



## Qoltec LiFePO4 lithium iron phosphate battery | 12.8V | 100Ah | 1280Wh | BMS

Product code: 53705

The Qoltec 100Ah LiFePO4 battery is a reliable source of energy for your power needs. A maintenance-free, environmentally friendly, fully safe product. Adapted for cyclic discharge and recharge. High efficiency, long service life and low weight are just a few of the advantages that the LiFePO4 battery offers. The product has a built-in BMS protection system.

### GET EFFICIENCY AT THE HIGHEST LEVEL



#### Thermal and chemical stability

If you are looking for a safe and long-lasting energy source, the LiFePO4 battery from Qoltec will be a very good investment. This type of battery is all about **thermal and chemical stability**, allowing you to work in very extreme conditions without compromising the performance of the battery and allowing it to retain its full capacity.

## ENSURE A RELIABLE SOURCE OF ENERGY



3000 charge and discharge cycles

LiFePO4 batteries are durability and performance in one :

- **100% depth of discharge**,
- very low self-discharge rate,
- **no memory effect**, very efficient cycling and buffer operation,
- longer service life - more than 3000 charge and discharge cycles,
- 100% non-combustible battery - no risk of overheating, arson or explosion,
- 100% maintenance-free, no need to top up the electrolyte,
- lower weight and at the same time higher energy density compared to e.g. lead acid batteries,
- **environmentally safe** - no toxic gases or chemicals are released,
- can be operated in any position, no need to set it horizontally,
- shock-resistant.

## ADVANCED LIFEPO4 TECHNOLOGY - MORE POWER, LESS CHARGING



Efficient and deep discharge resistant

Our batteries are **extremely efficient and resistant to deep discharges**. They are characterised by a **longer service life while maintaining their properties of more than 3000 charge and discharge cycles**, and this gives them a major advantage over other batteries currently available on the market. In addition, they are **non-polluting, recyclable, non-toxic and non-flammable**

## APPLICATION OF LIFEPO4 BATTERIES



Wide range of applications for LiFePO<sub>4</sub> batteries

The wide range of advantages and functional benefits of lithium-iron-phosphate batteries means that they will meet the expectations of even the most demanding users and are perfect for :

- in photovoltaics, as power storage, off-grid systems,
- uninterruptible power supplies, UPS, voltage converters,
- alarm systems, access control systems,
- campers, trailers,
- electric cars,
- yachts, boats, motorboats,
- golf carts, wheelchairs,
- emergency lighting,
- power tools, lawnmowers,
- electric toys, quads.



## BMS OR INTELLIGENT BATTERY MANAGEMENT SYSTEM



# Battery Management System

BMS for intelligent battery management system

All Qoltec LiFePO<sub>4</sub> batteries are **equipped with a BMS**, which is an essential element of battery protection. It constantly monitors the operation of the battery, **protecting the cells from overheating, overcharging and deep discharge**, cutting off the power supply when values are exceeded that pose a potential danger to the battery and connected devices.

## CONFIDENCE CONFIRMED BY A GUARANTEE

Quality Guarantee - Long-lasting Power, Reliable Performance

Do you care about the high quality of the product you are buying? Our solutions will meet your expectations. The LiFePO<sub>4</sub> batteries we offer come with a **24-month warranty** valid from the date of purchase.

## TECHNICAL DATA

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Producer                      | Qoltec                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Battery type                  | LiFePO4                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Power                         | 1280Wh                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Capacity                      | 100Ah                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Nominal voltage               | 12.8V                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Rating limited voltage        | 10.4V~14.6V                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Type of charging              | CV                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Battery charging voltage      | 14.4 0.2V                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Number of charging cycles     | Retains more than 80% of capacity even after 3000 charging cycles                                                                                                                                                                                                                                                                                                                                                                                              |
| Internal resistance           | 7m                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Connector type                | M8                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Maximum charging current      | 50A                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Maximum discharge current     | 100A                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Standard charging current     | 20A                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Standard discharging current  | 50A                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Cut off voltage               | 10.4V                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Protection                    | Battery with BMS                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Battery overcharge protection | 3.65V                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Application                   | Photovoltaics, Off-grid systems, Energy storage, Emergency power supply, Electric cars, Campers, Yachts, Wheelchairs, Power tools, Emergency lighting                                                                                                                                                                                                                                                                                                          |
| Additional information        | <p>The maximum number of batteries connected in parallel is 4 units.</p> <p>The maximum number of batteries connected in series is 4 units.</p> <p>When connecting batteries in series, make sure that the voltage differences between the batteries do not exceed 1 V. We do not recommend connecting batteries from different batches or brands, as differences in BMS systems and cells may affect their operation.</p> <p>A battery comprising 8 cells</p> |
| OTHER PARAMETERS              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Colour                        | Black, blue                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Operating temperature range   | Discharge:-15 60<br>Charge:0 60<br>Storage:-15 50                                                                                                                                                                                                                                                                                                                                                                                                              |
| Storage temperature range     | 1 month - 20 ~ 45<br>3 months - 20 ~ 45<br>1 year - 20 ~ 20                                                                                                                                                                                                                                                                                                                                                                                                    |
| Storage humidity              | 45 85%RH                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| IP Rating                     | IP65                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Dimensions (D/L x W x H)      | 165 x 260 x 210 mm                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Package depth / length [mm]   | 210                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Package width [mm]            | 360                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Package height [mm]           | 260                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Net weight [kg]               | 9.700                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Gross weight [kg]             | 10.300                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Certificate                   | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Warranty                      | 24 month                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| EAN code                      | 5901878537054                                                                                                                                                                                                                                                                                                                                                                                                                                                  |