries in parallel

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SG-LFP48100R

48V100AH Rack Mount

A powerful smart rechargeable LiFePO4 intelligent energy storage unit, especially designed to provide Power Backup for Telecom Sites, IT/Data Centers and Solar Energy Storage Systems. Its design enables parallel installation to meet extended power backups.



Multipurpose Lithium-ion Battery

SG-LFP48100R

48V100AH Rack Mount

Product Features:

- Built-in intelligent BMS with charge/ discharge current limitations
- Automatic protection for overcharge/ discharge and temperature conditions
- Compatible with standard rectifiers/inverters/ UPS
- High reliability design
- Excellent battery life

Product Application:



Specifications

Battery Model	SG-LFP48100R
Nominal Capacity	100Ah
Nominal Voltage	48V
Battery Energy	4800Wh
Charge Voltage	54V
Discharge Voltage	40.5V
Nominal Charge/Discharge Current	50A
Nominal Charge/Discharge Power	2400W
Max Charge /Discharge Current	100A
Max Charge /Discharge Power	4800W

Communication

Display	SOC status indicator, LED indicator
Communication	RS485, CAN

General Specification

Dimension(W×D×H mm)	440 x 440 x 133 (mm)
Weight (Kg)	46kg Approx.
Installation	Rack Mounted
Charge Temperature	0°C ~ 55°C
Discharge Temperature	-20°C ~ 60°C
Storage Temperature	-20°C ~ 60°C
Operating/Storage/humidity	5% - 95%RH
Max Operating Altitude	≤4000m
IP Rating	IP20
Cell Type	LiFePO ₄ , Lithium Iron Phosphate
Cycle life	6000 Cycles @ 80% DOD / 25°C /0.5C
Cell Configuration	1P15S
Scalability	Max 15 batteries in parallel



SG-LFP24100W

25.6V100AH Wall Mount

A smart, sleek, and space-efficient wall-mounted Household Energy Storage System. Designed for versatility, it fits seamlessly into homes, offices, and commercial or industrial setups.

With its compact form, easy installation, and parallel scalability for extended power backup, this system ensures reliable and efficient energy storage, helping you optimize consumption, minimize waste, and maintain uninterrupted power when you need it most.



Multipurpose Lithium-ion Battery

SG-LFP24100W

25.6V100AH Wall Mount

Product Features:

- Built-in intelligent BMS with charge/discharge current limitations
- Automatic protection for overcharge/discharge and temperature conditions
- Compatible with standard rectifiers/inverters/UPS
- High reliability design
- Excellent battery life

Product Application:



General Specification

Model	SG-LFP24100W
Nominal Voltage	25.6V
Nominal Capacity	100Ah
Battery Energy	2560Wh
Charge Voltage	29.2V
Discharge Voltage	20.8V
Nominal Charge/Discharge Current	50A (0.5C)
Nominal Charge/Discharge Power	1280W
Max Charge/Discharge Current	100A (1C)
Max Charge/Discharge Power	2560W

Communication

Display	Touch Screen LCD display
Communication	RS485, CAN, Bluetooth

General Specification

Dimension (WxDxH mm)	150 X 395 X 587 (mm)
Weight (Kg)	28kg Approx.
Installation	Wall Mounted
Charge Temperature	0°C ~ 55°C
Discharge Temperature	-20°C ~ 60°C
Storage Temperature	-20°C ~ 60°C
Operating/Storage/humidity	5% - 95%RH
Max Operating Altitude	<4000m
IP Rating	IP20
Cell Type	LiFePO ₄ , Lithium Iron Phosphate
Cycle life	6000 Cycles @ 80% DOD / 25°C / 0.5C
Cell Configuration	1P8S
Scalability	Max 16 batteries in parallel



SG-LFP25100

25.6V100AH

Lithium LiFePO_4 Battery offers a significant weight reduction, enormous energy reserves and stable voltage even under extreme loads. The Lithium LFP battery is specifically developed to fully meet the high demands placed on a storage battery.

It enables high safety and cyclic life span are guaranteed even with regular deep discharges with its enhanced chemistry, which offers numerous advantages in a variety of applications.





Multipurpose Lithium-ion Battery

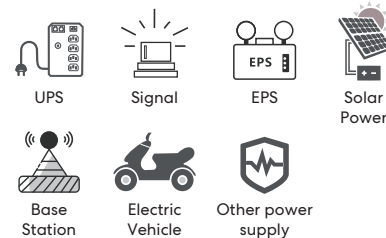
SG-LFP25100

25.6V100AH

Product Features:

- LiFePO_4 cell (3.2V) higher reliability
- Longer Cycle Life
- Fully replaceable with current batteries (Lead-acid, Ni-Cd)
- Lithium iron phosphate technology, safe and reliable.
- Maintenance free with 50% lighter than lead acid batteries
- Optimum adaptation to variety of applications with series & parallel expansion support

Product Application:



Nominal Characteristics:

Nominal Voltage	25.6V
Nominal Capacity (@0.2C)	100Ah (8S1P)
Nominal Energy	2560Wh
Internal Resistance	50mΩ
Self Discharge Rate	≤3.5% per month
Cycle Life (@20-28°C, 0.2C, 50% DOD)	6000 Cycles
Parallel Connected Function	No more than 2 groups in parallel
Series Connected Function	No more than 2 groups in series

Charging Specifications

Charging Limited Voltage/Float	28.8V/27.6V±0.2V
Charge Voltage (For Standby use)	
Max. Charging Current	60A

Discharging Specifications

Discharging Cut-off Voltage	20.0V
Max. Discharging Continuous Current	60A
Max. Discharging Pulse Current	120A, <3S

Mechanical Characteristics

Length	532mm
Width	206mm
Height	215mm
Total Height	217mm
Weight	Approx. 24.0Kg
Terminal	M8

Operating Conditions

Charge Temperature	0°C~45°C (32°F to 113°F)
Discharge Temperature	-20°C to 60°C (-4°F to 140°F)
Storage Temperature	0°C to 45°C (32°F to 113°F)
Humidity	0-95%, No condensation
Temperature protection	Integrated in BMS
Safety Standard	IEC 62619 at cell level
Water Dust Resistance	IP55



SG-LFP12200

12.8V200AH

Suitable for solar energy storage system, provide emergency back up power, UPS, Inverter, Railway signalling, Telecommunication, Medical equipments, Security communications, Transportation logistics and so on.



Multipurpose Lithium-ion Battery

SG-LFP12200

12.8V200AH

Product Features:

- LiFePO_4 cell (3.2V), higher reliability
- Longer Cycle Life
- Fully replaceable with current batteries (Lead-acid, Ni-Cd)
- Lithium iron phosphate technology, safe and reliable.
- Maintenance free with 50% lighter than lead acid batteries
- Optimum adaptation to variety of applications with series & parallel expansion support

Product Application:



Nominal Characteristics

Nominal Voltage	12.8V
Nominal Capacity	200Ah (4S2P)
Nominal Energy	2560Wh
Internal Resistance	$\leq 35\text{m}\Omega$
Self Discharge Rate	$< 3.5\%$ per month
Cycle Life (@25°C, 0.2C, 50%DOD)	6000 Cycles
Parallel Connected Function	no more than 4 groups
Series Connected Function	no more than 4 groups

Charging Specifications

Recommended Charging Voltage	14.0~14.6V
Max. Charging Current	100A

Discharging Specification

Discharging Cut-off Voltage	10V
Max. Discharging Continuous Current	100A
Max. Discharging Pulse Current	$200\text{A} \leq 3\text{S}$

Mechanical Characteristics

Length	522mm
Width	238mm
Height	218mm
Total Height	220mm
Weight	Approx. 27Kg
Terminal	M8

Operating Conditions

Charging Temperature	0°C ~ 45°C (32°F ~ 113°F)
Discharge Temperature	-20°C ~ 60°C (-4°F ~ 140°F)
Storage Temperature	0°C ~ 45°C (32°F ~ 113°F)
Safety Standard	UL 1642 at cell level
Water Dust Resistance	IP55



SG-LFP12150

12.8V150AH

12V LFP batteries are designed for small home solar systems and other such as UPS, Signal, EPS, Solar Power, Base Station, Electric Vehicle etc.

Besides, they are also a direct replacement for lead-acid batteries. With the same size and same type of terminal, you can easily upgrade the old lead battery system into lithium.



Multipurpose Lithium-ion Battery

SG-LFP12150

12.8V150AH

Product Features:

- LiFePO_4 cell (3.2V) higher reliability
- Longer Cycle Life
- Fully replaceable with current batteries (Lead-acid, Ni-Cd)
- Lithium iron phosphate technology, safe and reliable.
- Maintenance free with 50% lighter than lead acid batteries
- Optimum adaptation to variety of applications with series & parallel expansion support

Product Application:



Nominal Characteristics

Nominal Voltage	12.8V
Nominal Capacity	150Ah (4S1P)
Nominal Energy	1920Wh
Internal Resistance	$\leq 45\text{m}\Omega$
Self Discharge Rate	$< 3.5\%$ per month
Cycle Life (@25°C, 0.2C, 50%DOD)	6000 Cycles
Parallel Connected Function	no more than 2 groups
Series Connected Function	no more than 4 groups

Charging Specifications

Recommended Charging Voltage	14.0~14.6V
Max. Charging Current	75A

Discharging Specification

Discharging Cut-off Voltage	10V
Max. Discharging Continuous Current	100A
Max. Discharging Pulse Current	$200\text{A} \leq 3\text{S}$

Mechanical Characteristics

Length	483mm
Width	170mm
Height	240mm
Total Height	240mm
Weight	Approx. 19.2Kg
Terminal	M8

Operating Conditions

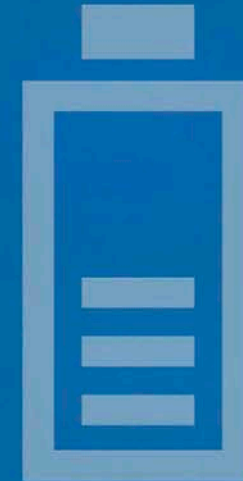
Charging Temperature	0°C ~ 45°C (32°F ~ 113°F)
Discharge Temperature	-20°C ~ 60°C (-4°F ~ 140°F)
Storage Temperature	0°C ~ 45°C (32°F ~ 113°F)
Safety Standard	UL 1642 at cell level
Water Dust Resistance	IP55

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Electric Vehicle Charging



SG-LFP12100

12.8V100AH

Lithium 12.8V 100AH Battery is a suitable SLA battery Replacement for UPS, Signal, EPS, Solar Power, Base Station, Electric Vehicle, etc.



Multipurpose Lithium-ion Battery

SG-LFP12100

12.8V100AH

Product Features:

- LiFePO_4 cell (3.2V) higher reliability
- Longer Cycle Life
- Fully replaceable with current batteries (Lead-acid, Ni-Cd)
- Lithium iron phosphate technology, safe and reliable.
- Maintenance free with 50% lighter than lead acid batteries
- Optimum adaptation to variety of applications with series & parallel expansion support

Product Application:



Nominal Characteristics

Nominal Voltage	12.8V
Nominal Capacity	100Ah (4S1P)
Nominal Energy	1280Wh
Internal Resistance	$\leq 45\text{m}\Omega$
Self Discharge Rate	$< 3.5\%$ per month
Cycle Life (@25°C, 0.2C, 50%DOD)	6000 Cycles
Parallel Connected Function	no more than 4 groups
Series Connected Function	no more than 4 groups

Charging Specifications

Recommended Charging Voltage	14.0~14.6V
Max. Charging Current	50A

Discharging Specification

Discharging Cut-off Voltage	10V
Max. Discharging Continuous Current	100A
Max. Discharging Pulse Current	$200\text{ A} \leq 3\text{S}$

Mechanical Characteristics

Length	328mm
Width	172mm
Height	215mm
Total Height	220mm
Weight	Approx. 13.1Kg
Terminal	M8

Operating Conditions

Charging Temperature	0°C ~ 45°C (32°F ~ 113°F)
Discharge Temperature	-20°C ~ 60°C (-4°F ~ 140°F)
Storage Temperature	0°C ~ 45°C (32°F ~ 113°F)
Safety Standard	UL 1642 at cell level
Water Dust Resistance	IP55



SG-LFP1260

12.8V60AH

A 12.8V 60Ah lithium battery is suitable for a variety of applications, including solar energy systems, RVs, electric bikes and scooters, backup power systems, and more. It can also power wheelchairs, portable power banks, and even jump starters for vehicles.

They can also be used in portable power banks, jump starters for vehicles, and various other devices requiring a 12V power source.



Multipurpose Lithium-ion Battery

SG-LFP1260

12.8V60AH

Product Features:

- LiFePO_4 cell (3.2V) higher reliability
- Longer Cycle Life
- Fully replaceable with current batteries (Lead-acid, Ni-Cd)
- Lithium iron phosphate technology, safe and reliable.
- Maintenance free with 50% lighter than lead acid batteries
- Optimum adaptation to variety of applications with series & parallel expansion support

Product Application:



Nominal Characteristics

Nominal Voltage	12.8V
Nominal Capacity	60Ah (4S2P)
Nominal Energy	768Wh
Internal Resistance	$\leq 50\text{m}\Omega$
Self Discharge Rate	$< 3.5\%$ per month
Cycle Life (@25°C, 0.2C, 50%DOD)	6000 Cycles
Parallel Connected Function	no more than 2 groups
Series Connected Function	no more than 4 groups

Charging Specifications

Recommended Charging Voltage	14.0~14.6V
Max. Charging Current	30A

Discharging Specification

Discharging Cut-off Voltage	10V
Max. Discharging Continuous Current	60A
Max. Discharging Pulse Current	$120\text{A} \leq 3\text{S}$

Mechanical Characteristics

Length	229mm
Width	138mm
Height	210mm
Total Height	210mm
Weight	Approx. 6.7Kg
Terminal	M6

Operating Conditions

Charging Temperature	0°C ~ 45°C (32°F ~ 113°F)
Discharge Temperature	-20°C ~ 60°C (-4°F ~ 140°F)
Storage Temperature	0°C ~ 45°C (32°F ~ 113°F)
Safety Standard	UL 1642 at cell level
Water Dust Resistance	IP55



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House # 2, Street # 63, Sector F-8/4, Islamabad - Pakistan.
Tel: +92-51-111-22-00-22



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